

TPS7H5005-SEP and TPS7H5001-SP QMLP Neutron Displacement Damage (NDD) Characterization Report



ABSTRACT

This report presents the effect of neutron displacement damage (NDD) on the TPS7H5005-SEP and TPS7H5001-SP QMLP PWM controller. Both the TPS7H5005-SEP and TPS7H5001-SP QMLP showed a strong degree of hardness to neutron irradiation up to fluence level 1×10^{13} n/cm².

The neutron irradiation test is a destructive test. Test procedure follows MIL-STD-883 method 1017 as guidance. The purpose of this test is to determine the device susceptibility to non-ionizing energy loss (NIEL) degradation. Objectives of the test are, to detect and measure the degradation of critical device parameters as a function of neutron fluence and to determine if these parameters are within specified limits after exposure to a specified level of neutron fluence.

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1 Device Information

1.1 Product Description

The TPS7H5005-SEP and TPS7H5001-SP QMLP are 4-V to 14-V, current mode, dual output, high speed PWM controller optimized for DC-DC converters. The high switching frequency capability of the TPS7H5005-SEP and TPS7H5001-SP QMLP, small footprint, and low-current consumption makes the device ideal for fully exploiting the area reduction and high-efficiency benefits of DC-DC converters. The TPS7H5005-SEP and TPS7H5001-SP

QMLP feature integrated synchronous rectifier control outputs and dead-time programmability in order to target high-efficiency and high-performance topologies. In addition, these devices, single-ended converter topologies by providing the user the flexibility to control the maximum duty cycle.

The TPS7H5005-SEP and TPS7H5001-SP QMLP can be driven using an external clock through the SYNC pin or run using its internal oscillator at a frequency programmed by the user. Other programmable features include the UVLO threshold, soft start, and slope compensation. The TPS7H5005-SEP and TPS7H5001-SP QMLP are packaged in a very small 24-pin TSSOP (thin-shrink small outline package) package. As the TPS7H5001-SP QMLP uses the same material set, the results are applicable to both devices.

1.2 Device Details

Device and Exposure Details lists the device information and test conditions used in the NDD characterization.

Table 1-1. Device and Exposure Details

NDD Exposure Details	
TI Devices	TPS7H5005-SEP
TI Part Name	TPS7H5005MPWTSEP
Device Function	PWM controller
Package	24-pin TSSOP
Technology	LBC7
Lot Number / Lot Trace Code	02326747 / 24CF0HK
Sample Quantity	9 + 1 control unit
Exposure Facility	Fast Neutron Irradiation (FNI) Facility of University of Massachusetts Lowell Research Reactor (UMLRR)
Neutron Fluence (1-MeV equivalent) Level	1×10^{12} , 5×10^{12} , 1×10^{13} n/cm ²
Irradiation Temperature	25°C

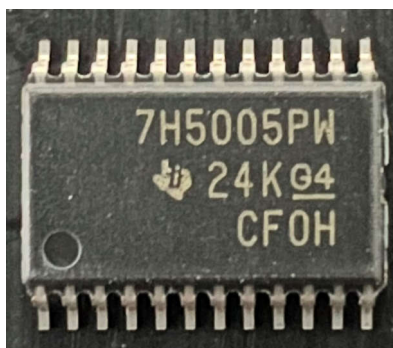


Figure 1-1. TPS7H5005-SEP Device

2 Total Dose Test Setup

2.1 Test Overview

General test procedures adhere to MIL-STD-883, Method 1017 as a guide for neutron irradiation. The TPS7H5005-SEP was electrically tested using the production automated test equipment (ATE) program at an ambient room temperature of 25°C before and after neutron irradiation.

2.2 Test Facility

The utilized test facility is the Fast Neutron Irradiation (FNI) Facility of University of Massachusetts Lowell Research Reactor. The neutron fluence for this irradiation was measured utilizing ASTM E-265 “Measuring Reaction Rates and Fast Neutron Fluence by Radioactivation of Sulfur-32” and correlated to the measured reactor power level. All irradiation conditions required under ASTM 722 were met, this includes: neutron fluence, distribution and uncertainty. The Average Integrated Neutron Fluence, 1-MeV(Si) equivalent, reflects these factors.

Detailed information of the radiation facility is available at the following link:

https://www.uml.edu/docs/FNI%20Brochure_tcm18-90375.pdf

2.3 Test Setup Details

Devices were irradiated at three fluence levels in unbiased conditions: 1.0×10^{12} n/cm², 5.0×10^{12} n/cm² and 1.0×10^{13} n/cm².

Table 2-1. Neutron Irradiation Conditions

GROUP	SAMPLE QTY	NEUTRON FLUENCE (n/cm ²)	BIAS
A	3	1.0×10^{12}	Unbias
B	3	5.0×10^{12}	Unbias
C	3	1.0×10^{13}	Unbias
Control Unit	1	N/A	N/A

3 Test Results

3.1 NDD Characterization Summary

The results show that all devices were fully functional and within specification limits. A sample size of nine units was exposed for neutron irradiation and an additional unirradiated control unit was used as correlation.

Overall, the TPS7H5005-SEP showed a strong degree of hardness to Neutron irradiation up to fluence level 1×10^{13} n/cm². As the TPS7H5001-SP QMLP uses the same material set, the results are applicable to this orderable as well. The measurements taken post-irradiation for each sample set showed a marginal shift for most parameters at each fluence level. The parameters that showed a greater degree of change between pre- and post- irradiation were still within the Electrical Performance Characteristics specified in the Data Sheet Electrical Parameters table. See [Table 3-1](#) for the Data Sheet Electrical Parameters and Associated Tests.

Electrical testing is done for pre- and post- neutron irradiation by ATE. ATE electrical test is done at an ambient room temperature of 25°C. Parameters not listed in the [Table 3-1](#) are omitted either because there is no parametric data or because verification was done through bench testing.

See [Appendix A](#) for NDD report up to 1.0×10^{13} n/cm².

3.2 Data Sheet Electrical Parameters and Associated Tests

Table 3-1. TPS7H5005-SEP and TPS7H5001-SP QMLP Electrical Parameters Table

PARAMETER	TEST CONDITION	TPS7H5005-SEP and TPS7H5001-SP QMLP DATA SHEET				TEST #
		MIN	TYP	MAX	UNIT	
SUPPLY VOLTAGES AND CURRENTS						
IDD Operating supply current	f _{SW} = 500 kHz, No load for OUTA, OUTB, SRA, and SRB		6.25	8	mA	5.24 __IDD_ACT_500K_NOLOAD_4V, 5.25 __IDD_ACT_500K_NOLOAD_5V, 5.26 __IDD_ACT_500K_NOLOAD_12V, 5.27 __IDD_ACT_500K_NOLOAD_14V
	f _{SW} = 1 MHz, No load for OUTA, OUTB, SRA, and SRB		6.75	9.5	mA	5.28 __IDD_ACT_1M_NOLOAD_4V, 5.29 __IDD_ACT_1M_NOLOAD_5V, 5.30 __IDD_ACT_1M_NOLOAD_12V, 5.31 __IDD_ACT_1M_NOLOAD_14V
	f _{SW} = 2 MHz, No load for OUTA, OUTB, SRA, and SRB		8.5	13.5	mA	5.36 __IDD_ACT_2M_NOLOAD_4V, 5.37 __IDD_ACT_2M_NOLOAD_5V, 5.38 __IDD_ACT_2M_NOLOAD_12V, 5.39 __IDD_ACT_2M_NOLOAD_14V
	f _{SW} = 500 kHz, C _{LOAD} = 100pF for OUTA, OUTB, SRA, and SRB		7.5	9.5	mA	5.48 __IDD_ACT_500K_4V, 5.49 __IDD_ACT_500K_5V, 5.50 __IDD_ACT_500K_12V, 5.51 __IDD_ACT_500K_14V
	f _{SW} = 1 MHz, C _{LOAD} = 100pF for OUTA, OUTB, SRA, and SRB		9	12	mA	5.52 __IDD_ACT_1M_4V, 5.53 __IDD_ACT_1M_5V, 5.54 __IDD_ACT_1M_12V, 5.55 __IDD_ACT_1M_14V
	f _{SW} = 2 MHz, C _{LOAD} = 100pF for OUTA, OUTB, SRA, and SRB		14	19.5	mA	5.60 __IDD_ACT_2M_4V, 5.61 __IDD_ACT_2M_5V, 5.62 __IDD_ACT_2M_12V, 5.63 __IDD_ACT_2M_14V
I _{DD(dis)} Standby current	EN = 0 V			3	mA	5.1 __IDD_DIS_4V, 5.2 __IDD_DIS_5V, 5.3 __IDD_DIS_12V 5.4 __IDD_DIS_14V
VLDO Internal linear regulator output voltage	5 V ≤ VIN ≤ 14 V, f _{sw} ≤ 1 MHz	4.75	5	5.2	V	5.65 __V_LDO_100K_5V, 5.66 __V_LDO_100K_12V, 5.67 __V_LDO_100K_14V, 5.69 __V_LDO_200K_5V, 5.70 __V_LDO_200K_12V, 5.71 __V_LDO_200K_14V, 5.73 __V_LDO_500K_5V, 5.74 __V_LDO_500K_12V, 5.75 __V_LDO_500K_14V, 5.77 __V_LDO_1M_5V, 5.78 __V_LDO_1M_12V, 5.79 __V_LDO_1M_14V
	5 V ≤ VIN ≤ 14 V, f _{sw} = 2 MHz	4.65	5	5.2	V	5.85 __V_LDO_2M_5V, 5.86 __V_LDO_2M_12V, 5.87 __V_LDO_2M_14V
ENABLE AND UNDERVOLTAGE LOCKOUT						
V _{ENR} EN threshold rising		0.57	0.6	0.65	V	6.5 __V_EN_RISE_4V, 6.8 __V_EN_RISE_5V, 6.11 __V_EN_RISE_12V, 6.14 __V_EN_RISE_14V
V _{ENF} EN threshold falling		0.47	0.5	0.55	V	6.6 __V_EN_FALL_4V, 6.9 __V_EN_FALL_5V, 6.12 __V_EN_FALL_12V, 6.15 __V_EN_FALL_14V
V _{ENH} EN hysteresis voltage		85	95	105	mV	6.7 __V_EN_HYS_4V, 6.10 __V_EN_HYS_5V, 6.13 __V_EN_HYS_12V, 6.16 __V_EN_HYS_14V
I _{EN} EN pin input leakage current	VIN = 14 V, EN = 5V		5	50	nA	6.1 __I_EN_LEAK_4V, 6.2 __I_EN_LEAK_5V, 6.3 __I_EN_LEAK_12V, 6.4 __I_EN_LEAK_14V
VLDO _{UVLOR} VLDO UVLO rising		3.44	3.55	3.66	V	6.34 __UVLO_VLDO_RISE_1MHz, 6.37 __UVLO_VLDO_RISE_100kHz, 6.40 __UVLO_VLDO_RISE_200kHz, 6.43 __UVLO_VLDO_RISE_500kHz, 6.46 __UVLO_VLDO_RISE_2MHz
VLDO _{UVLOF} VLDO UVLO falling		3.29	3.4	3.51	V	6.35 __UVLO_VLDO_FALL_1MHz, 6.38 __UVLO_VLDO_FALL_100kHz, 6.41 __UVLO_VLDO_FALL_200kHz, 6.44 __UVLO_VLDO_FALL_500kHz, 6.47 __UVLO_VLDO_FALL_2MHz
VLDO _{UVLOH} VLDO UVLO hysteresis		115	135	160	mV	6.36 __UVLO_VLDO_HYS_1MHz, 6.39 __UVLO_VLDO_HYS_100kHz, 6.42 __UVLO_VLDO_HYS_200kHz, 6.45 __UVLO_VLDO_HYS_500kHz, 6.48 __UVLO_VLDO_HYS_2MHz
SOFT START						
I _{SS} Soft-start current	SS = 0.3 V	1.98	2.7	3.32	μA	7.1 __I_SS_4V, 7.3 __I_SS_5V, 7.5 __I_SS_12V, 7.7 __I_SS_14V
ERROR AMPLIFIER						
E _{Agm} Transconductance	-2 μA < I _{COMP} < 2 μA, V _(COMP) = 1 V	1150	1800	2500	μA/V	8.9 __EA_GM_4V, 8.10 __EA_GM_5V, 8.11 __EA_GM_12V, 8.12 __EA_GM_14V

Table 3-1. TPS7H5005-SEP and TPS7H5001-SP QMLP Electrical Parameters Table (continued)

PARAMETER	TEST CONDITION	TPS7H5005-SEP and TPS7H5001-SP QMLP DATA SHEET				TEST #
		MIN	TYP	MAX	UNIT	
EA _{ISRC} Error amplifier source current	V _(COMP) = 1 V, 100-mV input overdrive	100		190	μA	8.13 __EA_I_SOURCE_4V, 8.14 __EA_I_SOURCE_5V, 8.15 __EA_I_SOURCE_12V, 8.16 __EA_I_SOURCE_14V
EA _{ISNK} Error amplifier sink current	V _(COMP) = 1 V, 100-mV input overdrive	100		190	μA	8.17 __EA_I_SINK_4V, 8.18 __EA_I_SINK_5V, 8.19 __EA_I_SINK_12V, 8.20 __EA_I_SINK_14V
EA _{OS} Error amplifier offset voltage		-2		2	mV	8.5 __EA_OS_4V, 8.6 __EA_OS_5V, 8.7 __EA_OS_12V, 8.8 __EA_OS_14V
OSCILLATOR						
SYNC _{RT} SYNC out low-to-high rise time (10%/90%)	C _{LOAD} = 25 pF		6	15	ns	9.1 __T_SYNC_RISE_100kHz_4V, 9.5 __T_SYNC_RISE_200kHz_4V, 9.9 __T_SYNC_RISE_500kHz_4V, 9.13 __T_SYNC_RISE_1MHz_4V, 9.17 __T_SYNC_RISE_1p5MHz_4V, 9.21 __T_SYNC_RISE_2MHz_4V, 9.25 __T_SYNC_RISE_100kHz_5V, 9.29 __T_SYNC_RISE_200kHz_5V, 9.33 __T_SYNC_RISE_500kHz_5V, 9.37 __T_SYNC_RISE_1MHz_5V, 9.41 __T_SYNC_RISE_1p5MHz_5V, 9.45 __T_SYNC_RISE_2MHz_5V, 9.49 __T_SYNC_RISE_100kHz_12V, 9.53 __T_SYNC_RISE_200kHz_12V, 9.57 __T_SYNC_RISE_500kHz_12V, 9.61 __T_SYNC_RISE_1MHz_12V, 9.65 __T_SYNC_RISE_1p5MHz_12V, 9.69 __T_SYNC_RISE_2MHz_12V, 9.73 __T_SYNC_RISE_100kHz_14V, 9.77 __T_SYNC_RISE_200kHz_14V, 9.81 __T_SYNC_RISE_500kHz_14V, 9.85 __T_SYNC_RISE_1MHz_14V, 9.89 __T_SYNC_RISE_1p5MHz_14V, 9.93 __T_SYNC_RISE_2MHz_14V
SYNC _{FT} SYNC out high-to-low fall time (10%/90%)	C _{LOAD} = 25 pF		6	17	ns	9.2 __T_SYNC_FALL_100kHz_4V, 9.14 __T_SYNC_FALL_1MHz_4V, 9.22 __T_SYNC_FALL_2MHz_4V, 9.26 __T_SYNC_FALL_100kHz_5V, 9.38 __T_SYNC_FALL_1MHz_5V, 9.46 __T_SYNC_FALL_2MHz_5V, 9.74 __T_SYNC_FALL_100kHz_14V, 9.86 __T_SYNC_FALL_1MHz_14V, 9.94 __T_SYNC_FALL_2MHz_14V
SYNC _{OL} SYNC out low level	I _{OL} = 10 mA			500	mV	9.186 __SYNC_VOL_4V, 9.187 __SYNC_VOL_5V, 9.188 __SYNC_VOL_12V, 9.189 __SYNC_VOL_14V
EXT _{DT} Externally set frequency detection time	RT = Open, f = 200 kHz			20	μs	9.185 __T_SYNC_DETECT
FSW _{EXT} Externally set frequency	RT = 1.07 MΩ	95	105	115	kHz	9.4 __FSW_EXT_RT_100kHz_4V, 9.28 __FSW_EXT_RT_100kHz_5V, 9.52 __FSW_EXT_RT_100kHz_12V, 9.76 __FSW_EXT_RT_100kHz_14V
	RT = 511 kΩ	190	210	230	kHz	9.8 __FSW_EXT_RT_200kHz_4V, 9.32 __FSW_EXT_RT_200kHz_5V, 9.56 __FSW_EXT_RT_200kHz_12V, 9.80 __FSW_EXT_RT_200kHz_14V
	RT = 90.9 kΩ	900	1000	1100	kHz	9.16 __FSW_EXT_RT_1MHz_4V, 9.40 __FSW_EXT_RT_1MHz_5V, 9.64 __FSW_EXT_RT_1MHz_12V, 9.88 __FSW_EXT_RT_1MHz_14V
	RT = 34.8 kΩ	1700	2000	2300	kHz	9.24 __FSW_EXT_RT_2MHz_4V, 9.48 __FSW_EXT_RT_2MHz_5V, 9.72 __FSW_EXT_RT_2MHz_12V, 9.96 __FSW_EXT_RT_2MHz_14V
VOLTAGE REFERENCE						
VREF Internal voltage reference initial tolerance	Measured at COMP, 25°C	0.609	0.613	0.615	V	8.1 __VREF_4V, 8.2 __VREF_5V, 8.3 __VREF_12V, 8.4 __VREF_14V

Table 3-1. TPS7H5005-SEP and TPS7H5001-SP QMLP Electrical Parameters Table (continued)

PARAMETER	TEST CONDITION	TPS7H5005-SEP and TPS7H5001-SP QMLP DATA SHEET				TEST #
		MIN	TYP	MAX	UNIT	
REFCAP REFCAP voltage	REFCAP = 470 nF	1.213	1.225	1.237	V	5.88 __V_REFCAP_100K_4V, 5.89 __V_REFCAP_100K_5V, 5.90 __V_REFCAP_100K_12V, 5.91 __V_REFCAP_100K_14V, 5.92 __V_REFCAP_200K_4V, 5.93 __V_REFCAP_200K_5V, 5.94 __V_REFCAP_200K_12V, 5.95 __V_REFCAP_200K_14V, 5.96 __V_REFCAP_500K_4V, 5.97 __V_REFCAP_500K_5V, 5.98 __V_REFCAP_500K_12V, 5.99 __V_REFCAP_500K_14V, 5.100 __V_REFCAP_1M_4V, 5.101 __V_REFCAP_1M_5V, 5.102 __V_REFCAP_1M_12V, 5.103 __V_REFCAP_1M_14V, 5.104 __V_REFCAP_1P5M_4V, 5.105 __V_REFCAP_1P5M_5V, 5.106 __V_REFCAP_1P5M_12V, 5.107 __V_REFCAP_1P5M_14V, 5.108 __V_REFCAP_2M_4V, 5.109 __V_REFCAP_2M_5V, 5.110 __V_REFCAP_2M_12V, 5.111 __V_REFCAP_2M_14V
CURRENT SENSE, CURRENT LIMIT, AND HICCUP						
CCSR	COMP to CS_ILIM ratio	2.00	2.06	2.12		10.49 __CCSR_Ratio
V _{CS_ILIM} Current limit (over-current) threshold			1.05	1.09	V	10.1 __V_CS_ILIM_OC_Rise_4V, 10.3 __V_CS_ILIM_OC_Rise_5V, 10.5 __V_CS_ILIM_OC_Rise_12V, 10.7 __V_CS_ILIM_OC_Rise_14V
FAULT						
V _{FLTR} FLT threshold rising		0.57	0.6	0.65	V	12.1 __V_FAULT_RISE_4V, 12.4 __V_FAULT_RISE_5V, 12.7 __V_FAULT_RISE_12V, 12.10 __V_FAULT_RISE_14V
V _{FLTF} FLT threshold falling		0.47	0.5	0.55	V	12.2 __V_FAULT_FALL_4V, 12.5 __V_FAULT_FALL_5V, 12.8 __V_FAULT_FALL_12V, 12.11 __V_FAULT_FALL_14V
V _{FLTH} FLT hysteresis voltage		90	100	110	mV	12.3 __V_FAULT_HYS_4V, 12.6 __V_FAULT_HYS_5V, 12.9 __V_FAULT_HYS_12V, 12.12 __V_FAULT_HYS_14V
T _{FLT} FLT minimum pulse width	V _{FLT} = 1 V	0.4		1.4	μs	12.14 __T_FAULT_MIN
t _{DFLT} FLT delay duration	f _{sw} = 100 kHz	140	152	169	μs	12.15 __T_FAULT_DELAY_100kHz
	f _{sw} = 200 kHz	66	78	86	μs	12.17 __T_FAULT_DELAY_200kHz
	f _{sw} = 1 MHz	14	17	21	μs	12.21 __T_FAULT_DELAY_1MHz
	f _{sw} = 2 MHz	7	11	14	μs	12.23 __T_FAULT_DELAY_2MHz
PRIMARY AND SYNCHRONOUS RECTIFIER OUTPUTS						
Rise/fall time	R _{LOAD} = 50 kΩ, C _{LOAD} = 100 pF, 10% to 90%		10	17	ns	13.1 __OUTA_RISE_1MHz_4V, 13.9 __OUTA_RISE_1MHz_5V, 13.17 __OUTA_RISE_1MHz_12V, 13.25 __OUTA_RISE_1MHz_14V, 13.3 __OUTA_FALL_1MHz_4V, 13.11 __OUTA_FALL_1MHz_5V, 13.19 __OUTA_FALL_1MHz_12V, 13.27 __OUTA_FALL_1MHz_14V, 13.2 __OUTB_RISE_1MHz_4V, 13.10 __OUTB_RISE_1MHz_5V, 13.18 __OUTB_RISE_1MHz_12V, 13.26 __OUTB_RISE_1MHz_14V, 13.4 __OUTB_FALL_1MHz_4V, 13.12 __OUTB_FALL_1MHz_5V, 13.20 __OUTB_FALL_1MHz_12V, 13.28 __OUTB_FALL_1MHz_14V
t _{MIN} Minimum on-time LEB = 10 kΩ	LEB = 10 kΩ, 5 V ≤ VIN ≤ 14 V			85	ns	13.145 __OUT_T_ON_MIN

Table 3-1. TPS7H5005-SEP and TPS7H5001-SP QMLP Electrical Parameters Table (continued)

PARAMETER	TEST CONDITION	TPS7H5005-SEP and TPS7H5001-SP QMLP DATA SHEET				TEST #
		MIN	TYP	MAX	UNIT	
TD _{PS} Primary off to secondary on dead time	PS = floating, 5 V ≤ VIN ≤ 14 V, 90% of OUTx falling edge to 10% of SRx rising edge with OUTx and SRx floating	5	8	11	ns	13.37 __PSA_DT_0ns_1M_5V, 13.38 __PSB_DT_0ns_1M_5V, 13.41 __PSA_DT_0ns_1M_12V, 13.42 __PSB_DT_0ns_1M_12V, 13.45 __PSA_DT_0ns_1M_14V, 13.46 __PSB_DT_0ns_1M_14V
	PS = 49.9 kΩ, 5 V ≤ VIN ≤ 14 V, 90% of OUTx falling edge to 10% of SRx rising edge with OUTx and SRx floating	43	50	55	ns	13.53 __PSA_DT_50ns_1M_5V, 13.54 __PSB_DT_50ns_1M_5V, 13.57 __PSA_DT_50ns_1M_12V, 13.58 __PSB_DT_50ns_1M_12V, 13.61 __PSA_DT_50ns_1M_14V, 13.62 __PSB_DT_50ns_1M_14V
	PS = 107 kΩ, 5 V ≤ VIN ≤ 14 V, 90% of OUTx falling edge to 10% of SRx rising edge with OUTx and SRx floating	85	100	110	ns	13.69 __PSA_DT_100ns_1M_5V, 13.70 __PSB_DT_100ns_1M_5V, 13.73 __PSA_DT_100ns_1M_12V, 13.74 __PSB_DT_100ns_1M_12V, 13.77 __PSA_DT_100ns_1M_14V, 13.78 __PSB_DT_100ns_1M_14V
TD _{SP} Secondary off to primary on dead time	SP = floating, 5 V ≤ VIN ≤ 14 V, 90% of SRx falling edge to 10% of OUTx rising edge with OUTx and SRx floating	5	8	11	ns	13.39 __SPA_DT_0ns_1M_5V, 13.40 __SPB_DT_0ns_1M_5V, 13.43 __SPA_DT_0ns_1M_12V, 13.44 __SPB_DT_0ns_1M_12V, 13.47 __SPA_DT_0ns_1M_14V, 13.48 __SPB_DT_0ns_1M_14V
	SP = 49.9 kΩ, 5 V ≤ VIN ≤ 14 V, 90% of SRx falling edge to 10% of OUTx rising edge with OUTx and SRx floating	43	50	55	ns	13.55 __SPA_DT_50ns_1M_5V, 13.56 __SPB_DT_50ns_1M_5V, 13.59 __SPA_DT_50ns_1M_12V, 13.60 __SPB_DT_50ns_1M_12V, 13.63 __SPA_DT_50ns_1M_14V, 13.64 __SPB_DT_50ns_1M_14V
	SP = 100 kΩ, 5 V ≤ VIN ≤ 14 V, 90% of SRx falling edge to 10% of OUTx rising edge with OUTx and SRx floating	85	100	110	ns	13.71 __SPA_DT_100ns_1M_5V, 13.72 __SPB_DT_100ns_1M_5V, 13.75 __SPA_DT_100ns_1M_12V, 13.76 __SPB_DT_100ns_1M_12V, 13.79 __SPA_DT_100ns_1M_14V, 13.80 __SPB_DT_100ns_1M_14V
DUTY CYCLE						
D _{MAX} Maximum duty cycle	DCL = AVSS	45	48	50	%	13.160 __MAX_DC_DCL_AVSS
	DCL = floating	70	75	80	%	13.163 __MAX_DC_DCL_OPEN
	DCL =VLDO			100	%	13.166 __MAX_DC_DCL_VLDO

4 Applicable and Reference Documents

4.1 Applicable Documents

- Texas Instruments, [TPS7H5005-SEP Radiation-Hardness-Assured Si and GaN Dual Output Controller data sheet \(SLVSGG1\)](#)
- Texas Instruments, [TPS7H500x-SP Radiation-Hardness-Assured 2-MHz Current Mode PWM Controllers](#)
- Texas Instruments, [TPS7H500x-SEP Evaluation Module \(EVM\) user's guide](#)
- Texas Instruments, [TPS7H500x-SEP Single-Event Effects \(SEE\) Radiation Report](#)

4.2 Reference Documents

Texas Instruments neutron irradiation test follow the guideline from MIL-STD-883 TM 1017. The document is available in Defense Logistic Agency's website.

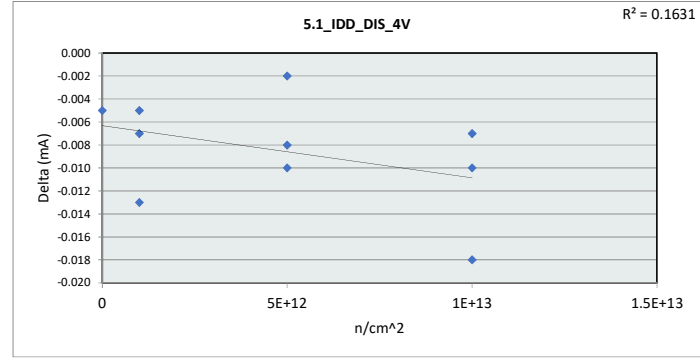
A Appendix: NDD Report Data

This appendix contains the NDD report data.

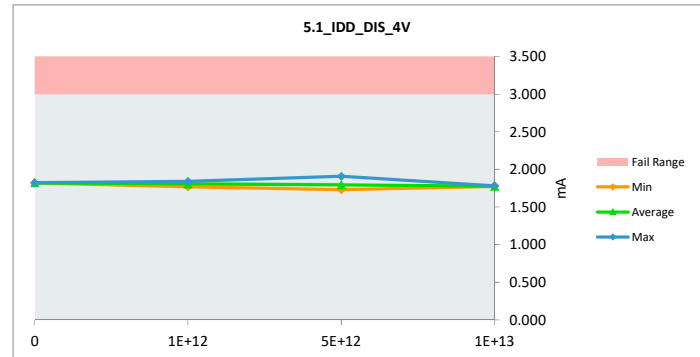
NDD Characterization Report
TPS7H5005-SEP

NDD Characterization Report TPS7H5005-SEP

5.1_IDD_DIS_4V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		3	3	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.827	1.822	-0.005
1E+12	1	1.826	1.813	-0.013
1E+12	2	1.774	1.769	-0.005
1E+12	3	1.847	1.840	-0.007
5E+12	4	1.741	1.731	-0.010
5E+12	5	1.916	1.908	-0.008
5E+12	6	1.745	1.743	-0.002
1E+13	7	1.784	1.774	-0.010
1E+13	8	1.794	1.776	-0.018
1E+13	9	1.790	1.783	-0.007
Max		1.916	1.908	-0.002
Average		1.804	1.796	-0.009
Min		1.741	1.731	-0.018
Std Dev		0.052	0.052	0.005

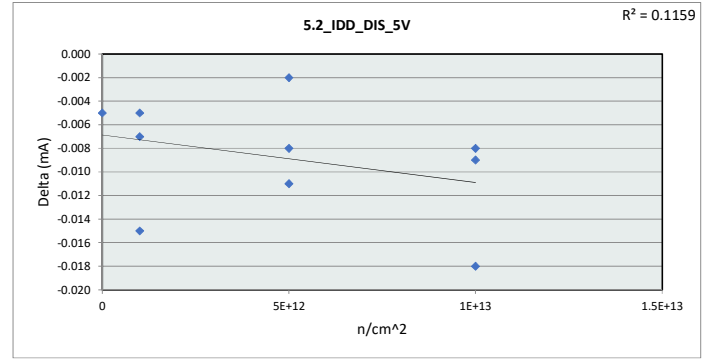


5.1_IDD_DIS_4V				
Test Site				
Tester				
Test Number				
Max Limit		3	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	1.822	1.769	1.731	1.774
Average	1.822	1.807	1.794	1.778
Max	1.822	1.840	1.908	1.783
UL	3.000	3.000	3.000	3.000

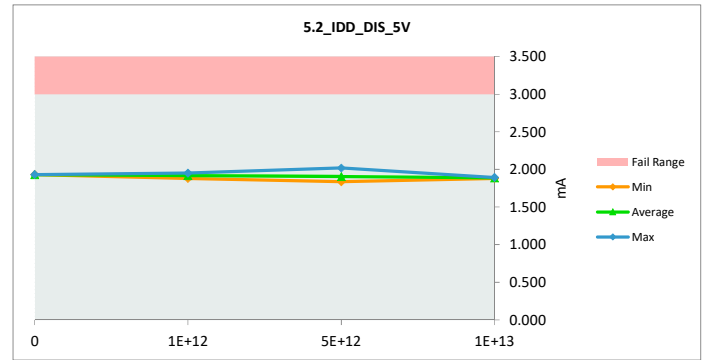


NDD Characterization Report TPS7H5005-SEP

5.2_IDD_DIS_5V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		3	3	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.937	1.932	-0.005
1E+12	1	1.937	1.922	-0.015
1E+12	2	1.885	1.880	-0.005
1E+12	3	1.959	1.952	-0.007
5E+12	4	1.849	1.838	-0.011
5E+12	5	2.027	2.019	-0.008
5E+12	6	1.855	1.853	-0.002
1E+13	7	1.890	1.881	-0.009
1E+13	8	1.903	1.885	-0.018
1E+13	9	1.902	1.894	-0.008
Max		2.027	2.019	-0.002
Average		1.914	1.906	-0.009
Min		1.849	1.838	-0.018
Std Dev		0.053	0.053	0.005

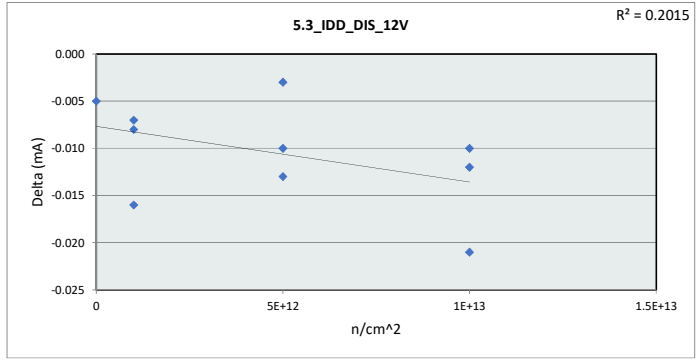


5.2_IDD_DIS_5V				
Test Site				
Tester				
Test Number				
Max Limit		3	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	1.932	1.880	1.838	1.881
Average	1.932	1.918	1.903	1.887
Max	1.932	1.952	2.019	1.894
UL	3.000	3.000	3.000	3.000

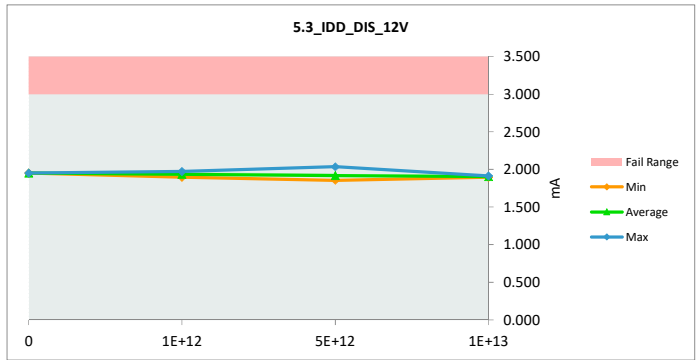


NDD Characterization Report TPS7H5005-SEP

5.3_IDD_DIS_12V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		3	3	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.957	1.952	-0.005
1E+12	1	1.956	1.940	-0.016
1E+12	2	1.903	1.896	-0.007
1E+12	3	1.980	1.972	-0.008
5E+12	4	1.868	1.855	-0.013
5E+12	5	2.045	2.035	-0.010
5E+12	6	1.872	1.869	-0.003
1E+13	7	1.908	1.896	-0.012
1E+13	8	1.923	1.902	-0.021
1E+13	9	1.924	1.914	-0.010
Max		2.045	2.035	-0.003
Average		1.934	1.923	-0.010
Min		1.868	1.855	-0.021
Std Dev		0.053	0.053	0.005

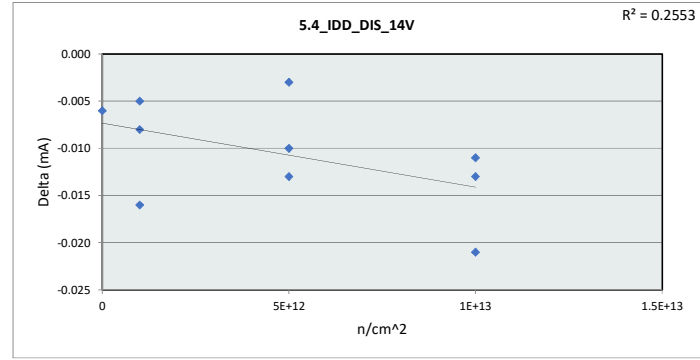


5.3_IDD_DIS_12V				
Test Site				
Tester				
Test Number				
Max Limit		3	mA	
Min Limit			mA	
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	1.952	1.896	1.855	1.896
Average	1.952	1.936	1.920	1.904
Max	1.952	1.972	2.035	1.914
UL	3.000	3.000	3.000	3.000

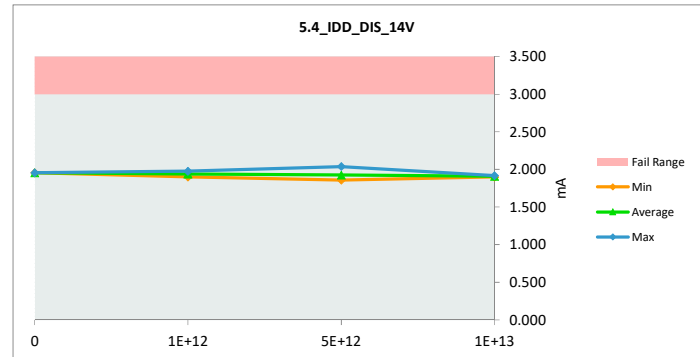


NDD Characterization Report TPS7H5005-SEP

5.4_IDD_DIS_14V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		3	3	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.962	1.956	-0.006
1E+12	1	1.961	1.945	-0.016
1E+12	2	1.906	1.901	-0.005
1E+12	3	1.984	1.976	-0.008
5E+12	4	1.872	1.859	-0.013
5E+12	5	2.049	2.039	-0.010
5E+12	6	1.876	1.873	-0.003
1E+13	7	1.913	1.900	-0.013
1E+13	8	1.927	1.906	-0.021
1E+13	9	1.929	1.918	-0.011
Max		2.049	2.039	-0.003
Average		1.938	1.927	-0.011
Min		1.872	1.859	-0.021
Std Dev		0.053	0.053	0.005

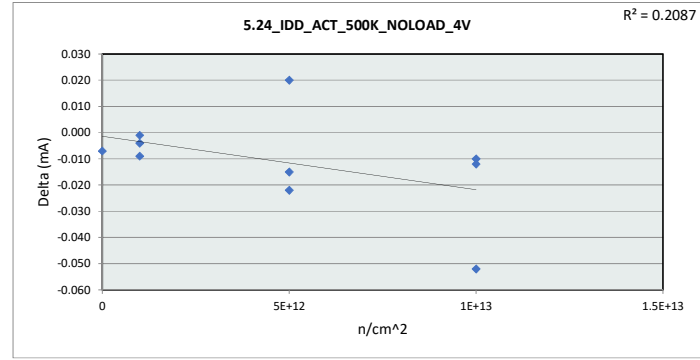


5.4_IDD_DIS_14V				
Test Site				
Tester				
Test Number				
Max Limit		3	mA	
Min Limit			mA	
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	1.956	1.901	1.859	1.900
Average	1.956	1.941	1.924	1.908
Max	1.956	1.976	2.039	1.918
UL	3.000	3.000	3.000	3.000

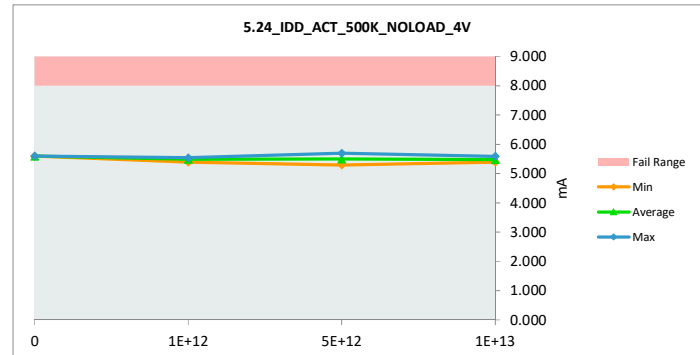


NDD Characterization Report TPS7H5005-SEP

5.24_IDD_ACT_500K_NOLOAD_4V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		8	8	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	5.605	5.598	-0.007
1E+12	1	5.543	5.542	-0.001
1E+12	2	5.401	5.397	-0.004
1E+12	3	5.546	5.537	-0.009
5E+12	4	5.320	5.298	-0.022
5E+12	5	5.714	5.699	-0.015
5E+12	6	5.487	5.507	0.020
1E+13	7	5.404	5.392	-0.012
1E+13	8	5.509	5.457	-0.052
1E+13	9	5.602	5.592	-0.010
Max		5.714	5.699	0.020
Average		5.513	5.502	-0.011
Min		5.320	5.298	-0.052
Std Dev		0.116	0.118	0.018

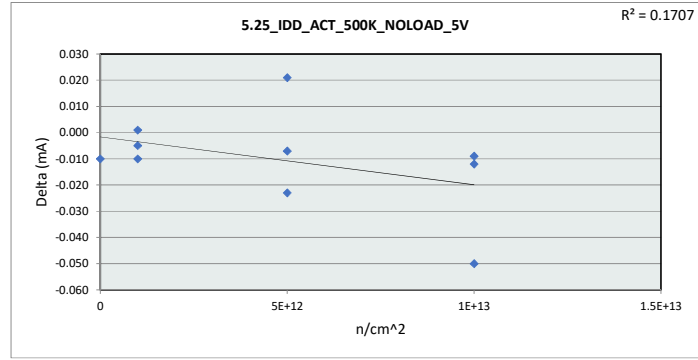


5.24_IDD_ACT_500K_NOLOAD				
Test Site				
Tester				
Test Number				
Max Limit		8	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	5.598	5.397	5.298	5.392
Average	5.598	5.492	5.501	5.480
Max	5.598	5.542	5.699	5.592
UL	8.000	8.000	8.000	8.000

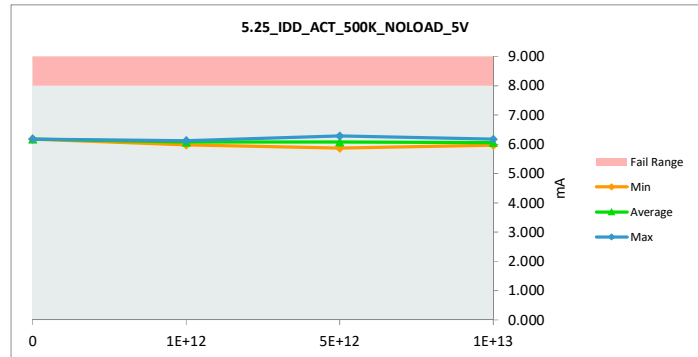


NDD Characterization Report TPS7H5005-SEP

5.25_IDD_ACT_500K_NOLOAD_5V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		8	8	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.190	6.180	-0.010
1E+12	1	6.126	6.127	0.001
1E+12	2	5.983	5.978	-0.005
1E+12	3	6.128	6.118	-0.010
5E+12	4	5.895	5.872	-0.023
5E+12	5	6.293	6.286	-0.007
5E+12	6	6.070	6.091	0.021
1E+13	7	5.982	5.970	-0.012
1E+13	8	6.091	6.041	-0.050
1E+13	9	6.188	6.179	-0.009
Max		6.293	6.286	0.021
Average		6.095	6.084	-0.010
Min		5.895	5.872	-0.050
Std Dev		0.118	0.122	0.018

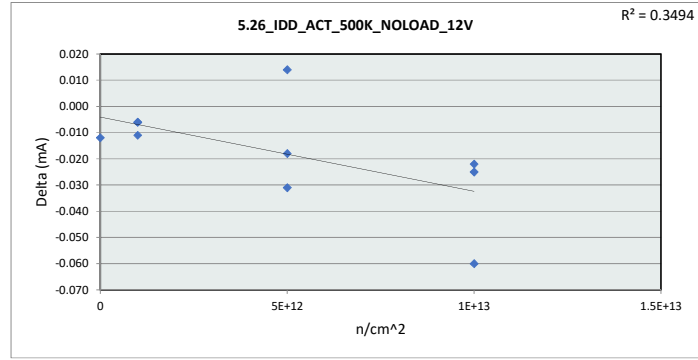


5.25_IDD_ACT_500K_NOLOAD				
Test Site				
Tester				
Test Number				
Max Limit		8	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	6.180	5.978	5.872	5.970
Average	6.180	6.074	6.083	6.063
Max	6.180	6.127	6.286	6.179
UL	8.000	8.000	8.000	8.000

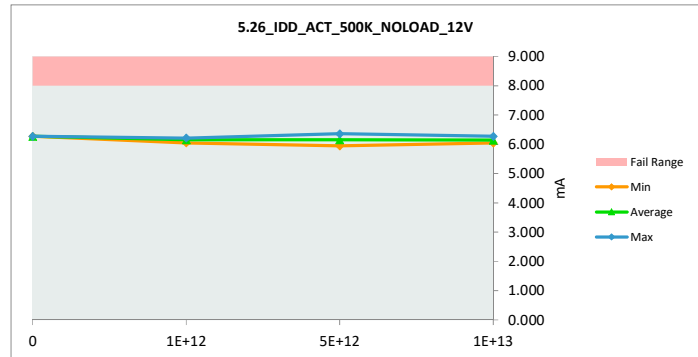


NDD Characterization Report TPS7H5005-SEP

5.26_IDD_ACT_500K_NOLOAD_12V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		8	8	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.287	6.275	-0.012
1E+12	1	6.215	6.209	-0.006
1E+12	2	6.059	6.053	-0.006
1E+12	3	6.224	6.213	-0.011
5E+12	4	5.979	5.948	-0.031
5E+12	5	6.378	6.360	-0.018
5E+12	6	6.151	6.165	0.014
1E+13	7	6.068	6.043	-0.025
1E+13	8	6.179	6.119	-0.060
1E+13	9	6.295	6.273	-0.022
Max		6.378	6.360	0.014
Average		6.184	6.166	-0.018
Min		5.979	5.948	-0.060
Std Dev		0.123	0.126	0.019

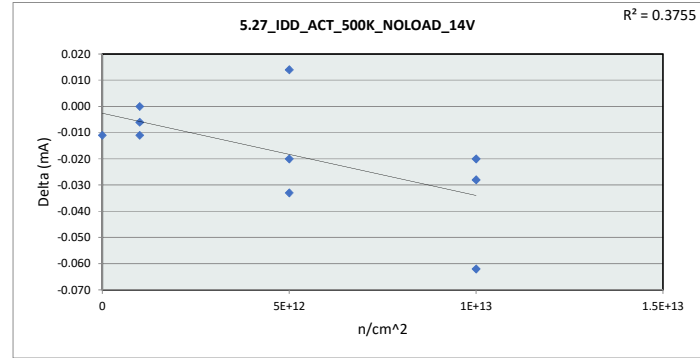


5.26_IDD_ACT_500K_NOLOAD				
Test Site				
Tester				
Test Number				
Max Limit		8	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	6.275	6.053	5.948	6.043
Average	6.275	6.158	6.158	6.145
Max	6.275	6.213	6.360	6.273
UL	8.000	8.000	8.000	8.000

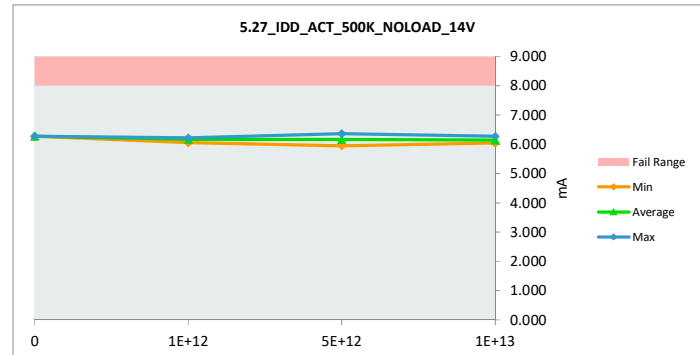


NDD Characterization Report TPS7H5005-SEP

5.27_IDD_ACT_500K_NOLOAD_14V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		8	8	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.290	6.279	-0.011
1E+12	1	6.216	6.216	0.000
1E+12	2	6.064	6.058	-0.006
1E+12	3	6.229	6.218	-0.011
5E+12	4	5.984	5.951	-0.033
5E+12	5	6.385	6.365	-0.020
5E+12	6	6.154	6.168	0.014
1E+13	7	6.075	6.047	-0.028
1E+13	8	6.186	6.124	-0.062
1E+13	9	6.296	6.276	-0.020
Max		6.385	6.365	0.014
Average		6.188	6.170	-0.018
Min		5.984	5.951	-0.062
Std Dev		0.122	0.126	0.021

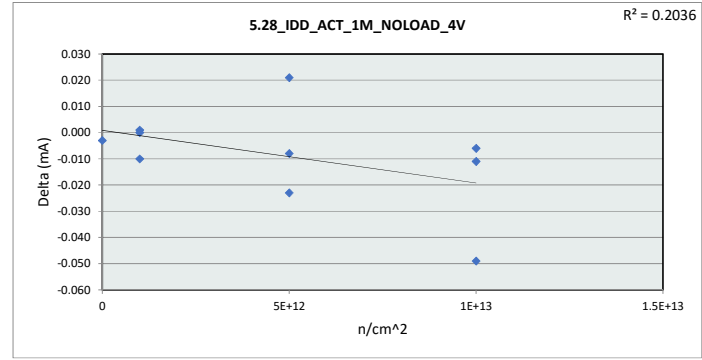


5.27_IDD_ACT_500K_NOLOAD				
Test Site				
Tester				
Test Number				
Max Limit		8	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	6.279	6.058	5.951	6.047
Average	6.279	6.164	6.161	6.149
Max	6.279	6.218	6.365	6.276
UL	8.000	8.000	8.000	8.000

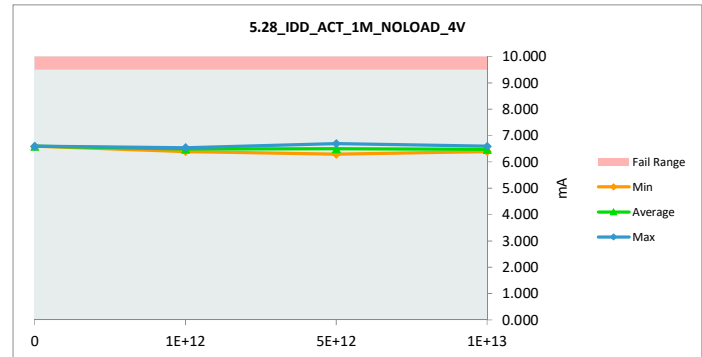


NDD Characterization Report TPS7H5005-SEP

5.28_IDD_ACT_1M_NOLOAD_4V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		9.5	9.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.598	6.595	-0.003
1E+12	1	6.537	6.538	0.001
1E+12	2	6.394	6.394	0.000
1E+12	3	6.536	6.526	-0.010
5E+12	4	6.315	6.292	-0.023
5E+12	5	6.700	6.692	-0.008
5E+12	6	6.488	6.509	0.021
1E+13	7	6.402	6.391	-0.011
1E+13	8	6.499	6.450	-0.049
1E+13	9	6.600	6.594	-0.006
Max		6.700	6.692	0.021
Average		6.507	6.498	-0.009
Min		6.315	6.292	-0.049
Std Dev		0.114	0.118	0.018

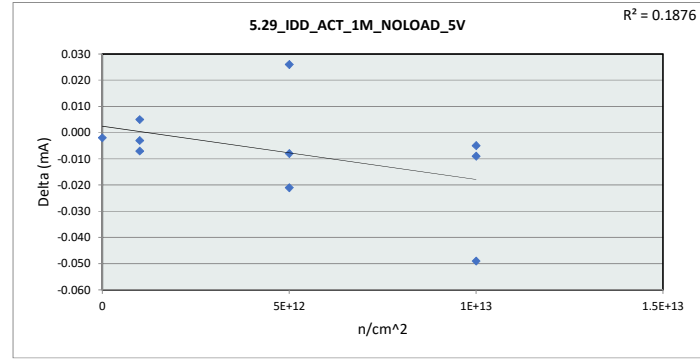


5.28_IDD_ACT_1M_NOLOAD_4V				
Test Site				
Tester				
Test Number				
Max Limit		9.5	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	6.595	6.394	6.292	6.391
Average	6.595	6.486	6.498	6.478
Max	6.595	6.538	6.692	6.594
UL	9.500	9.500	9.500	9.500

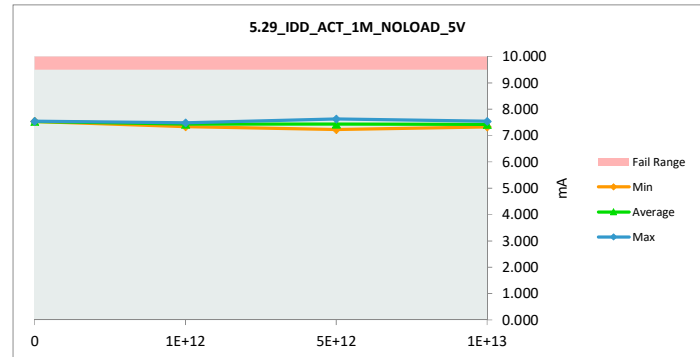


NDD Characterization Report TPS7H5005-SEP

5.29_IDD_ACT_1M_NOLOAD_5V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		9.5	9.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.541	7.539	-0.002
1E+12	1	7.476	7.481	0.005
1E+12	2	7.337	7.334	-0.003
1E+12	3	7.473	7.466	-0.007
5E+12	4	7.247	7.226	-0.021
5E+12	5	7.639	7.631	-0.008
5E+12	6	7.429	7.455	0.026
1E+13	7	7.341	7.332	-0.009
1E+13	8	7.439	7.390	-0.049
1E+13	9	7.548	7.543	-0.005
Max		7.639	7.631	0.026
Average		7.447	7.440	-0.007
Min		7.247	7.226	-0.049
Std Dev		0.116	0.120	0.019

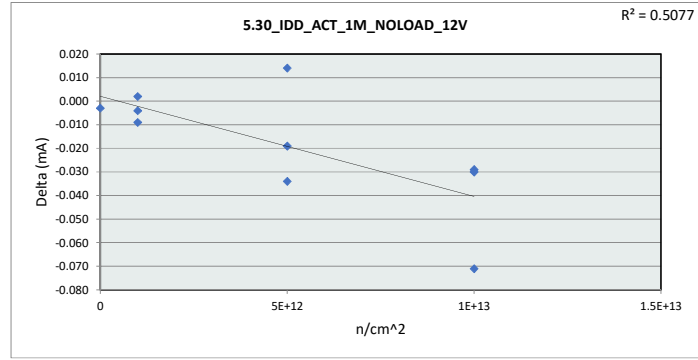


5.29_IDD_ACT_1M_NOLOAD_5V				
Test Site				
Tester				
Test Number				
Max Limit	9.5	mA		
Min Limit		mA		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.539	7.334	7.226	7.332
Average	7.539	7.427	7.437	7.422
Max	7.539	7.481	7.631	7.543
UL	9.500	9.500	9.500	9.500

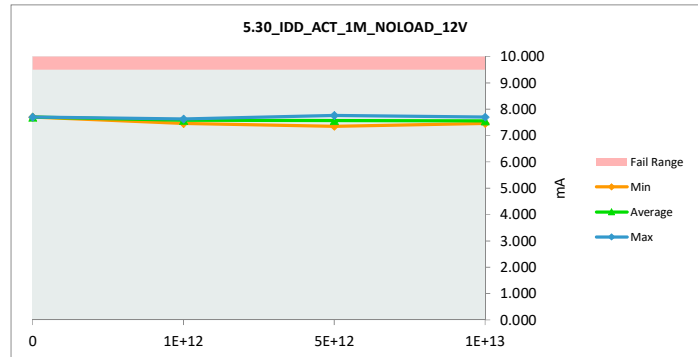


NDD Characterization Report TPS7H5005-SEP

5.30_IDD_ACT_1M_NOLOAD_12V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		9.5	9.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.703	7.700	-0.003
1E+12	1	7.625	7.627	0.002
1E+12	2	7.466	7.462	-0.004
1E+12	3	7.639	7.630	-0.009
5E+12	4	7.389	7.355	-0.034
5E+12	5	7.786	7.767	-0.019
5E+12	6	7.571	7.585	0.014
1E+13	7	7.491	7.462	-0.029
1E+13	8	7.596	7.525	-0.071
1E+13	9	7.729	7.699	-0.030
Max		7.786	7.767	0.014
Average		7.600	7.581	-0.018
Min		7.389	7.355	-0.071
Std Dev		0.124	0.129	0.024

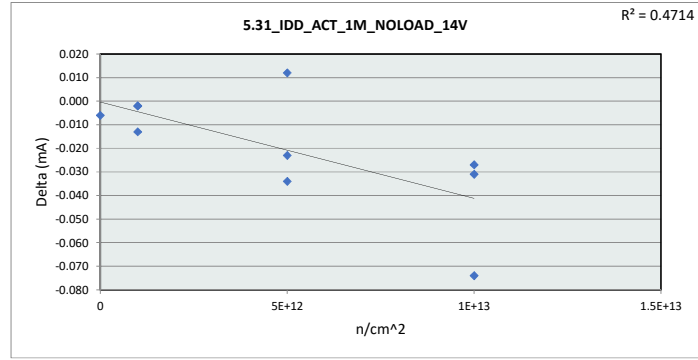


5.30_IDD_ACT_1M_NOLOAD				
Test Site				
Tester				
Test Number				
Max Limit	9.5	mA		
Min Limit		mA		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.700	7.462	7.355	7.462
Average	7.700	7.573	7.569	7.562
Max	7.700	7.630	7.767	7.699
UL	9.500	9.500	9.500	9.500

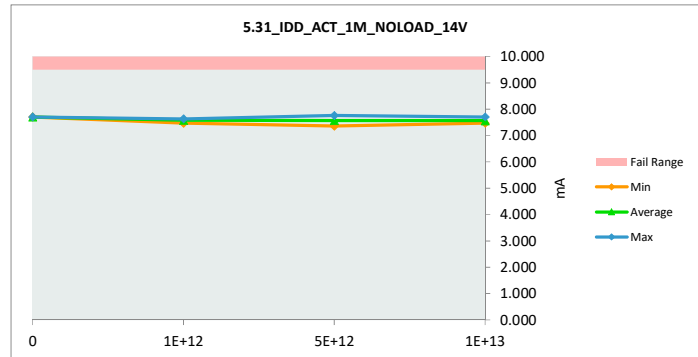


NDD Characterization Report TPS7H5005-SEP

5.31_IDD_ACT_1M_NOLOAD_14V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		9.5	9.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.711	7.705	-0.006
1E+12	1	7.632	7.630	-0.002
1E+12	2	7.470	7.468	-0.002
1E+12	3	7.645	7.632	-0.013
5E+12	4	7.394	7.360	-0.034
5E+12	5	7.792	7.769	-0.023
5E+12	6	7.577	7.589	0.012
1E+13	7	7.495	7.464	-0.031
1E+13	8	7.601	7.527	-0.074
1E+13	9	7.732	7.705	-0.027
Max		7.792	7.769	0.012
Average		7.605	7.585	-0.020
Min		7.394	7.360	-0.074
Std Dev		0.125	0.129	0.024

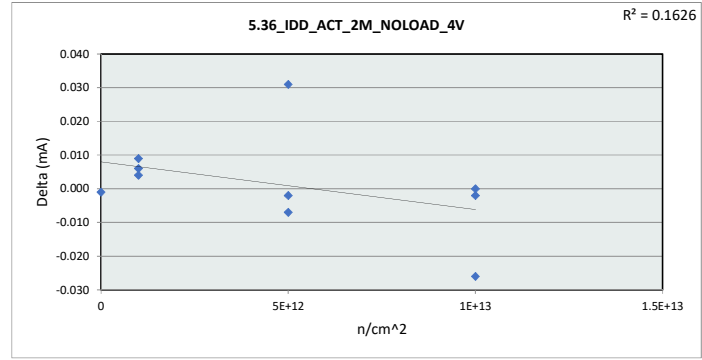


5.31_IDD_ACT_1M_NOLOAD				
Test Site				
Tester				
Test Number				
Max Limit	9.5	mA		
Min Limit		mA		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.705	7.468	7.360	7.464
Average	7.705	7.577	7.573	7.565
Max	7.705	7.632	7.769	7.705
UL	9.500	9.500	9.500	9.500

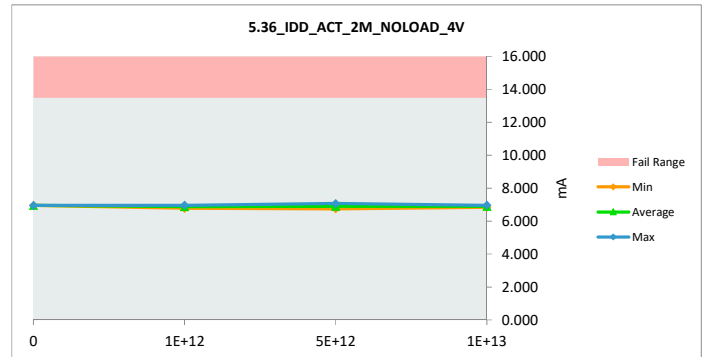


NDD Characterization Report TPS7H5005-SEP

5.36_IDD_ACT_2M_NOLOAD_4V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		13.5	13.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.960	6.959	-0.001
1E+12	1	6.906	6.915	0.009
1E+12	2	6.774	6.780	0.006
1E+12	3	6.958	6.962	0.004
5E+12	4	6.759	6.752	-0.007
5E+12	5	7.069	7.067	-0.002
5E+12	6	6.886	6.917	0.031
1E+13	7	6.855	6.853	-0.002
1E+13	8	6.885	6.859	-0.026
1E+13	9	6.961	6.961	0.000
Max		7.069	7.067	0.031
Average		6.901	6.903	0.001
Min		6.759	6.752	-0.026
Std Dev		0.093	0.094	0.014

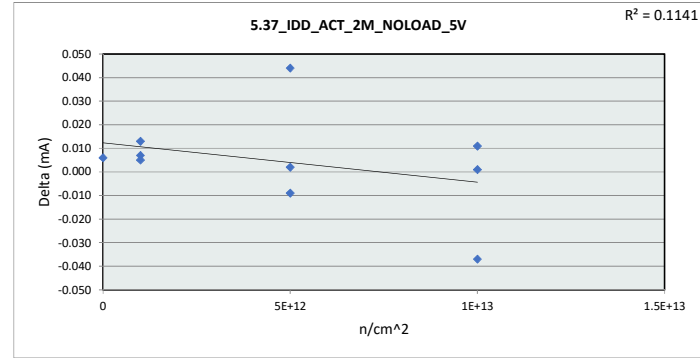


5.36_IDD_ACT_2M_NOLOAD_4V				
Test Site				
Tester				
Test Number				
Max Limit		13.5	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	6.959	6.780	6.752	6.853
Average	6.959	6.886	6.912	6.891
Max	6.959	6.962	7.067	6.961
UL	13.500	13.500	13.500	13.500

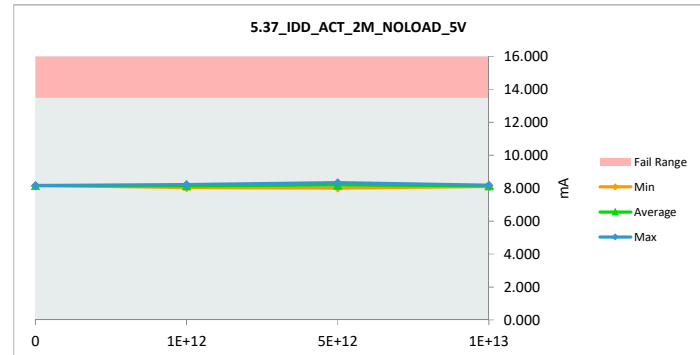


NDD Characterization Report TPS7H5005-SEP

5.37_IDD_ACT_2M_NOLOAD_5V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		13.5	13.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.150	8.156	0.006
1E+12	1	8.147	8.154	0.007
1E+12	2	8.032	8.045	0.013
1E+12	3	8.217	8.222	0.005
5E+12	4	8.022	8.013	-0.009
5E+12	5	8.335	8.337	0.002
5E+12	6	8.192	8.236	0.044
1E+13	7	8.110	8.111	0.001
1E+13	8	8.178	8.141	-0.037
1E+13	9	8.166	8.177	0.011
Max		8.335	8.337	0.044
Average		8.155	8.159	0.004
Min		8.022	8.013	-0.037
Std Dev		0.090	0.094	0.020

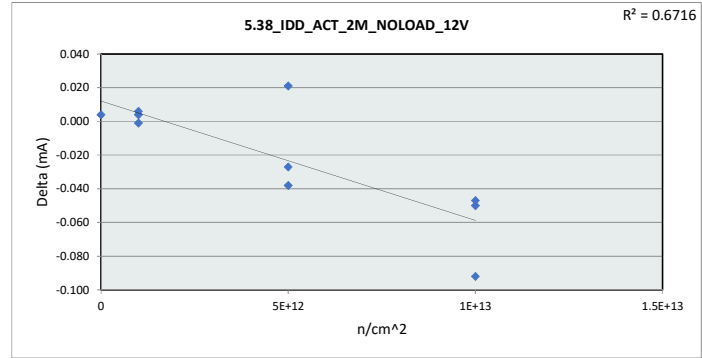


5.37_IDD_ACT_2M_NOLOAD_5V				
Test Site				
Tester				
Test Number				
Max Limit		13.5	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.156	8.045	8.013	8.111
Average	8.156	8.140	8.195	8.143
Max	8.156	8.222	8.337	8.177
UL	13.500	13.500	13.500	13.500

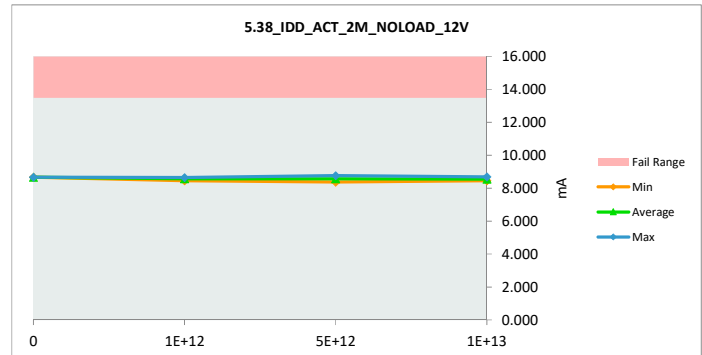


NDD Characterization Report TPS7H5005-SEP

5.38_IDD_ACT_2M_NOLOAD_12V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		13.5	13.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.671	8.675	0.004
1E+12	1	8.625	8.631	0.006
1E+12	2	8.457	8.461	0.004
1E+12	3	8.651	8.650	-0.001
5E+12	4	8.409	8.371	-0.038
5E+12	5	8.788	8.761	-0.027
5E+12	6	8.580	8.601	0.021
1E+13	7	8.512	8.465	-0.047
1E+13	8	8.585	8.493	-0.092
1E+13	9	8.748	8.698	-0.050
Max		8.788	8.761	0.021
Average		8.603	8.581	-0.022
Min		8.409	8.371	-0.092
Std Dev		0.121	0.126	0.035

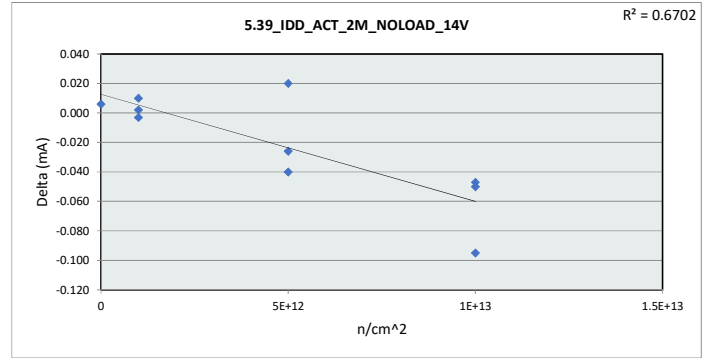


5.38_IDD_ACT_2M_NOLOAD				
Test Site				
Tester				
Test Number				
Max Limit		13.5	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.675	8.461	8.371	8.465
Average	8.675	8.581	8.578	8.552
Max	8.675	8.650	8.761	8.698
UL	13.500	13.500	13.500	13.500

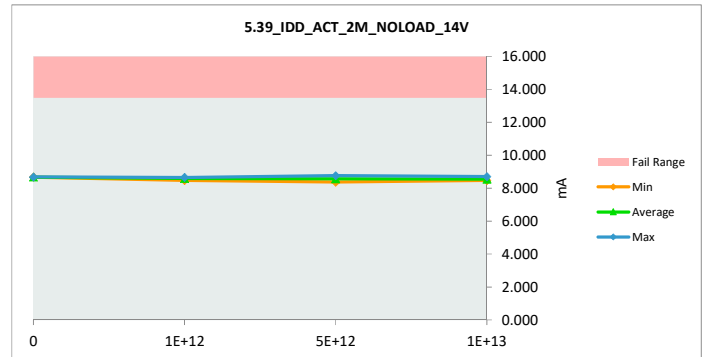


NDD Characterization Report TPS7H5005-SEP

5.39_IDD_ACT_2M_NOLOAD_14V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		13.5	13.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.672	8.678	0.006
1E+12	1	8.630	8.640	0.010
1E+12	2	8.465	8.467	0.002
1E+12	3	8.656	8.653	-0.003
5E+12	4	8.412	8.372	-0.040
5E+12	5	8.792	8.766	-0.026
5E+12	6	8.585	8.605	0.020
1E+13	7	8.516	8.469	-0.047
1E+13	8	8.592	8.497	-0.095
1E+13	9	8.753	8.703	-0.050
Max		8.792	8.766	0.020
Average		8.607	8.585	-0.022
Min		8.412	8.372	-0.095
Std Dev		0.120	0.126	0.036

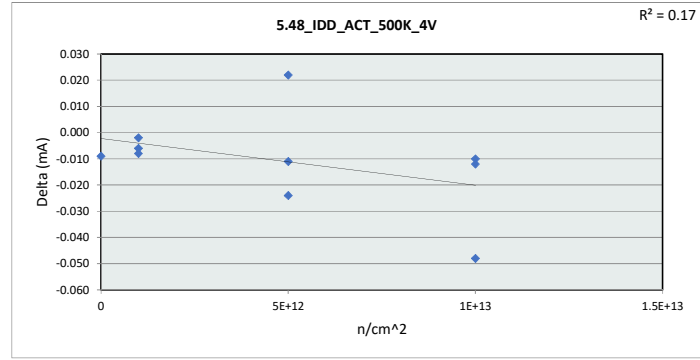


5.39_IDD_ACT_2M_NOLOAD				
Test Site				
Tester				
Test Number				
Max Limit		13.5	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.678	8.467	8.372	8.469
Average	8.678	8.587	8.581	8.556
Max	8.678	8.653	8.766	8.703
UL	13.500	13.500	13.500	13.500

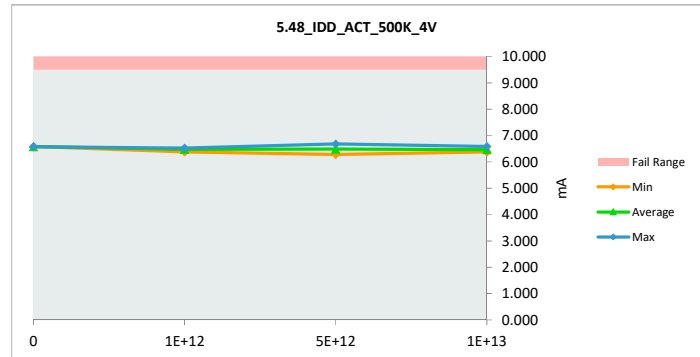


NDD Characterization Report TPS7H5005-SEP

5.48_IDD_ACT_500K_4V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		9.5	9.5	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.590	6.581	-0.009
1E+12	1	6.525	6.523	-0.002
1E+12	2	6.386	6.380	-0.006
1E+12	3	6.530	6.522	-0.008
5E+12	4	6.306	6.282	-0.024
5E+12	5	6.693	6.682	-0.011
5E+12	6	6.470	6.492	0.022
1E+13	7	6.392	6.380	-0.012
1E+13	8	6.488	6.440	-0.048
1E+13	9	6.592	6.582	-0.010
	Max	6.693	6.682	0.022
	Average	6.497	6.486	-0.011
	Min	6.306	6.282	-0.048
	Std Dev	0.115	0.118	0.017

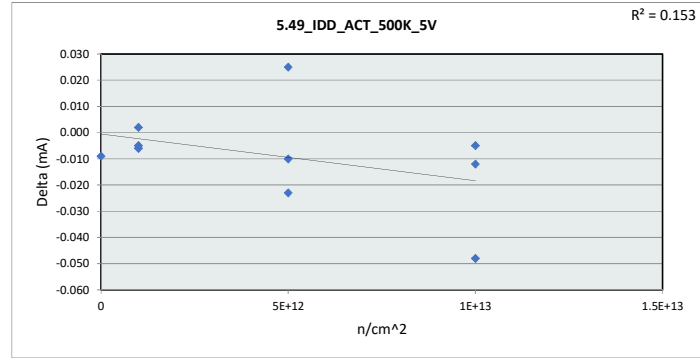


5.48_IDD_ACT_500K_4V				
Test Site				
Tester				
Test Number				
Max Limit		9.5	mA	
Min Limit			mA	
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	6.581	6.380	6.282	6.380
Average	6.581	6.475	6.485	6.467
Max	6.581	6.523	6.682	6.582
UL	9.500	9.500	9.500	9.500

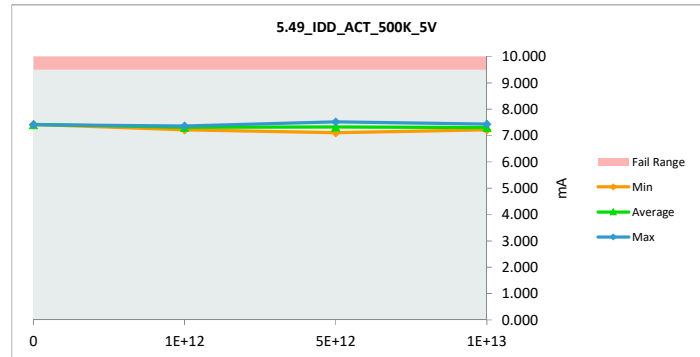


NDD Characterization Report TPS7H5005-SEP

5.49_IDD_ACT_500K_5V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		9.5	9.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.428	7.419	-0.009
1E+12	1	7.364	7.366	0.002
1E+12	2	7.224	7.218	-0.006
1E+12	3	7.367	7.362	-0.005
5E+12	4	7.135	7.112	-0.023
5E+12	5	7.530	7.520	-0.010
5E+12	6	7.307	7.332	0.025
1E+13	7	7.230	7.218	-0.012
1E+13	8	7.324	7.276	-0.048
1E+13	9	7.436	7.431	-0.005
Max		7.530	7.520	0.025
Average		7.335	7.325	-0.009
Min		7.135	7.112	-0.048
Std Dev		0.117	0.121	0.018

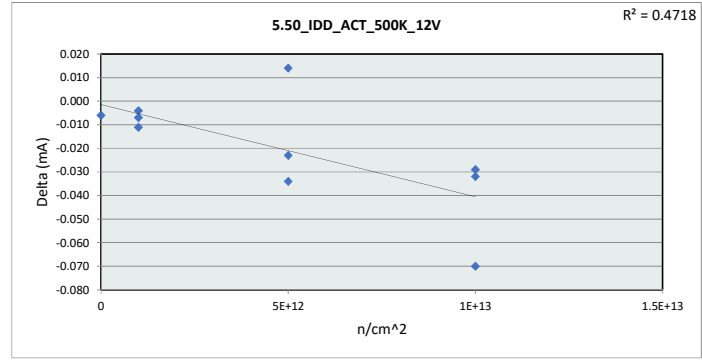


5.49_IDD_ACT_500K_5V				
Test Site				
Tester				
Test Number				
Max Limit	9.5	mA		
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.419	7.218	7.112	7.218
Average	7.419	7.315	7.321	7.308
Max	7.419	7.366	7.520	7.431
UL	9.500	9.500	9.500	9.500

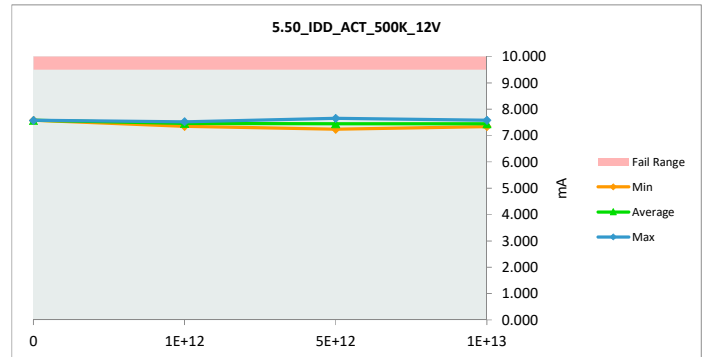


NDD Characterization Report TPS7H5005-SEP

5.50_IDD_ACT_500K_12V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		9.5	9.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.586	7.580	-0.006
1E+12	1	7.513	7.509	-0.004
1E+12	2	7.355	7.348	-0.007
1E+12	3	7.536	7.525	-0.011
5E+12	4	7.277	7.243	-0.034
5E+12	5	7.677	7.654	-0.023
5E+12	6	7.445	7.459	0.014
1E+13	7	7.377	7.345	-0.032
1E+13	8	7.479	7.409	-0.070
1E+13	9	7.615	7.586	-0.029
Max		7.677	7.654	0.014
Average		7.486	7.466	-0.020
Min		7.277	7.243	-0.070
Std Dev		0.125	0.129	0.023

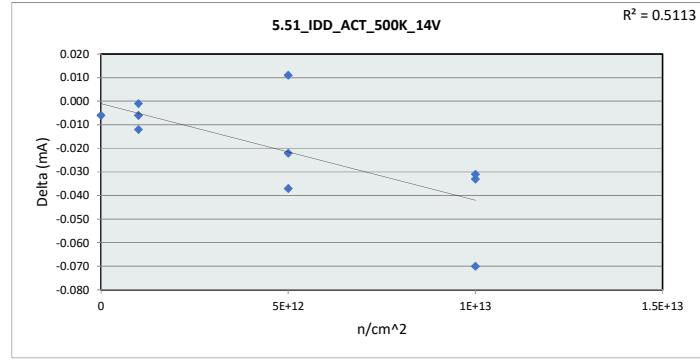


5.50_IDD_ACT_500K_12V				
Test Site				
Tester				
Test Number				
Max Limit	9.5	mA		
Min Limit		mA		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.580	7.348	7.243	7.345
Average	7.580	7.461	7.452	7.447
Max	7.580	7.525	7.654	7.586
UL	9.500	9.500	9.500	9.500

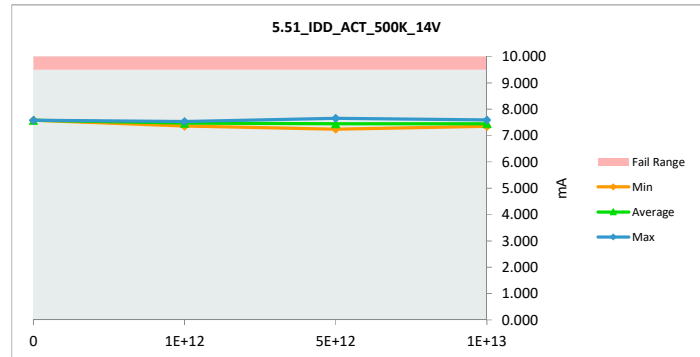


NDD Characterization Report TPS7H5005-SEP

5.51_IDD_ACT_500K_14V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		9.5	9.5	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.590	7.584	-0.006
1E+12	1	7.516	7.515	-0.001
1E+12	2	7.361	7.355	-0.006
1E+12	3	7.542	7.530	-0.012
5E+12	4	7.283	7.246	-0.037
5E+12	5	7.681	7.659	-0.022
5E+12	6	7.452	7.463	0.011
1E+13	7	7.382	7.349	-0.033
1E+13	8	7.486	7.416	-0.070
1E+13	9	7.620	7.589	-0.031
Max		7.681	7.659	0.011
Average		7.491	7.471	-0.021
Min		7.283	7.246	-0.070
Std Dev		0.124	0.129	0.023

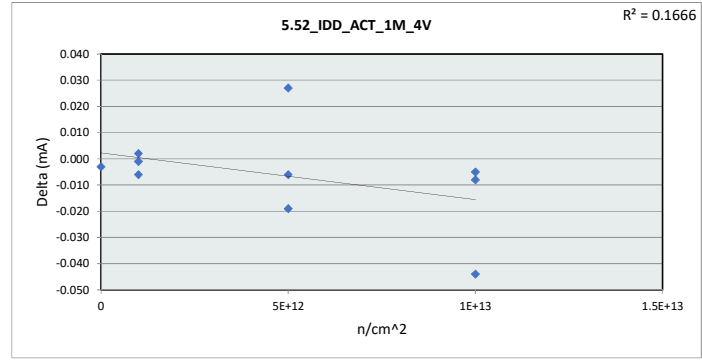


5.51_IDD_ACT_500K_14V				
Test Site				
Tester				
Test Number				
Max Limit	9.5	mA		
Min Limit		mA		
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	7.584	7.355	7.246	7.349
Average	7.584	7.467	7.456	7.451
Max	7.584	7.530	7.659	7.589
UL	9.500	9.500	9.500	9.500

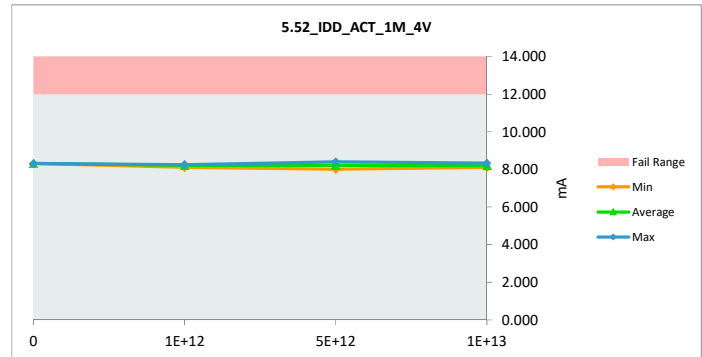


NDD Characterization Report TPS7H5005-SEP

5.52_IDD_ACT_1M_4V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		12	12	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.317	8.314	-0.003
1E+12	1	8.253	8.255	0.002
1E+12	2	8.115	8.114	-0.001
1E+12	3	8.257	8.251	-0.006
5E+12	4	8.031	8.012	-0.019
5E+12	5	8.411	8.405	-0.006
5E+12	6	8.208	8.235	0.027
1E+13	7	8.129	8.121	-0.008
1E+13	8	8.206	8.162	-0.044
1E+13	9	8.332	8.327	-0.005
Max		8.411	8.405	0.027
Average		8.226	8.220	-0.006
Min		8.031	8.012	-0.044
Std Dev		0.113	0.118	0.018

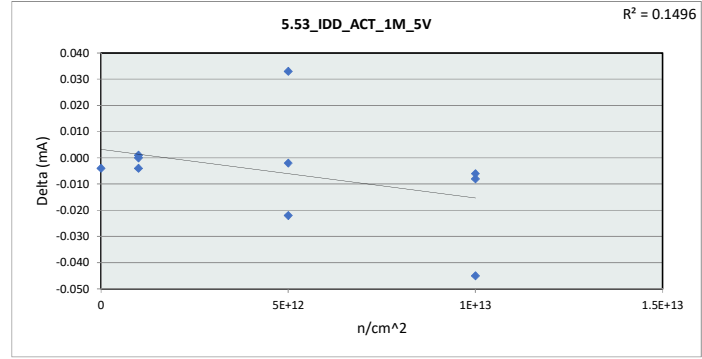


5.52_IDD_ACT_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit		12	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.314	8.114	8.012	8.121
Average	8.314	8.207	8.217	8.203
Max	8.314	8.255	8.405	8.327
UL	12.000	12.000	12.000	12.000

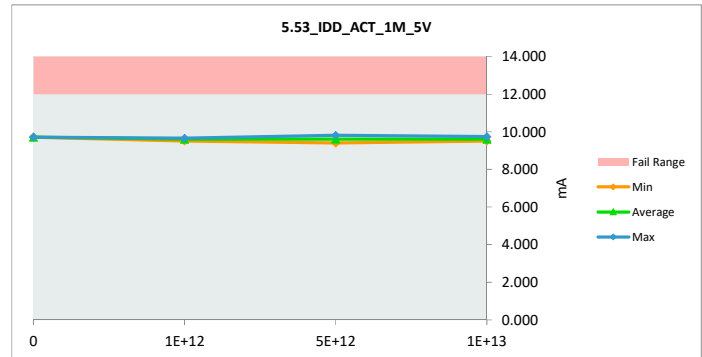


NDD Characterization Report TPS7H5005-SEP

5.53_IDD_ACT_1M_5V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		12	12	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	9.724	9.720	-0.004
1E+12	1	9.653	9.654	0.001
1E+12	2	9.513	9.513	0.000
1E+12	3	9.649	9.645	-0.004
5E+12	4	9.423	9.401	-0.022
5E+12	5	9.810	9.808	-0.002
5E+12	6	9.606	9.639	0.033
1E+13	7	9.524	9.516	-0.008
1E+13	8	9.601	9.556	-0.045
1E+13	9	9.745	9.739	-0.006
Max		9.810	9.808	0.033
Average		9.625	9.619	-0.006
Min		9.423	9.401	-0.045
Std Dev		0.118	0.123	0.019

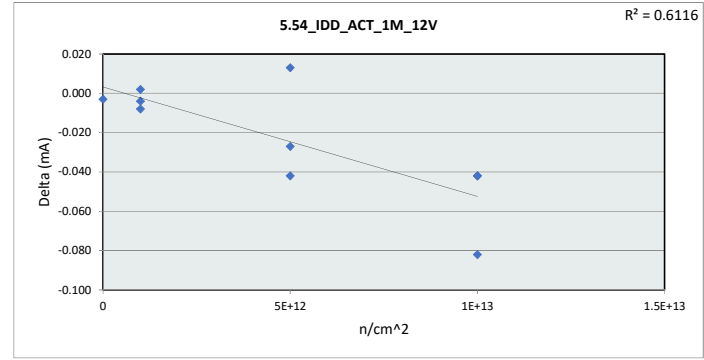


5.53_IDD_ACT_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit		12	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	9.720	9.513	9.401	9.516
Average	9.720	9.604	9.616	9.604
Max	9.720	9.654	9.808	9.739
UL	12.000	12.000	12.000	12.000

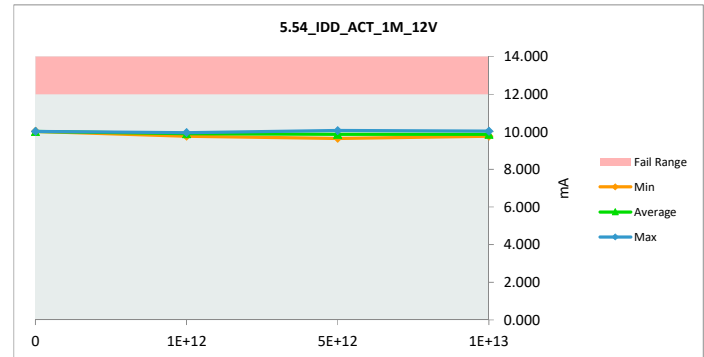


NDD Characterization Report TPS7H5005-SEP

5.54_IDD_ACT_1M_12V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		12	12	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	10.029	10.026	-0.003
1E+12	1	9.937	9.939	0.002
1E+12	2	9.776	9.772	-0.004
1E+12	3	9.968	9.960	-0.008
5E+12	4	9.695	9.653	-0.042
5E+12	5	10.094	10.067	-0.027
5E+12	6	9.876	9.889	0.013
1E+13	7	9.809	9.767	-0.042
1E+13	8	9.899	9.817	-0.082
1E+13	9	10.078	10.036	-0.042
Max		10.094	10.067	0.013
Average		9.916	9.893	-0.023
Min		9.695	9.653	-0.082
Std Dev		0.131	0.137	0.029

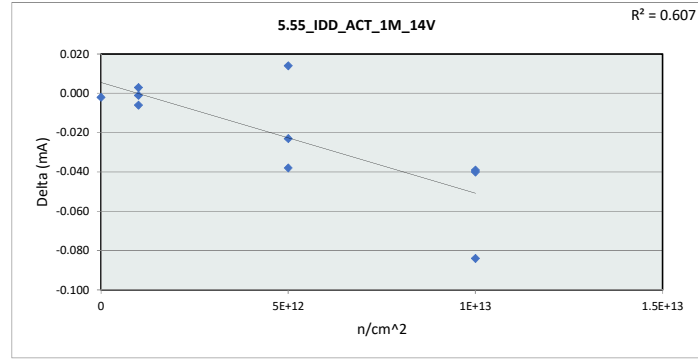


5.54_IDD_ACT_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	12	mA		
Min Limit		mA		
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	10.026	9.772	9.653	9.767
Average	10.026	9.890	9.870	9.873
Max	10.026	9.960	10.067	10.036
UL	12.000	12.000	12.000	12.000

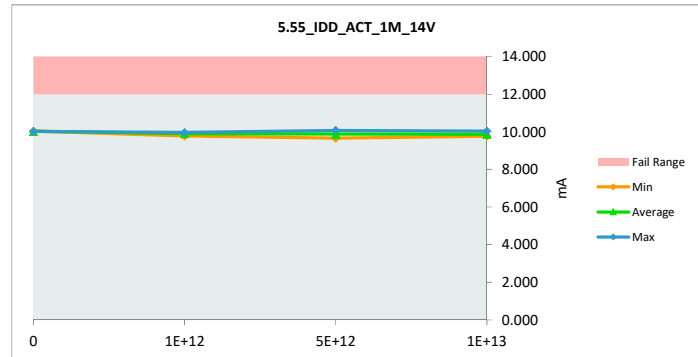


NDD Characterization Report TPS7H5005-SEP

5.55_IDD_ACT_1M_14V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		12	12	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	10.032	10.030	-0.002
1E+12	1	9.940	9.943	0.003
1E+12	2	9.778	9.777	-0.001
1E+12	3	9.972	9.966	-0.006
5E+12	4	9.698	9.660	-0.038
5E+12	5	10.095	10.072	-0.023
5E+12	6	9.881	9.895	0.014
1E+13	7	9.811	9.772	-0.039
1E+13	8	9.903	9.819	-0.084
1E+13	9	10.080	10.040	-0.040
Max		10.095	10.072	0.014
Average		9.919	9.897	-0.022
Min		9.698	9.660	-0.084
Std Dev		0.131	0.137	0.029

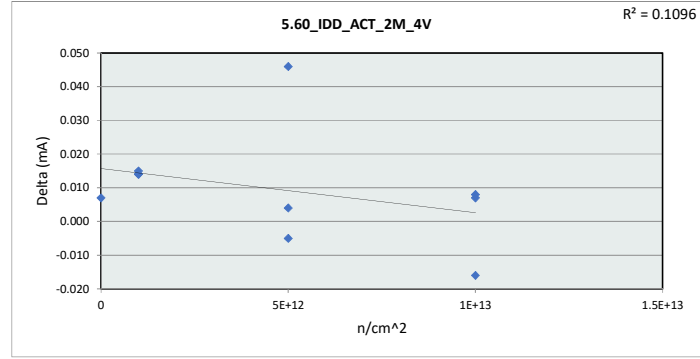


5.55_IDD_ACT_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit		12	mA	
Min Limit			mA	
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	10.030	9.777	9.660	9.772
Average	10.030	9.895	9.876	9.877
Max	10.030	9.966	10.072	10.040
UL	12.000	12.000	12.000	12.000

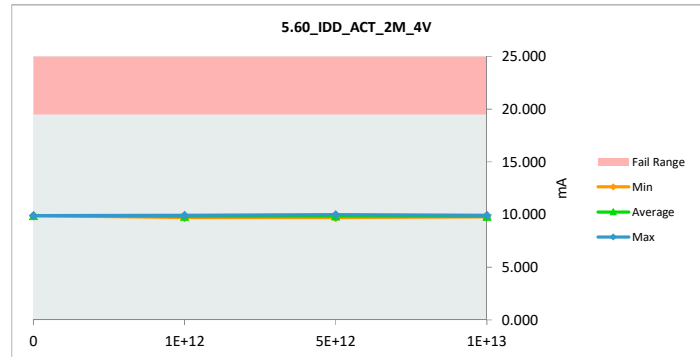


NDD Characterization Report TPS7H5005-SEP

5.60_IDD_ACT_2M_4V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		19.5	19.5	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	9.892	9.899	0.007
1E+12	1	9.832	9.846	0.014
1E+12	2	9.710	9.725	0.015
1E+12	3	9.921	9.935	0.014
5E+12	4	9.721	9.716	-0.005
5E+12	5	9.994	9.998	0.004
5E+12	6	9.825	9.871	0.046
1E+13	7	9.820	9.827	0.007
1E+13	8	9.795	9.779	-0.016
1E+13	9	9.908	9.916	0.008
Max		9.994	9.998	0.046
Average		9.842	9.851	0.009
Min		9.710	9.716	-0.016
Std Dev		0.089	0.092	0.016

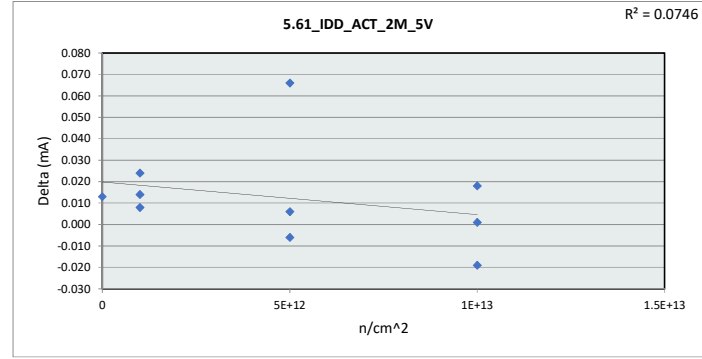


5.60_IDD_ACT_2M_4V				
Test Site				
Tester				
Test Number				
Max Limit		19.5	mA	
Min Limit			mA	
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	9.899	9.725	9.716	9.779
Average	9.899	9.835	9.862	9.841
Max	9.899	9.935	9.998	9.916
UL	19.500	19.500	19.500	19.500

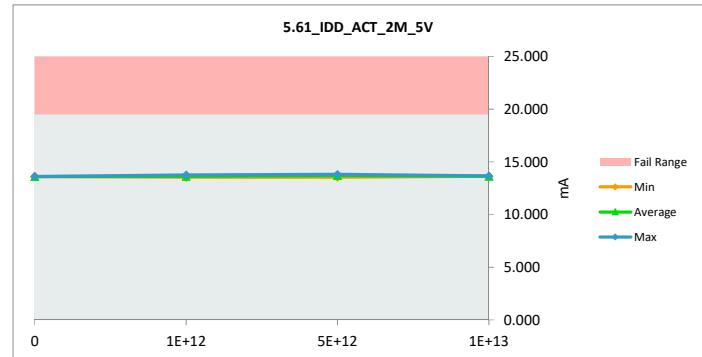


NDD Characterization Report TPS7H5005-SEP

5.61_IDD_ACT_2M_5V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		19.5	19.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	13.597	13.610	0.013
1E+12	1	13.599	13.613	0.014
1E+12	2	13.522	13.546	0.024
1E+12	3	13.754	13.762	0.008
5E+12	4	13.542	13.536	-0.006
5E+12	5	13.814	13.820	0.006
5E+12	6	13.694	13.760	0.066
1E+13	7	13.645	13.646	0.001
1E+13	8	13.650	13.631	-0.019
1E+13	9	13.635	13.653	0.018
Max		13.814	13.820	0.066
Average		13.645	13.658	0.012
Min		13.522	13.536	-0.019
Std Dev		0.090	0.094	0.023

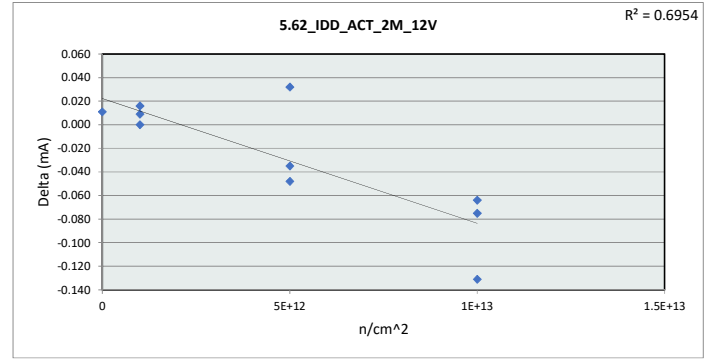


5.61_IDD_ACT_2M_5V				
Test Site				
Tester				
Test Number				
Max Limit		19.5	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	13.610	13.546	13.536	13.631
Average	13.610	13.640	13.705	13.643
Max	13.610	13.762	13.820	13.653
UL	19.500	19.500	19.500	19.500

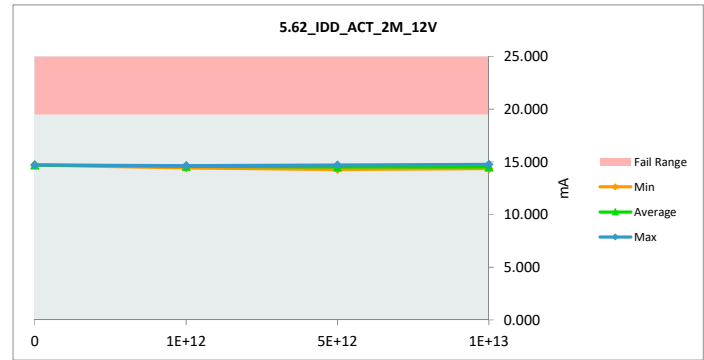


NDD Characterization Report TPS7H5005-SEP

5.62_IDD_ACT_2M_12V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		19.5	19.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	14.696	14.707	0.011
1E+12	1	14.582	14.598	0.016
1E+12	2	14.434	14.443	0.009
1E+12	3	14.649	14.649	0.000
5E+12	4	14.340	14.292	-0.048
5E+12	5	14.750	14.715	-0.035
5E+12	6	14.524	14.556	0.032
1E+13	7	14.465	14.401	-0.064
1E+13	8	14.502	14.371	-0.131
1E+13	9	14.837	14.762	-0.075
Max		14.837	14.762	0.032
Average		14.578	14.549	-0.029
Min		14.340	14.292	-0.131
Std Dev		0.154	0.164	0.051

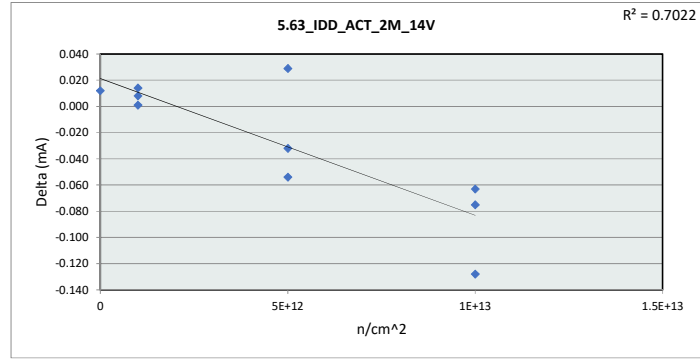


5.62_IDD_ACT_2M_12V				
Test Site				
Tester				
Test Number				
Max Limit		19.5	mA	
Min Limit			mA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	14.707	14.443	14.292	14.371
Average	14.707	14.563	14.521	14.511
Max	14.707	14.649	14.715	14.762
UL	19.500	19.500	19.500	19.500

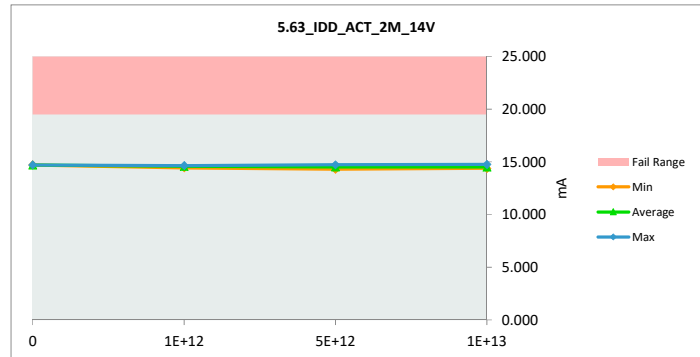


NDD Characterization Report TPS7H5005-SEP

5.63_IDD_ACT_2M_14V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		19.5	19.5	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	14.700	14.712	0.012
1E+12	1	14.589	14.603	0.014
1E+12	2	14.439	14.447	0.008
1E+12	3	14.653	14.654	0.001
5E+12	4	14.347	14.293	-0.054
5E+12	5	14.755	14.723	-0.032
5E+12	6	14.529	14.558	0.029
1E+13	7	14.469	14.406	-0.063
1E+13	8	14.506	14.378	-0.128
1E+13	9	14.842	14.767	-0.075
Max		14.842	14.767	0.029
Average		14.583	14.554	-0.029
Min		14.347	14.293	-0.128
Std Dev		0.154	0.165	0.050

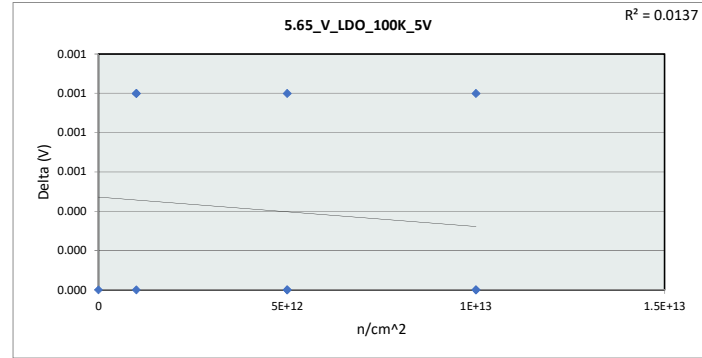


5.63_IDD_ACT_2M_14V				
Test Site				
Tester				
Test Number				
Max Limit		19.5	mA	
Min Limit			mA	
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	14.712	14.447	14.293	14.378
Average	14.712	14.568	14.525	14.517
Max	14.712	14.654	14.723	14.767
UL	19.500	19.500	19.500	19.500

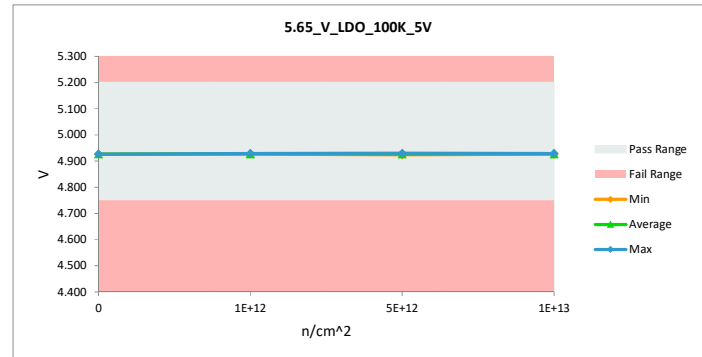


NDD Characterization Report TPS7H5005-SEP

5.65_V_LDO_100K_5V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	5.2	5.2		
Min Limit	4.75	4.75		
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	4.927	4.927	0.000
1E+12	1	4.927	4.927	0.000
1E+12	2	4.928	4.929	0.001
1E+12	3	4.927	4.928	0.001
5E+12	4	4.929	4.930	0.001
5E+12	5	4.924	4.924	0.000
5E+12	6	4.927	4.927	0.000
1E+13	7	4.929	4.929	0.000
1E+13	8	4.926	4.927	0.001
1E+13	9	4.926	4.926	0.000
Max		4.929	4.930	0.001
Average		4.927	4.927	0.000
Min		4.924	4.924	0.000
Std Dev		0.001	0.002	0.001

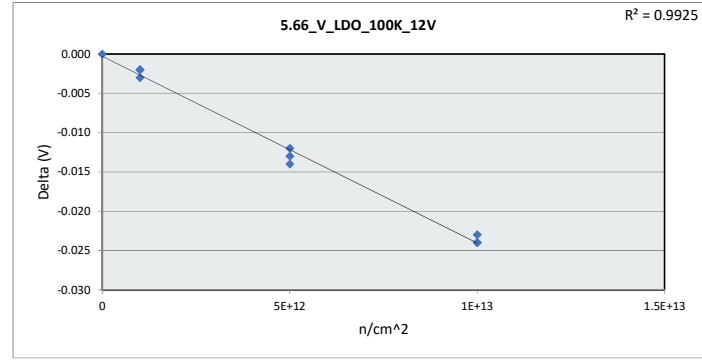


5.65_V_LDO_100K_5V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	4.927	4.927	4.924	4.926
Average	4.927	4.928	4.927	4.927
Max	4.927	4.929	4.930	4.929
UL	5.200	5.200	5.200	5.200

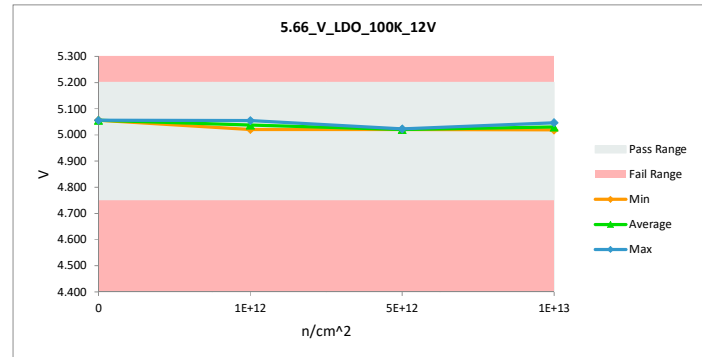


NDD Characterization Report TPS7H5005-SEP

5.66_V_LDO_100K_12V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	5.2	5.2	5.2	5.2
Min Limit	4.75	4.75	4.75	4.75
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	5.056	5.056	0.000
1E+12	1	5.039	5.037	-0.002
1E+12	2	5.023	5.021	-0.002
1E+12	3	5.058	5.055	-0.003
5E+12	4	5.036	5.023	-0.013
5E+12	5	5.034	5.020	-0.014
5E+12	6	5.032	5.020	-0.012
1E+13	7	5.043	5.019	-0.024
1E+13	8	5.047	5.023	-0.024
1E+13	9	5.070	5.047	-0.023
Max		5.070	5.056	0.000
Average		5.044	5.032	-0.012
Min		5.023	5.019	-0.024
Std Dev		0.014	0.015	0.010

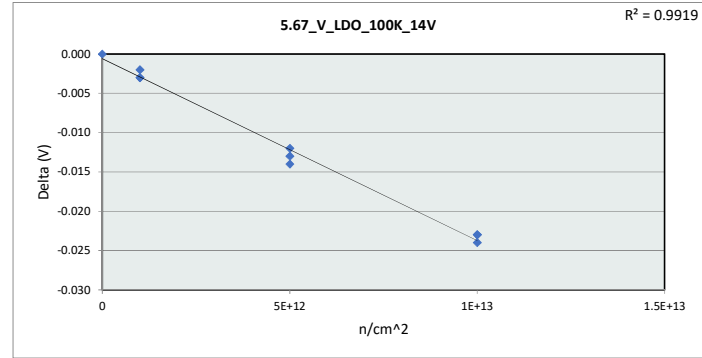


5.66_V_LDO_100K_12V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V	V	V
Min Limit	4.75	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.056	5.021	5.020	5.019
Average	5.056	5.038	5.021	5.030
Max	5.056	5.055	5.023	5.047
UL	5.200	5.200	5.200	5.200

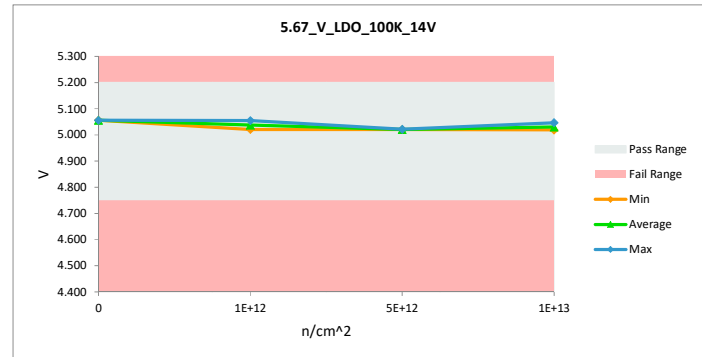


NDD Characterization Report TPS7H5005-SEP

5.67_V_LDO_100K_14V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	5.2	5.2	5.2	5.2
Min Limit	4.75	4.75	4.75	4.75
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	5.056	5.056	0.000
1E+12	1	5.039	5.036	-0.003
1E+12	2	5.023	5.021	-0.002
1E+12	3	5.058	5.055	-0.003
5E+12	4	5.036	5.022	-0.014
5E+12	5	5.033	5.020	-0.013
5E+12	6	5.032	5.020	-0.012
1E+13	7	5.042	5.019	-0.023
1E+13	8	5.047	5.023	-0.024
1E+13	9	5.070	5.047	-0.023
Max		5.070	5.056	0.000
Average		5.044	5.032	-0.012
Min		5.023	5.019	-0.024
Std Dev		0.014	0.015	0.009

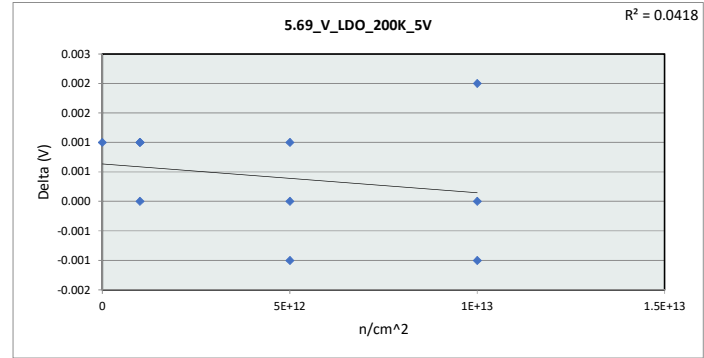


5.67_V_LDO_100K_14V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V	V	V
Min Limit	4.75	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.056	5.021	5.020	5.019
Average	5.056	5.037	5.021	5.030
Max	5.056	5.055	5.022	5.047
UL	5.200	5.200	5.200	5.200

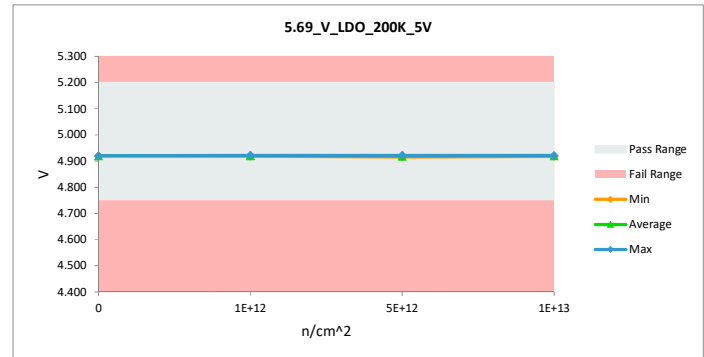


NDD Characterization Report TPS7H5005-SEP

5.69_V_LDO_200K_5V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	5.2	5.2		
Min Limit	4.75	4.75		
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	4.919	4.920	0.001
1E+12	1	4.919	4.919	0.000
1E+12	2	4.921	4.922	0.001
1E+12	3	4.920	4.921	0.001
5E+12	4	4.921	4.922	0.001
5E+12	5	4.916	4.916	0.000
5E+12	6	4.919	4.918	-0.001
1E+13	7	4.922	4.921	-0.001
1E+13	8	4.918	4.920	0.002
1E+13	9	4.918	4.918	0.000
Max		4.922	4.922	0.002
Average		4.919	4.920	0.000
Min		4.916	4.916	-0.001
Std Dev		0.002	0.002	0.001

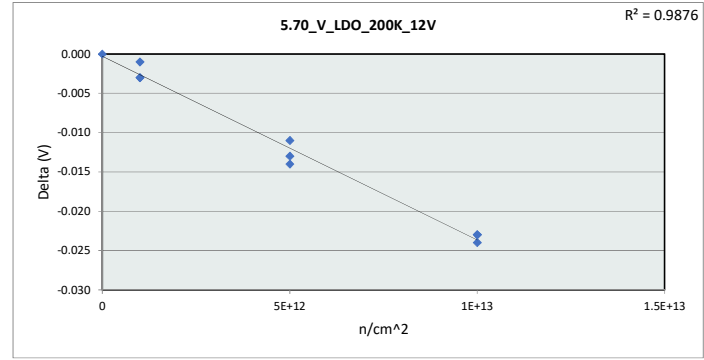


5.69_V_LDO_200K_5V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	4.920	4.919	4.916	4.918
Average	4.920	4.921	4.919	4.920
Max	4.920	4.922	4.922	4.921
UL	5.200	5.200	5.200	5.200

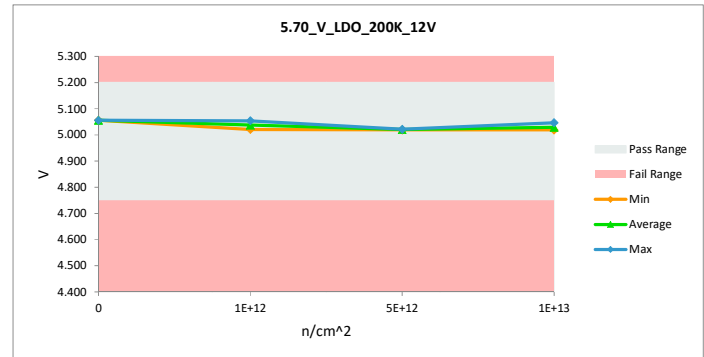


NDD Characterization Report TPS7H5005-SEP

5.70_V_LDO_200K_12V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	5.2	5.2	5.2	5.2
Min Limit	4.75	4.75	4.75	4.75
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	5.056	5.056	0.000
1E+12	1	5.039	5.036	-0.003
1E+12	2	5.022	5.021	-0.001
1E+12	3	5.057	5.054	-0.003
5E+12	4	5.035	5.022	-0.013
5E+12	5	5.033	5.019	-0.014
5E+12	6	5.031	5.020	-0.011
1E+13	7	5.042	5.019	-0.023
1E+13	8	5.046	5.022	-0.024
1E+13	9	5.070	5.047	-0.023
Max		5.070	5.056	0.000
Average		5.043	5.032	-0.012
Min		5.022	5.019	-0.024
Std Dev		0.014	0.015	0.010

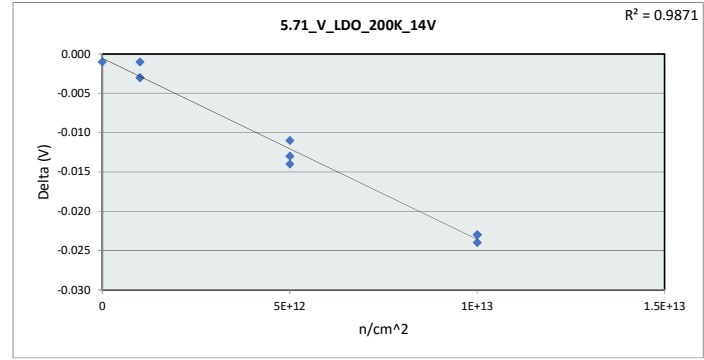


5.70_V_LDO_200K_12V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.056	5.021	5.019	5.019
Average	5.056	5.037	5.020	5.029
Max	5.056	5.054	5.022	5.047
UL	5.200	5.200	5.200	5.200

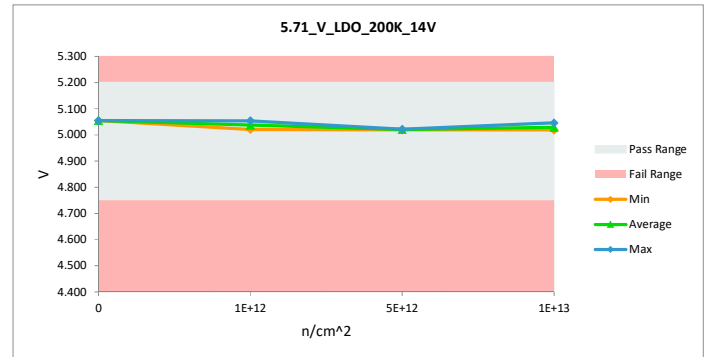


NDD Characterization Report TPS7H5005-SEP

5.71_V_LDO_200K_14V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	5.2	5.2	5.2	5.2
Min Limit	4.75	4.75	4.75	4.75
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	5.056	5.055	-0.001
1E+12	1	5.039	5.036	-0.003
1E+12	2	5.022	5.021	-0.001
1E+12	3	5.057	5.054	-0.003
5E+12	4	5.035	5.022	-0.013
5E+12	5	5.033	5.019	-0.014
5E+12	6	5.031	5.020	-0.011
1E+13	7	5.042	5.019	-0.023
1E+13	8	5.046	5.022	-0.024
1E+13	9	5.069	5.046	-0.023
Max		5.069	5.055	-0.001
Average		5.043	5.031	-0.012
Min		5.022	5.019	-0.024
Std Dev		0.014	0.015	0.009

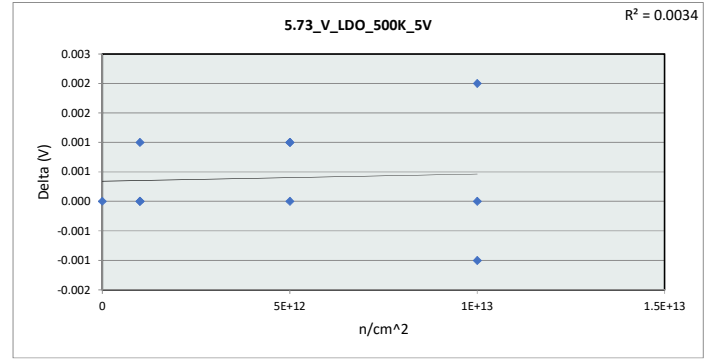


5.71_V_LDO_200K_14V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V	V	V
Min Limit	4.75	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.055	5.021	5.019	5.019
Average	5.055	5.037	5.020	5.029
Max	5.055	5.054	5.022	5.046
UL	5.200	5.200	5.200	5.200

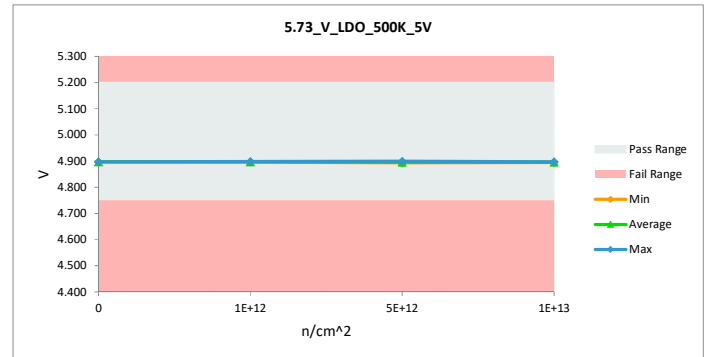


NDD Characterization Report TPS7H5005-SEP

5.73_V_LDO_500K_5V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	5.2		5.2	
Min Limit	4.75		4.75	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	4.897	4.897	0.000
1E+12	1	4.896	4.896	0.000
1E+12	2	4.898	4.898	0.000
1E+12	3	4.896	4.897	0.001
5E+12	4	4.898	4.899	0.001
5E+12	5	4.893	4.893	0.000
5E+12	6	4.895	4.896	0.001
1E+13	7	4.898	4.897	-0.001
1E+13	8	4.894	4.896	0.002
1E+13	9	4.895	4.895	0.000
Max		4.898	4.899	0.002
Average		4.896	4.896	0.000
Min		4.893	4.893	-0.001
Std Dev		0.002	0.002	0.001

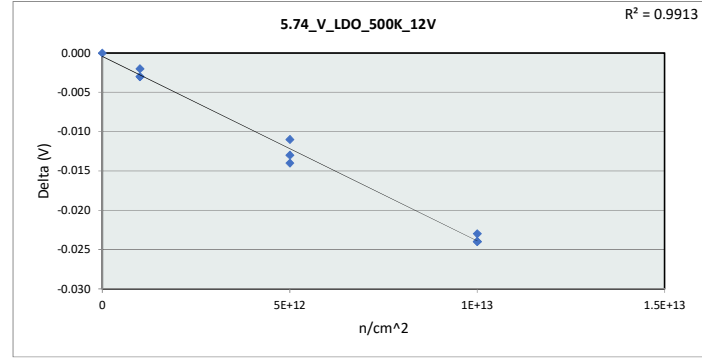


5.73_V_LDO_500K_5V				
Test Site				
Tester				
Test Number				
Max Limit	5.2		V	
Min Limit	4.75		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	4.897	4.896	4.893	4.895
Average	4.897	4.897	4.896	4.896
Max	4.897	4.898	4.899	4.897
UL	5.200	5.200	5.200	5.200

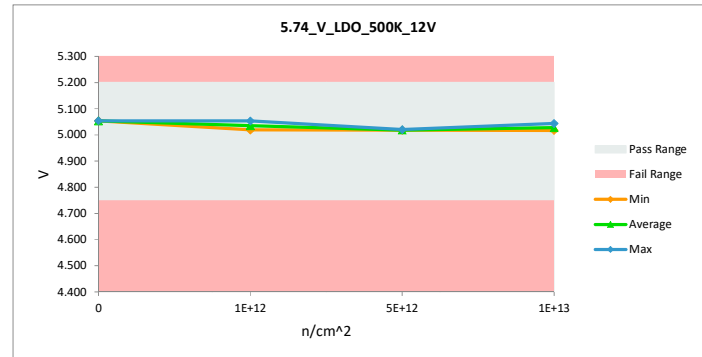


NDD Characterization Report TPS7H5005-SEP

5.74_V_LDO_500K_12V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	5.2	5.2	5.2	5.2
Min Limit	4.75	4.75	4.75	4.75
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	5.054	5.054	0.000
1E+12	1	5.037	5.034	-0.003
1E+12	2	5.021	5.019	-0.002
1E+12	3	5.056	5.053	-0.003
5E+12	4	5.033	5.020	-0.013
5E+12	5	5.032	5.018	-0.014
5E+12	6	5.029	5.018	-0.011
1E+13	7	5.041	5.017	-0.024
1E+13	8	5.045	5.021	-0.024
1E+13	9	5.067	5.044	-0.023
Max		5.067	5.054	0.000
Average		5.041	5.030	-0.012
Min		5.021	5.017	-0.024
Std Dev		0.014	0.015	0.010

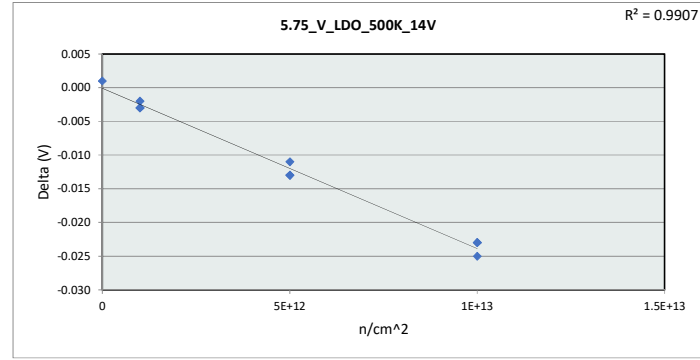


5.74_V_LDO_500K_12V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.054	5.019	5.018	5.017
Average	5.054	5.035	5.019	5.027
Max	5.054	5.053	5.020	5.044
UL	5.200	5.200	5.200	5.200

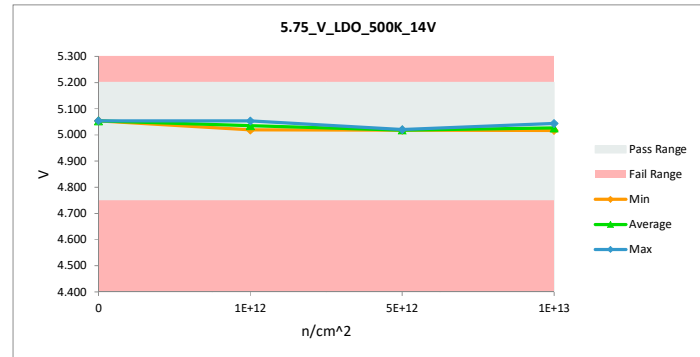


NDD Characterization Report TPS7H5005-SEP

5.75_V_LDO_500K_14V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	5.2		5.2	
Min Limit	4.75		4.75	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	5.053	5.054	0.001
1E+12	1	5.037	5.034	-0.003
1E+12	2	5.021	5.019	-0.002
1E+12	3	5.056	5.053	-0.003
5E+12	4	5.033	5.020	-0.013
5E+12	5	5.031	5.018	-0.013
5E+12	6	5.029	5.018	-0.011
1E+13	7	5.040	5.017	-0.023
1E+13	8	5.045	5.020	-0.025
1E+13	9	5.067	5.044	-0.023
Max		5.067	5.054	0.001
Average		5.041	5.030	-0.011
Min		5.021	5.017	-0.025
Std Dev		0.014	0.015	0.010

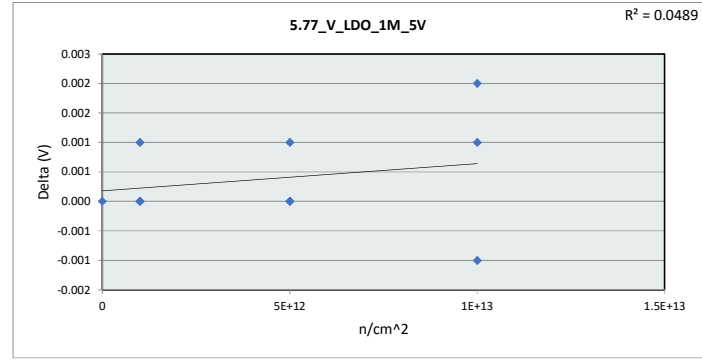


5.75_V_LDO_500K_14V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.054	5.019	5.018	5.017
Average	5.054	5.035	5.019	5.027
Max	5.054	5.053	5.020	5.044
UL	5.200	5.200	5.200	5.200

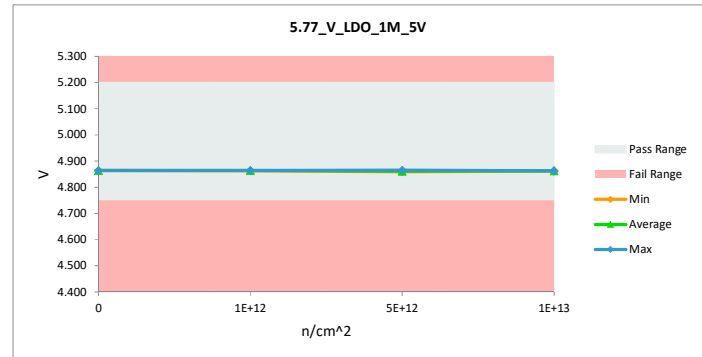


NDD Characterization Report TPS7H5005-SEP

5.77_V_LDO_1M_5V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	5.2	5.2	5.2	5.2
Min Limit	4.75	4.75	4.75	4.75
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	4.864	4.864	0.000
1E+12	1	4.863	4.863	0.000
1E+12	2	4.864	4.864	0.000
1E+12	3	4.863	4.864	0.001
5E+12	4	4.864	4.865	0.001
5E+12	5	4.859	4.859	0.000
5E+12	6	4.862	4.862	0.000
1E+13	7	4.864	4.863	-0.001
1E+13	8	4.861	4.863	0.002
1E+13	9	4.861	4.862	0.001
Max		4.864	4.865	0.002
Average		4.862	4.863	0.000
Min		4.859	4.859	-0.001
Std Dev		0.002	0.002	0.001

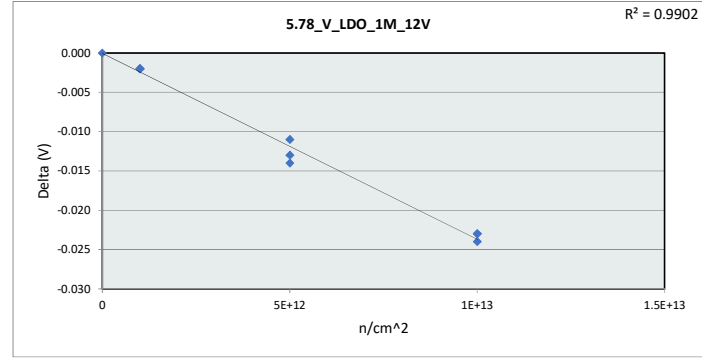


5.77_V_LDO_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V	V	V
Min Limit	4.75	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	4.864	4.863	4.859	4.862
Average	4.864	4.864	4.862	4.863
Max	4.864	4.864	4.865	4.863
UL	5.200	5.200	5.200	5.200

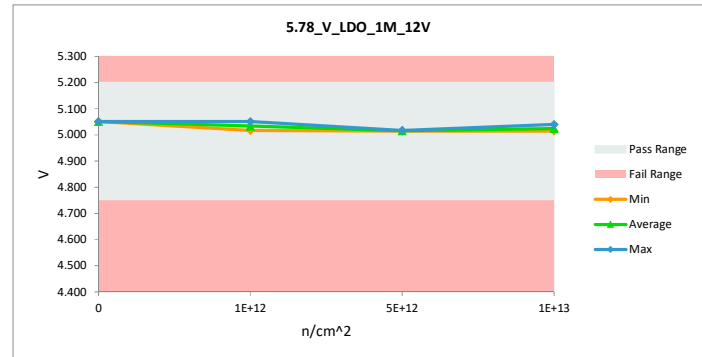


NDD Characterization Report TPS7H5005-SEP

5.78_V_LDO_1M_12V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	5.2	5.2	5.2	5.2
Min Limit	4.75	4.75	4.75	4.75
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	5.051	5.051	0.000
1E+12	1	5.034	5.032	-0.002
1E+12	2	5.019	5.017	-0.002
1E+12	3	5.053	5.051	-0.002
5E+12	4	5.031	5.017	-0.014
5E+12	5	5.029	5.016	-0.013
5E+12	6	5.026	5.015	-0.011
1E+13	7	5.038	5.015	-0.023
1E+13	8	5.042	5.018	-0.024
1E+13	9	5.063	5.040	-0.023
Max		5.063	5.051	0.000
Average		5.039	5.027	-0.011
Min		5.019	5.015	-0.024
Std Dev		0.014	0.015	0.010

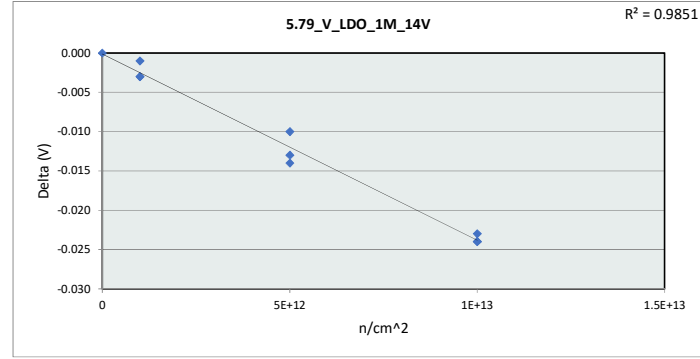


5.78_V_LDO_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V	V	V
Min Limit	4.75	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.051	5.017	5.015	5.015
Average	5.051	5.033	5.016	5.024
Max	5.051	5.051	5.017	5.040
UL	5.200	5.200	5.200	5.200

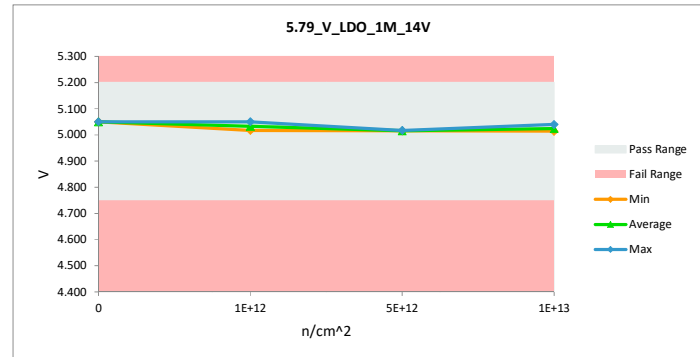


NDD Characterization Report TPS7H5005-SEP

5.79_V_LDO_1M_14V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	5.2	5.2	5.2	5.2
Min Limit	4.75	4.75	4.75	4.75
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	5.050	5.050	0.000
1E+12	1	5.034	5.031	-0.003
1E+12	2	5.018	5.017	-0.001
1E+12	3	5.053	5.050	-0.003
5E+12	4	5.030	5.017	-0.013
5E+12	5	5.029	5.015	-0.014
5E+12	6	5.025	5.015	-0.010
1E+13	7	5.038	5.014	-0.024
1E+13	8	5.042	5.018	-0.024
1E+13	9	5.063	5.040	-0.023
Max		5.063	5.050	0.000
Average		5.038	5.027	-0.011
Min		5.018	5.014	-0.024
Std Dev		0.014	0.015	0.010

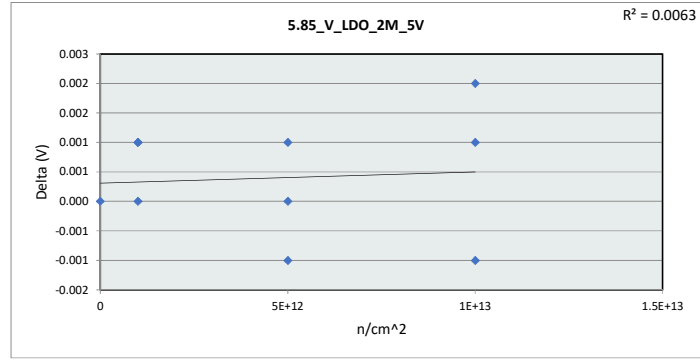


5.79_V_LDO_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.050	5.017	5.015	5.014
Average	5.050	5.033	5.016	5.024
Max	5.050	5.050	5.017	5.040
UL	5.200	5.200	5.200	5.200

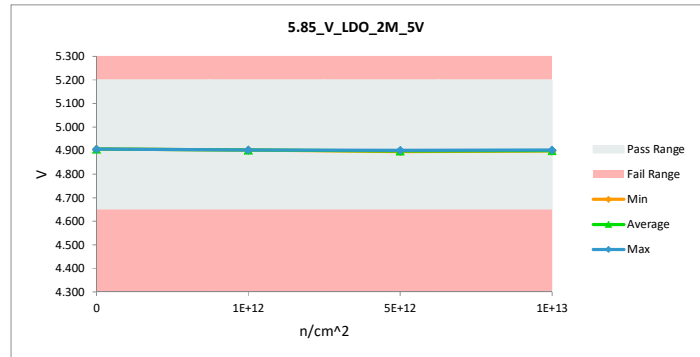


NDD Characterization Report TPS7H5005-SEP

5.85_V_LDO_2M_5V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	5.2	5.2	5.2	5.2
Min Limit	4.65	4.65	4.65	4.65
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	4.906	4.906	0.000
1E+12	1	4.902	4.902	0.000
1E+12	2	4.902	4.903	0.001
1E+12	3	4.901	4.902	0.001
5E+12	4	4.900	4.901	0.001
5E+12	5	4.897	4.896	-0.001
5E+12	6	4.898	4.898	0.000
1E+13	7	4.901	4.900	-0.001
1E+13	8	4.897	4.899	0.002
1E+13	9	4.901	4.902	0.001
Max		4.906	4.906	0.002
Average		4.900	4.901	0.000
Min		4.897	4.896	-0.001
Std Dev		0.003	0.003	0.001

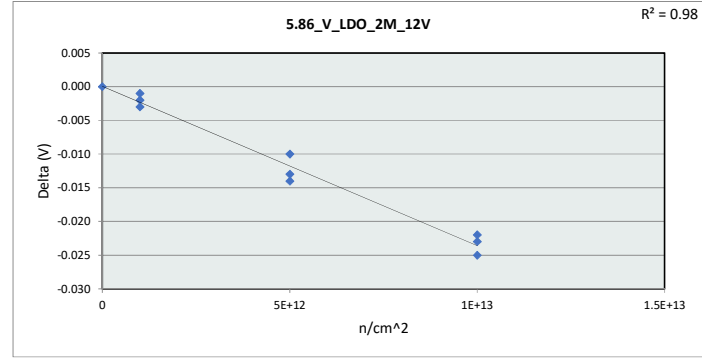


5.85_V_LDO_2M_5V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V	V	V
Min Limit	4.65	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.650	4.650	4.650	4.650
Min	4.906	4.902	4.896	4.899
Average	4.906	4.902	4.898	4.900
Max	4.906	4.903	4.901	4.902
UL	5.200	5.200	5.200	5.200

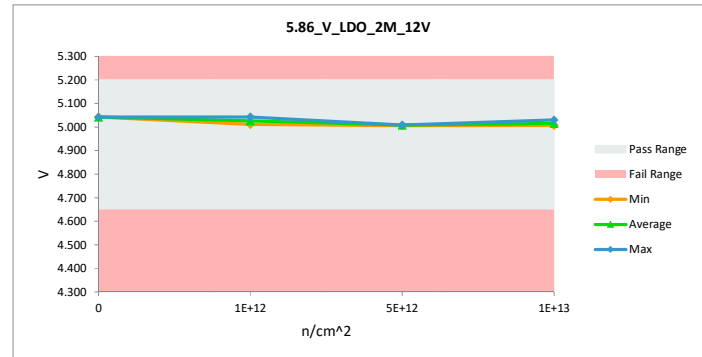


NDD Characterization Report TPS7H5005-SEP

5.86_V_LDO_2M_12V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	5.2		5.2	
Min Limit	4.65		4.65	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	5.042	5.042	0.000
1E+12	1	5.026	5.024	-0.002
1E+12	2	5.012	5.011	-0.001
1E+12	3	5.046	5.043	-0.003
5E+12	4	5.022	5.009	-0.013
5E+12	5	5.023	5.009	-0.014
5E+12	6	5.016	5.006	-0.010
1E+13	7	5.030	5.007	-0.023
1E+13	8	5.035	5.010	-0.025
1E+13	9	5.052	5.030	-0.022
Max		5.052	5.043	0.000
Average		5.030	5.019	-0.011
Min		5.012	5.006	-0.025
Std Dev		0.013	0.015	0.010

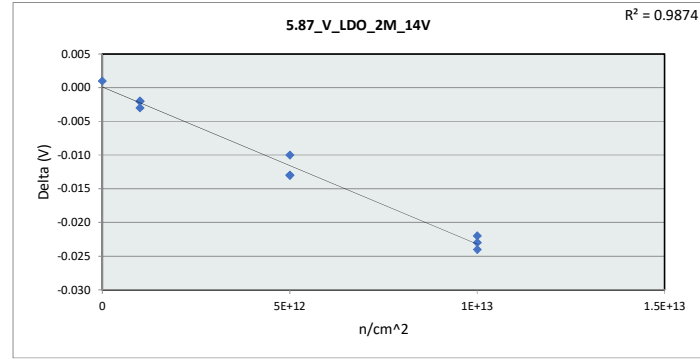


5.86_V_LDO_2M_12V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.65	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.650	4.650	4.650	4.650
Min	5.042	5.011	5.006	5.007
Average	5.042	5.026	5.008	5.016
Max	5.042	5.043	5.009	5.030
UL	5.200	5.200	5.200	5.200

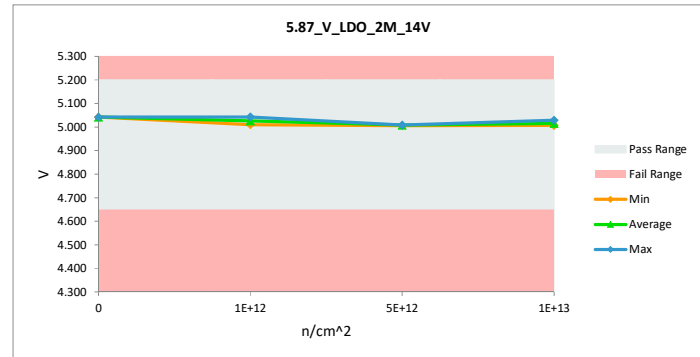


NDD Characterization Report TPS7H5005-SEP

5.87_V_LDO_2M_14V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	5.2	5.2	5.2	5.2
Min Limit	4.65	4.65	4.65	4.65
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	5.041	5.042	0.001
1E+12	1	5.026	5.024	-0.002
1E+12	2	5.012	5.010	-0.002
1E+12	3	5.046	5.043	-0.003
5E+12	4	5.022	5.009	-0.013
5E+12	5	5.022	5.009	-0.013
5E+12	6	5.016	5.006	-0.010
1E+13	7	5.029	5.007	-0.022
1E+13	8	5.034	5.010	-0.024
1E+13	9	5.052	5.029	-0.023
Max		5.052	5.043	0.001
Average		5.030	5.019	-0.011
Min		5.012	5.006	-0.024
Std Dev		0.013	0.015	0.010

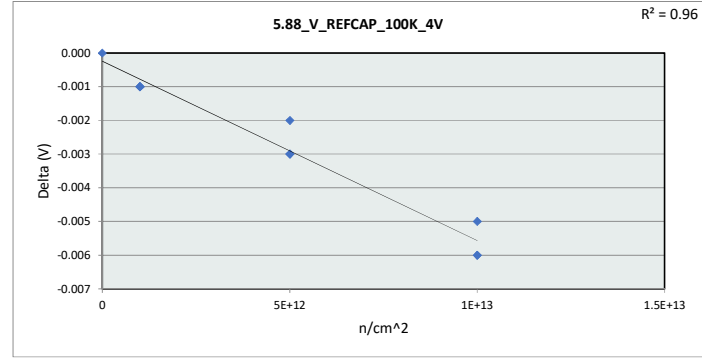


5.87_V_LDO_2M_14V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.65	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	4.650	4.650	4.650	4.650
Min	5.042	5.010	5.006	5.007
Average	5.042	5.026	5.008	5.015
Max	5.042	5.043	5.009	5.029
UL	5.200	5.200	5.200	5.200

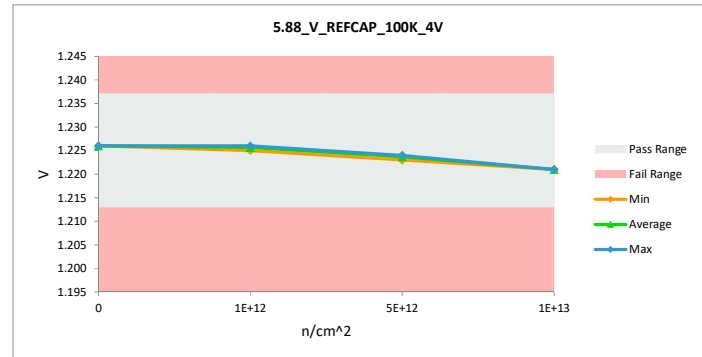


NDD Characterization Report TPS7H5005-SEP

5.88_V_REFCAP_100K_4V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	1.237		1.237	
Min Limit	1.213		1.213	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.226	-0.001
1E+12	2	1.226	1.225	-0.001
1E+12	3	1.227	1.226	-0.001
5E+12	4	1.227	1.224	-0.003
5E+12	5	1.226	1.223	-0.003
5E+12	6	1.226	1.224	-0.002
1E+13	7	1.227	1.221	-0.006
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.226	1.221	-0.005
Max		1.227	1.226	0.000
Average		1.226	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.002

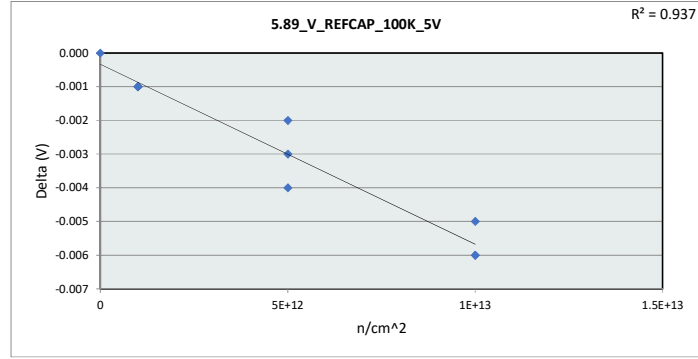


5.88_V_REFCAP_100K_4V				
Test Site				
Tester				
Test Number				
Max Limit	1.237		V	
Min Limit	1.213		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.223	1.221
Average	1.226	1.226	1.224	1.221
Max	1.226	1.226	1.224	1.221
UL	1.237	1.237	1.237	1.237

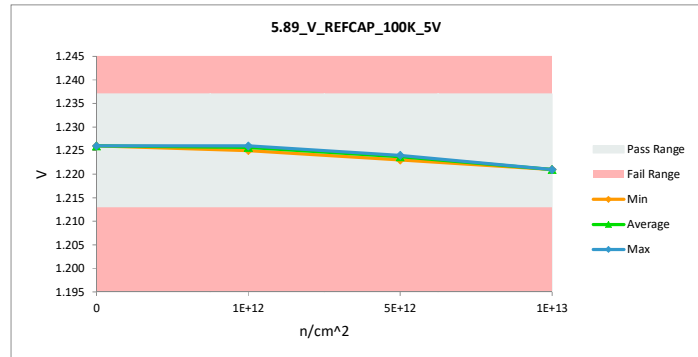


NDD Characterization Report TPS7H5005-SEP

5.89_V_REFCAP_100K_5V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.226	-0.001
1E+12	2	1.226	1.225	-0.001
1E+12	3	1.227	1.226	-0.001
5E+12	4	1.227	1.224	-0.003
5E+12	5	1.227	1.223	-0.004
5E+12	6	1.226	1.224	-0.002
1E+13	7	1.227	1.221	-0.006
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.226	1.221	-0.005
Max		1.227	1.226	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.002

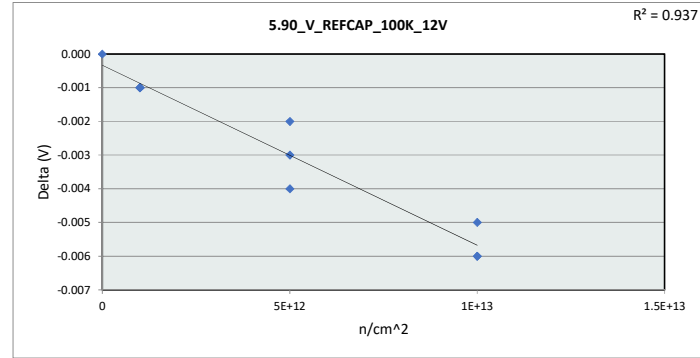


5.89_V_REFCAP_100K_5V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.223	1.221
Average	1.226	1.226	1.224	1.221
Max	1.226	1.226	1.224	1.221
UL	1.237	1.237	1.237	1.237

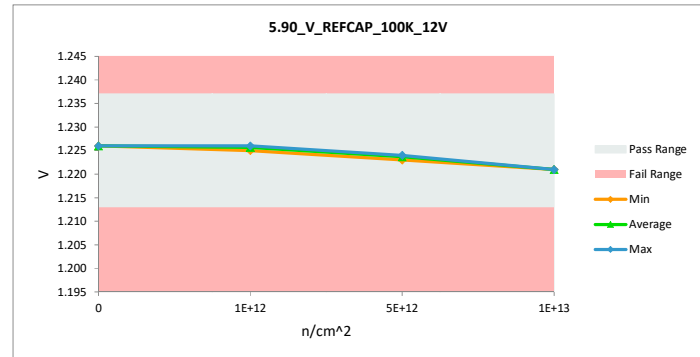


NDD Characterization Report TPS7H5005-SEP

5.90_V_REFCAP_100K_12V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.226	-0.001
1E+12	2	1.226	1.225	-0.001
1E+12	3	1.227	1.226	-0.001
5E+12	4	1.227	1.224	-0.003
5E+12	5	1.227	1.223	-0.004
5E+12	6	1.226	1.224	-0.002
1E+13	7	1.227	1.221	-0.006
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.226	1.221	-0.005
Max		1.227	1.226	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.002

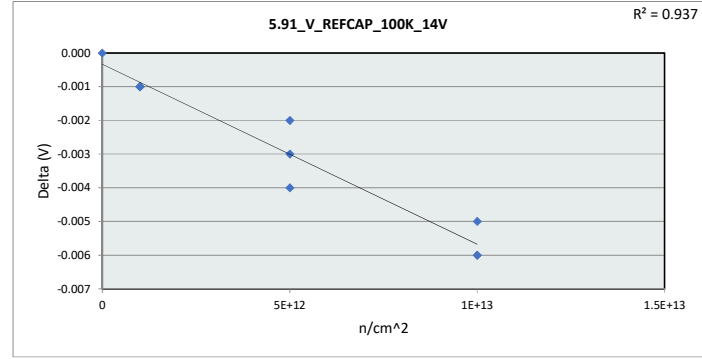


5.90_V_REFCAP_100K_12V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.223	1.221
Average	1.226	1.226	1.224	1.221
Max	1.226	1.226	1.224	1.221
UL	1.237	1.237	1.237	1.237

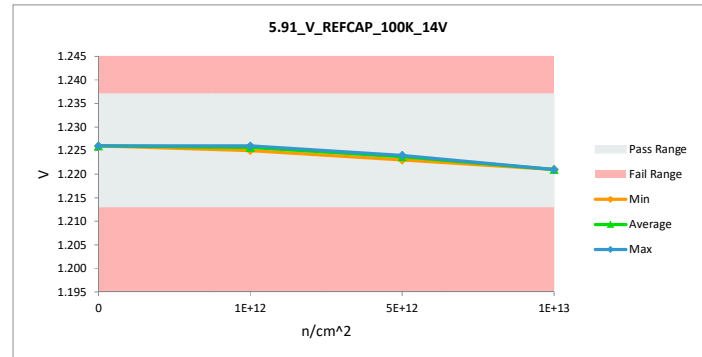


NDD Characterization Report TPS7H5005-SEP

5.91_V_REFCAP_100K_14V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.226	-0.001
1E+12	2	1.226	1.225	-0.001
1E+12	3	1.227	1.226	-0.001
5E+12	4	1.227	1.224	-0.003
5E+12	5	1.227	1.223	-0.004
5E+12	6	1.226	1.224	-0.002
1E+13	7	1.227	1.221	-0.006
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.226	1.221	-0.005
Max		1.227	1.226	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.002

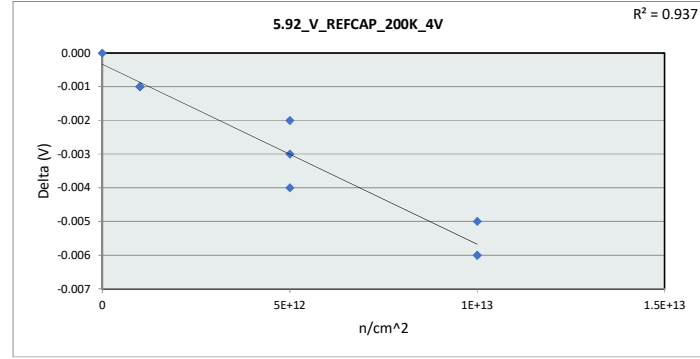


5.91_V_REFCAP_100K_14V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.223	1.221
Average	1.226	1.226	1.224	1.221
Max	1.226	1.226	1.224	1.221
UL	1.237	1.237	1.237	1.237

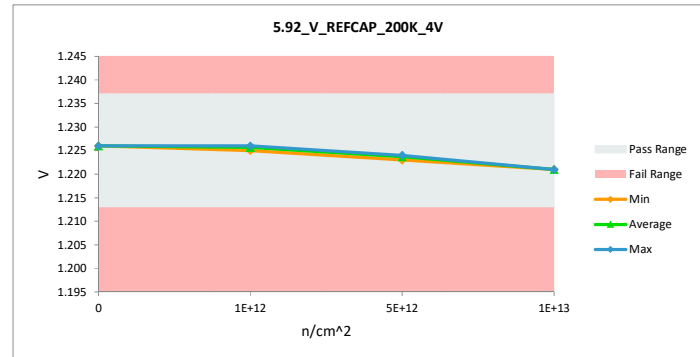


NDD Characterization Report TPS7H5005-SEP

5.92_V_REFCAP_200K_4V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.226	-0.001
1E+12	2	1.226	1.225	-0.001
1E+12	3	1.227	1.226	-0.001
5E+12	4	1.227	1.224	-0.003
5E+12	5	1.227	1.223	-0.004
5E+12	6	1.226	1.224	-0.002
1E+13	7	1.227	1.221	-0.006
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.226	1.221	-0.005
Max		1.227	1.226	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.002

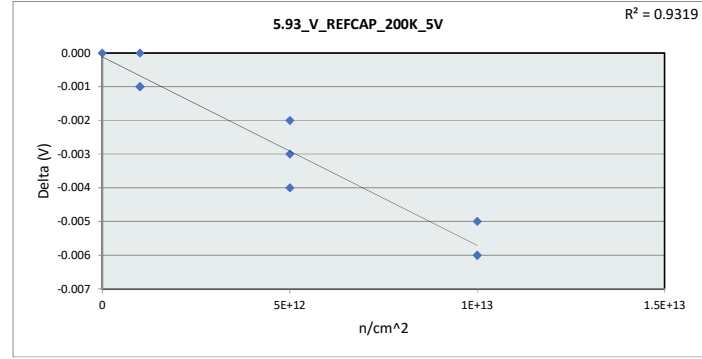


5.92_V_REFCAP_200K_4V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.223	1.221
Average	1.226	1.226	1.224	1.221
Max	1.226	1.226	1.224	1.221
UL	1.237	1.237	1.237	1.237

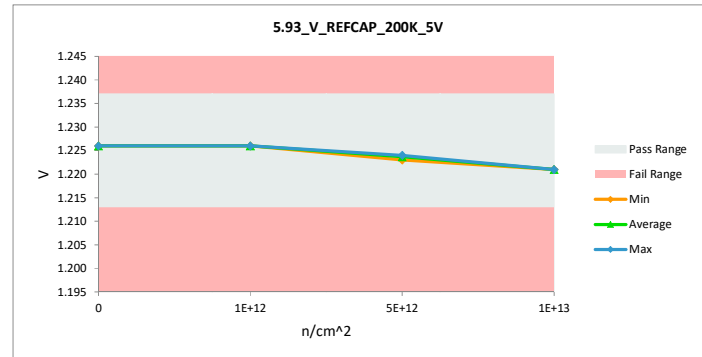


NDD Characterization Report TPS7H5005-SEP

5.93_V_REFCAP_200K_5V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.226	-0.001
1E+12	2	1.226	1.226	0.000
1E+12	3	1.227	1.226	-0.001
5E+12	4	1.227	1.224	-0.003
5E+12	5	1.227	1.223	-0.004
5E+12	6	1.226	1.224	-0.002
1E+13	7	1.227	1.221	-0.006
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.226	1.221	-0.005
Max		1.227	1.226	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.002

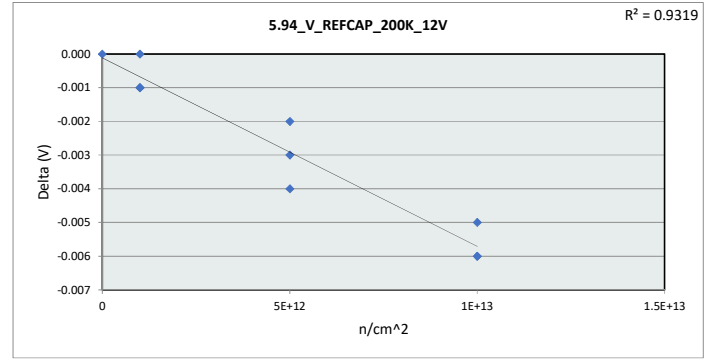


5.93_V_REFCAP_200K_5V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.226	1.223	1.221
Average	1.226	1.226	1.224	1.221
Max	1.226	1.226	1.224	1.221
UL	1.237	1.237	1.237	1.237

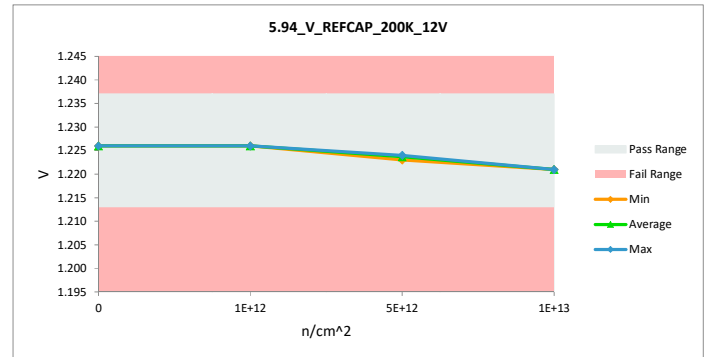


NDD Characterization Report TPS7H5005-SEP

5.94_V_REFCAP_200K_12V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.226	-0.001
1E+12	2	1.226	1.226	0.000
1E+12	3	1.227	1.226	-0.001
5E+12	4	1.227	1.224	-0.003
5E+12	5	1.227	1.223	-0.004
5E+12	6	1.226	1.224	-0.002
1E+13	7	1.227	1.221	-0.006
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.226	1.221	-0.005
Max		1.227	1.226	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.002

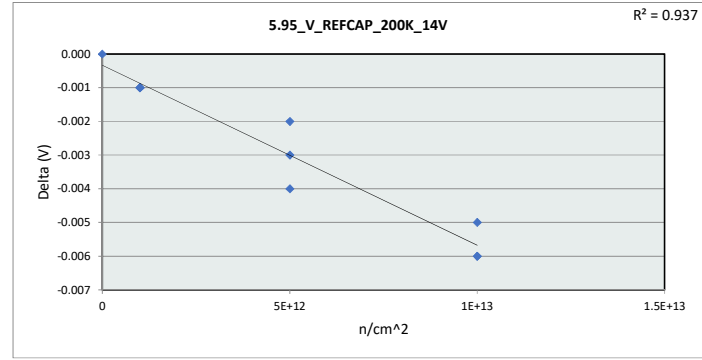


5.94_V_REFCAP_200K_12V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.226	1.223	1.221
Average	1.226	1.226	1.224	1.221
Max	1.226	1.226	1.224	1.221
UL	1.237	1.237	1.237	1.237

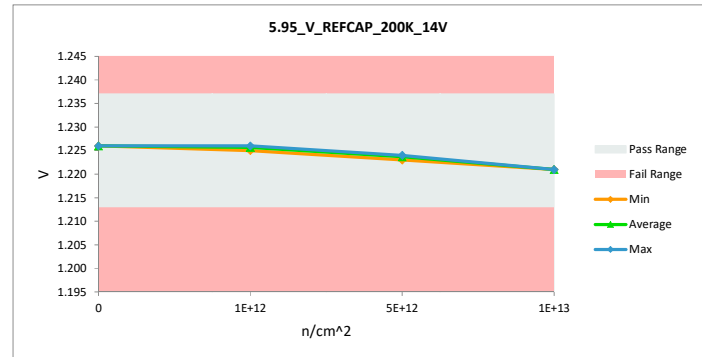


NDD Characterization Report TPS7H5005-SEP

5.95_V_REFCAP_200K_14V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.226	-0.001
1E+12	2	1.226	1.225	-0.001
1E+12	3	1.227	1.226	-0.001
5E+12	4	1.227	1.224	-0.003
5E+12	5	1.227	1.223	-0.004
5E+12	6	1.226	1.224	-0.002
1E+13	7	1.227	1.221	-0.006
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.226	1.221	-0.005
Max		1.227	1.226	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.002

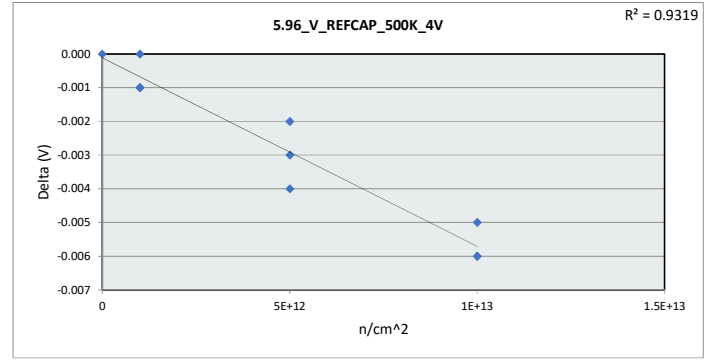


5.95_V_REFCAP_200K_14V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.223	1.221
Average	1.226	1.226	1.224	1.221
Max	1.226	1.226	1.224	1.221
UL	1.237	1.237	1.237	1.237

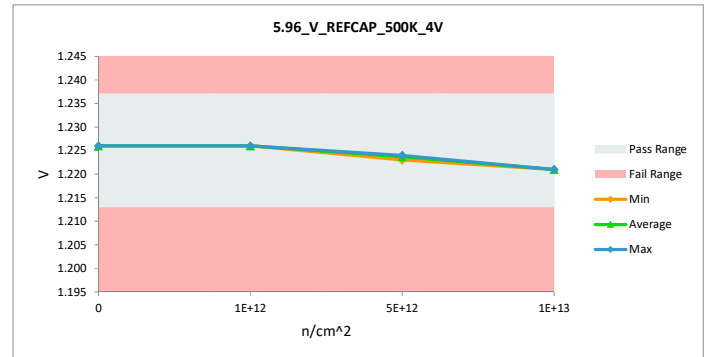


NDD Characterization Report TPS7H5005-SEP

5.96_V_REFCAP_500K_4V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.226	-0.001
1E+12	2	1.226	1.226	0.000
1E+12	3	1.227	1.226	-0.001
5E+12	4	1.227	1.224	-0.003
5E+12	5	1.227	1.223	-0.004
5E+12	6	1.226	1.224	-0.002
1E+13	7	1.227	1.221	-0.006
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.226	1.221	-0.005
Max		1.227	1.226	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.002

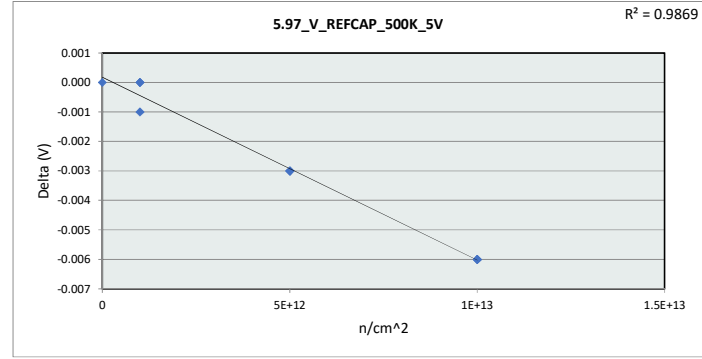


5.96_V_REFCAP_500K_4V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.226	1.223	1.221
Average	1.226	1.226	1.224	1.221
Max	1.226	1.226	1.224	1.221
UL	1.237	1.237	1.237	1.237

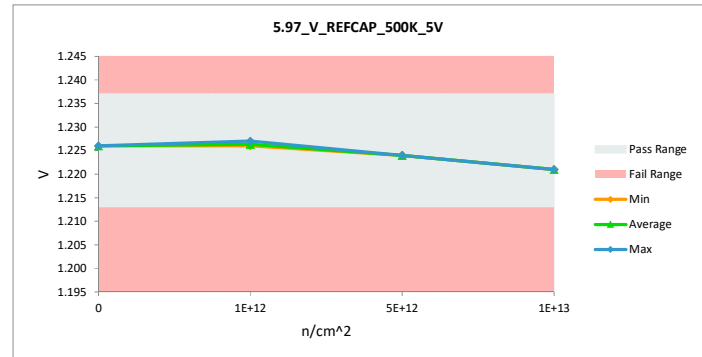


NDD Characterization Report TPS7H5005-SEP

5.97_V_REFCAP_500K_5V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.227	0.000
1E+12	2	1.226	1.226	0.000
1E+12	3	1.227	1.226	-0.001
5E+12	4	1.227	1.224	-0.003
5E+12	5	1.227	1.224	-0.003
5E+12	6	1.227	1.224	-0.003
1E+13	7	1.227	1.221	-0.006
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.227	1.221	-0.006
Max		1.227	1.227	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.000	0.002	0.003

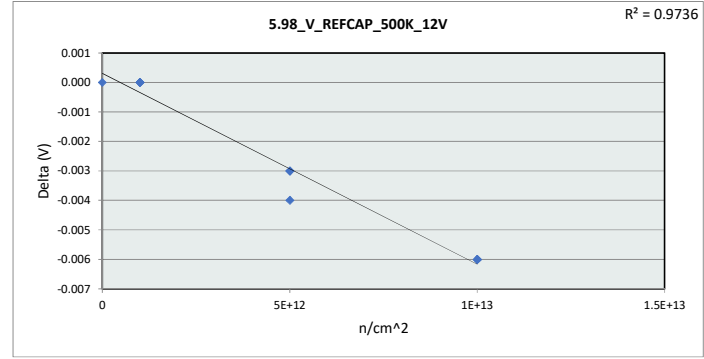


5.97_V_REFCAP_500K_5V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.226	1.224	1.221
Average	1.226	1.226	1.224	1.221
Max	1.226	1.227	1.224	1.221
UL	1.237	1.237	1.237	1.237

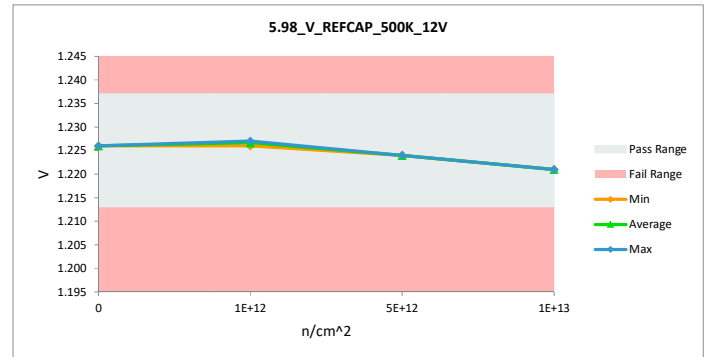


NDD Characterization Report TPS7H5005-SEP

5.98_V_REFCAP_500K_12V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	1.237		1.237	
Min Limit	1.213		1.213	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.227	0.000
1E+12	2	1.226	1.226	0.000
1E+12	3	1.227	1.227	0.000
5E+12	4	1.228	1.224	-0.004
5E+12	5	1.227	1.224	-0.003
5E+12	6	1.227	1.224	-0.003
1E+13	7	1.227	1.221	-0.006
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.227	1.221	-0.006
Max		1.228	1.227	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.003

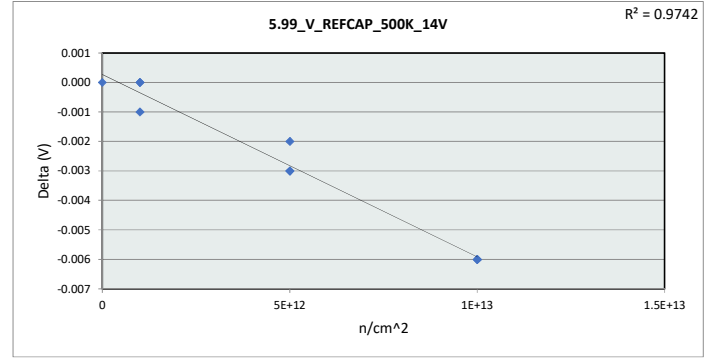


5.98_V_REFCAP_500K_12V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V		
Min Limit	1.213	V		
n/cm^2	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.226	1.224	1.221
Average	1.226	1.227	1.224	1.221
Max	1.226	1.227	1.224	1.221
UL	1.237	1.237	1.237	1.237

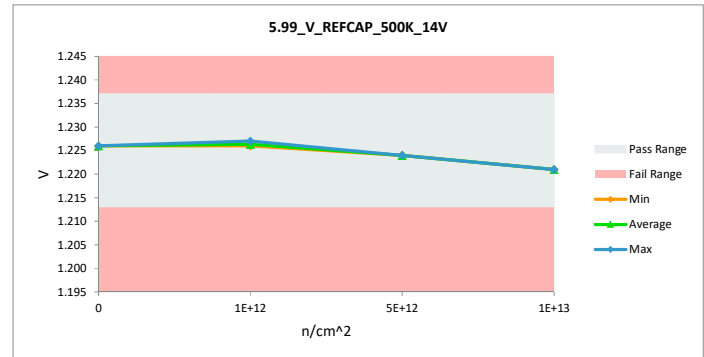


NDD Characterization Report TPS7H5005-SEP

5.99_V_REFCAP_500K_14V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.227	0.000
1E+12	2	1.226	1.226	0.000
1E+12	3	1.227	1.226	-0.001
5E+12	4	1.227	1.224	-0.003
5E+12	5	1.227	1.224	-0.003
5E+12	6	1.226	1.224	-0.002
1E+13	7	1.227	1.221	-0.006
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.227	1.221	-0.006
Max		1.227	1.227	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.000	0.002	0.003

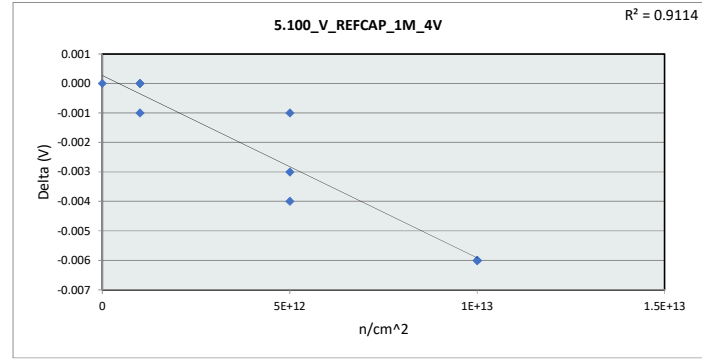


5.99_V_REFCAP_500K_14V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.226	1.224	1.221
Average	1.226	1.226	1.224	1.221
Max	1.226	1.227	1.224	1.221
UL	1.237	1.237	1.237	1.237

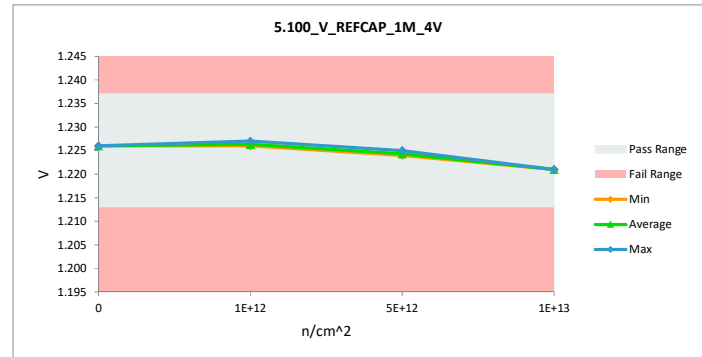


NDD Characterization Report TPS7H5005-SEP

5.100_V_REFCAP_1M_4V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	1.237		1.237	
Min Limit	1.213		1.213	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.227	0.000
1E+12	2	1.226	1.226	0.000
1E+12	3	1.227	1.226	-0.001
5E+12	4	1.228	1.224	-0.004
5E+12	5	1.227	1.224	-0.003
5E+12	6	1.226	1.225	-0.001
1E+13	7	1.227	1.221	-0.006
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.227	1.221	-0.006
Max		1.228	1.227	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.003

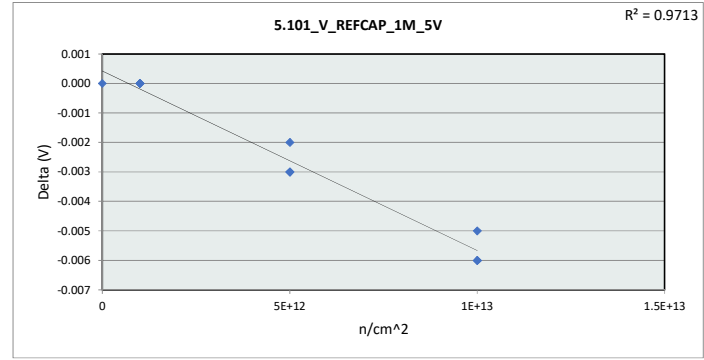


5.100_V_REFCAP_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	1.237		V	
Min Limit	1.213		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.226	1.224	1.221
Average	1.226	1.226	1.224	1.221
Max	1.226	1.227	1.225	1.221
UL	1.237	1.237	1.237	1.237

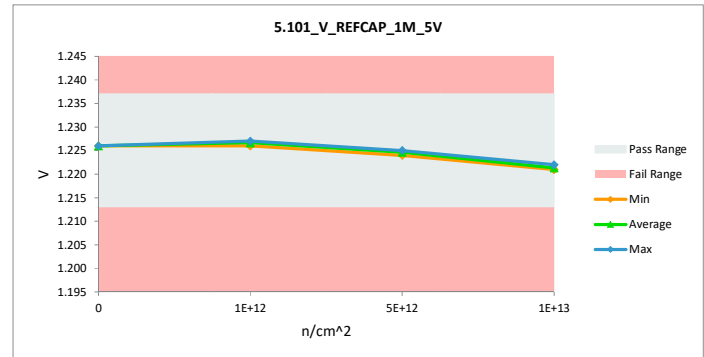


NDD Characterization Report TPS7H5005-SEP

5.101_V_REFCAP_1M_5V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.227	0.000
1E+12	2	1.226	1.226	0.000
1E+12	3	1.227	1.227	0.000
5E+12	4	1.228	1.225	-0.003
5E+12	5	1.227	1.224	-0.003
5E+12	6	1.227	1.225	-0.002
1E+13	7	1.227	1.222	-0.005
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.227	1.221	-0.006
Max		1.228	1.227	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.003

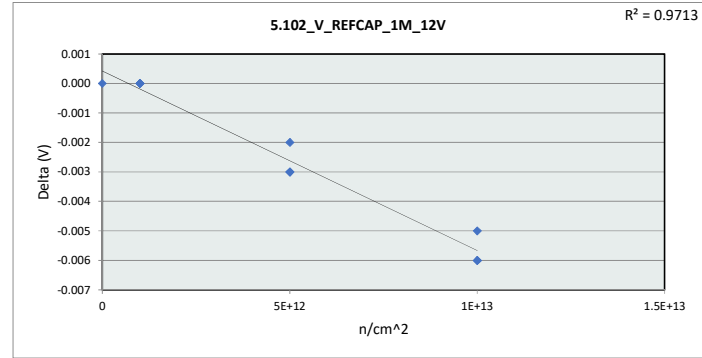


5.101_V_REFCAP_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.226	1.224	1.221
Average	1.226	1.227	1.225	1.221
Max	1.226	1.227	1.225	1.222
UL	1.237	1.237	1.237	1.237

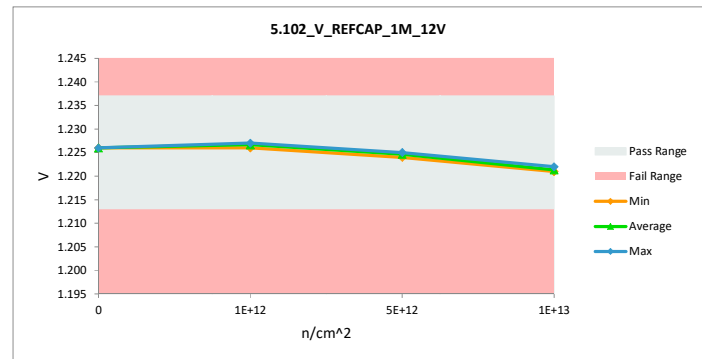


NDD Characterization Report TPS7H5005-SEP

5.102_V_REFCAP_1M_12V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.227	0.000
1E+12	2	1.226	1.226	0.000
1E+12	3	1.227	1.227	0.000
5E+12	4	1.228	1.225	-0.003
5E+12	5	1.227	1.224	-0.003
5E+12	6	1.227	1.225	-0.002
1E+13	7	1.227	1.222	-0.005
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.227	1.221	-0.006
Max		1.228	1.227	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.003

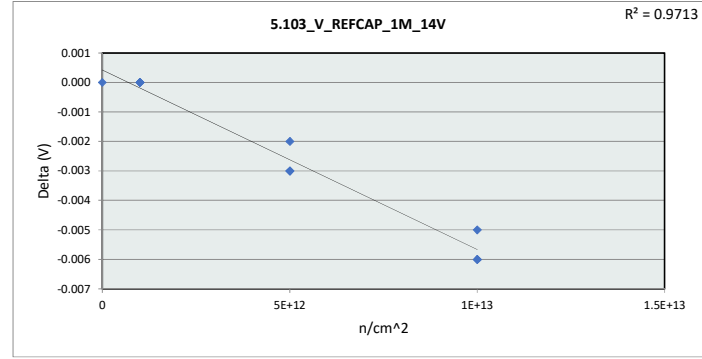


5.102_V_REFCAP_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.226	1.224	1.221
Average	1.226	1.227	1.225	1.221
Max	1.226	1.227	1.225	1.222
UL	1.237	1.237	1.237	1.237

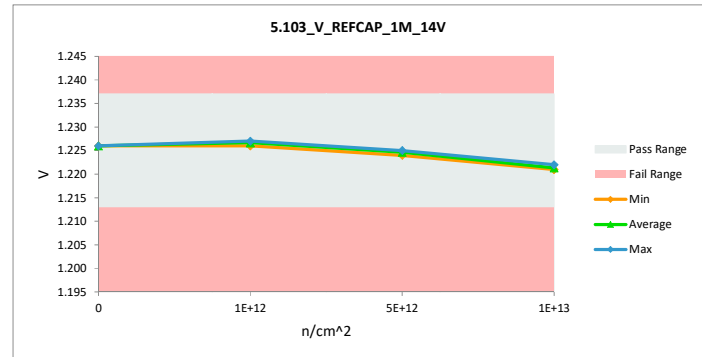


NDD Characterization Report TPS7H5005-SEP

5.103_V_REFCAP_1M_14V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.227	0.000
1E+12	2	1.226	1.226	0.000
1E+12	3	1.227	1.227	0.000
5E+12	4	1.228	1.225	-0.003
5E+12	5	1.227	1.224	-0.003
5E+12	6	1.227	1.225	-0.002
1E+13	7	1.227	1.222	-0.005
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.227	1.221	-0.006
Max		1.228	1.227	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.003

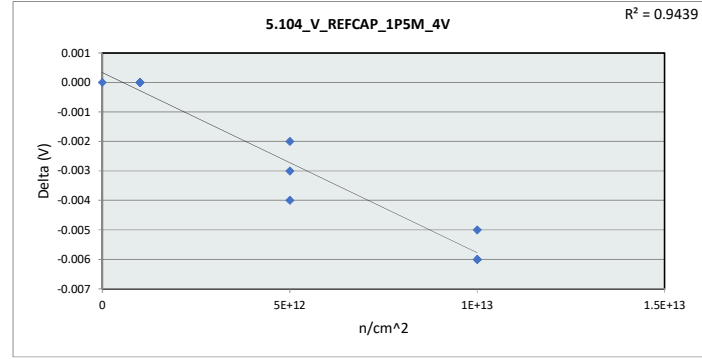


5.103_V_REFCAP_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.226	1.224	1.221
Average	1.226	1.227	1.225	1.221
Max	1.226	1.227	1.225	1.222
UL	1.237	1.237	1.237	1.237

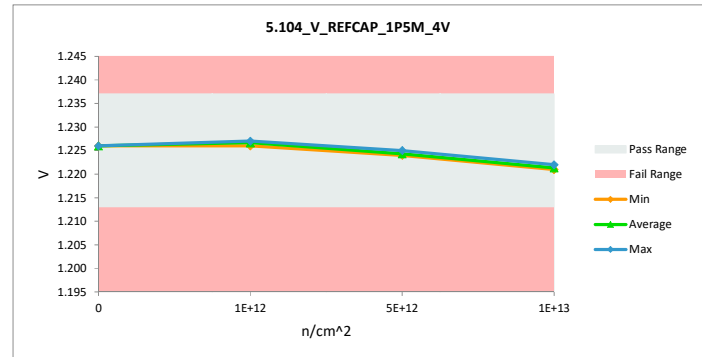


NDD Characterization Report TPS7H5005-SEP

5.104_V_REFCAP_1P5M_4V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	1.237		1.237	
Min Limit	1.213		1.213	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.227	0.000
1E+12	2	1.226	1.226	0.000
1E+12	3	1.227	1.227	0.000
5E+12	4	1.228	1.224	-0.004
5E+12	5	1.227	1.224	-0.003
5E+12	6	1.227	1.225	-0.002
1E+13	7	1.227	1.222	-0.005
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.227	1.221	-0.006
Max		1.228	1.227	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.003

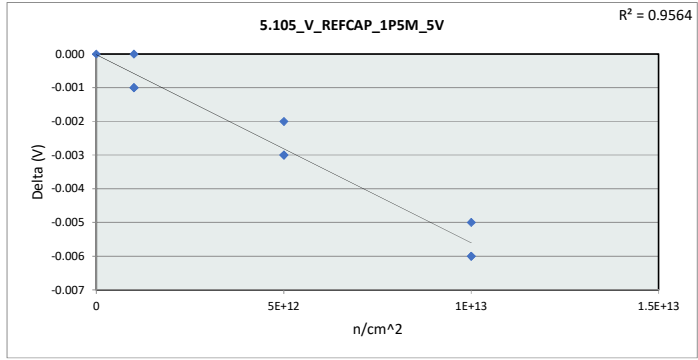


5.104_V_REFCAP_1P5M_4V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V		
Min Limit	1.213	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.226	1.224	1.221
Average	1.226	1.227	1.224	1.221
Max	1.226	1.227	1.225	1.222
UL	1.237	1.237	1.237	1.237

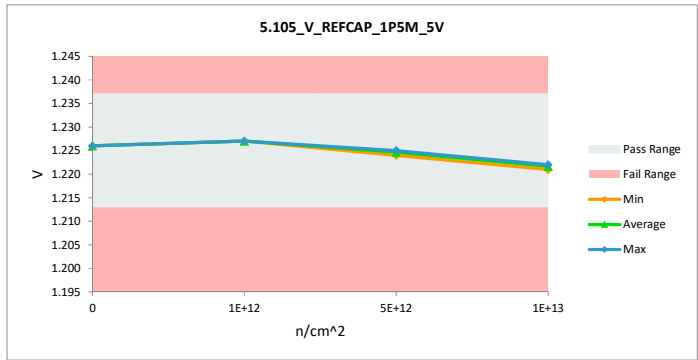


NDD Characterization Report TPS7H5005-SEP

5.105_V_REFCAP_1P5M_5V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.228	1.227	-0.001
1E+12	2	1.227	1.227	0.000
1E+12	3	1.228	1.227	-0.001
5E+12	4	1.228	1.225	-0.003
5E+12	5	1.227	1.224	-0.003
5E+12	6	1.227	1.225	-0.002
1E+13	7	1.228	1.222	-0.006
1E+13	8	1.227	1.222	-0.005
1E+13	9	1.227	1.221	-0.006
Max		1.228	1.227	0.000
Average		1.227	1.225	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.002

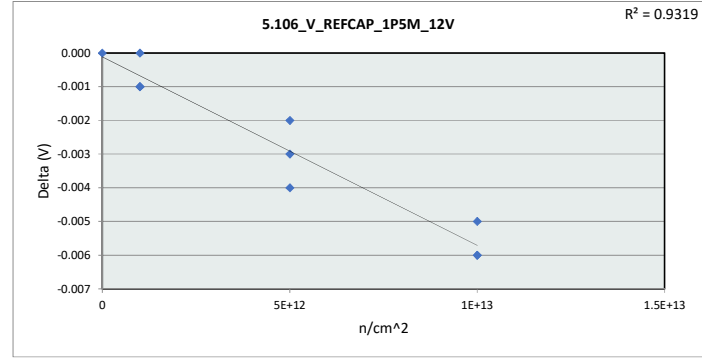


5.105_V_REFCAP_1P5M_5V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.227	1.224	1.221
Average	1.226	1.227	1.225	1.222
Max	1.226	1.227	1.225	1.222
UL	1.237	1.237	1.237	1.237

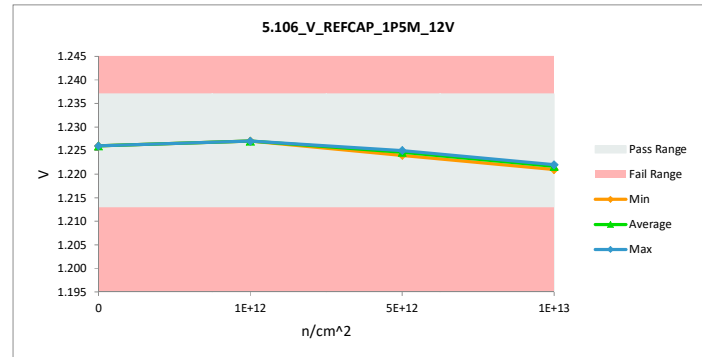


NDD Characterization Report TPS7H5005-SEP

5.106_V_REFCAP_1P5M_12V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.228	1.227	-0.001
1E+12	2	1.227	1.227	0.000
1E+12	3	1.228	1.227	-0.001
5E+12	4	1.228	1.225	-0.003
5E+12	5	1.228	1.224	-0.004
5E+12	6	1.227	1.225	-0.002
1E+13	7	1.228	1.222	-0.006
1E+13	8	1.227	1.222	-0.005
1E+13	9	1.227	1.221	-0.006
Max		1.228	1.227	0.000
Average		1.227	1.225	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.002

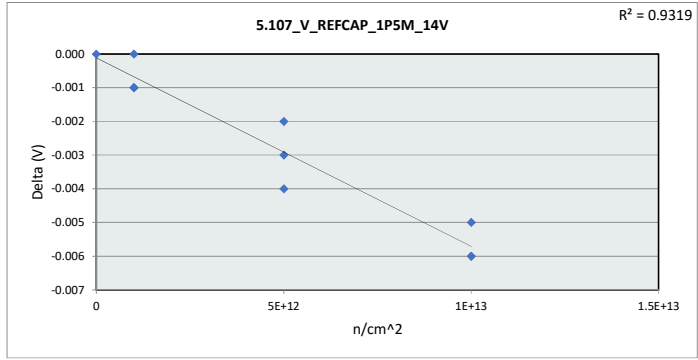


5.106_V_REFCAP_1P5M_12V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.227	1.224	1.221
Average	1.226	1.227	1.225	1.222
Max	1.226	1.227	1.225	1.222
UL	1.237	1.237	1.237	1.237

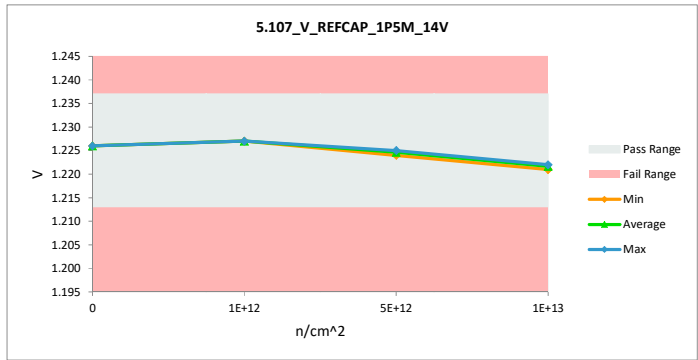


NDD Characterization Report TPS7H5005-SEP

5.107_V_REFCAP_1P5M_14V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.228	1.227	-0.001
1E+12	2	1.227	1.227	0.000
1E+12	3	1.228	1.227	-0.001
5E+12	4	1.228	1.225	-0.003
5E+12	5	1.228	1.224	-0.004
5E+12	6	1.227	1.225	-0.002
1E+13	7	1.228	1.222	-0.006
1E+13	8	1.227	1.222	-0.005
1E+13	9	1.227	1.221	-0.006
Max		1.228	1.227	0.000
Average		1.227	1.225	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.002

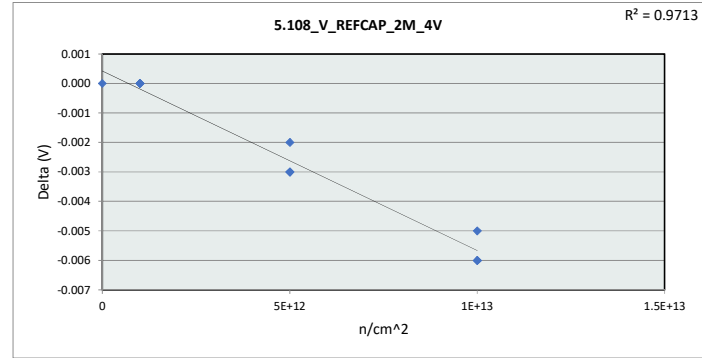


5.107_V_REFCAP_1P5M_14V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.227	1.224	1.221
Average	1.226	1.227	1.225	1.222
Max	1.226	1.227	1.225	1.222
UL	1.237	1.237	1.237	1.237

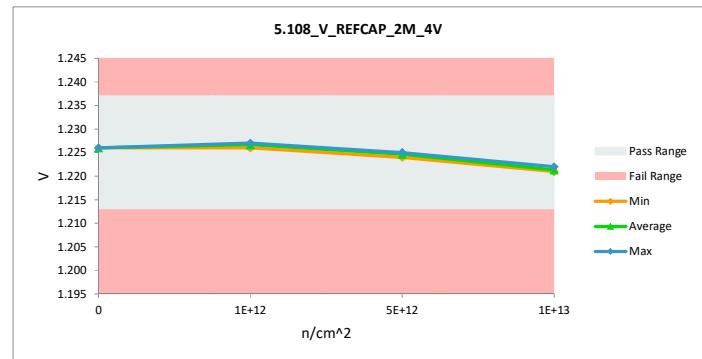


NDD Characterization Report TPS7H5005-SEP

5.108_V_REFCAP_2M_4V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	1.237		1.237	
Min Limit	1.213		1.213	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.226	1.226	0.000
1E+12	1	1.227	1.227	0.000
1E+12	2	1.226	1.226	0.000
1E+12	3	1.227	1.227	0.000
5E+12	4	1.228	1.225	-0.003
5E+12	5	1.227	1.224	-0.003
5E+12	6	1.227	1.225	-0.002
1E+13	7	1.227	1.222	-0.005
1E+13	8	1.227	1.221	-0.006
1E+13	9	1.227	1.221	-0.006
Max		1.228	1.227	0.000
Average		1.227	1.224	-0.003
Min		1.226	1.221	-0.006
Std Dev		0.001	0.002	0.003

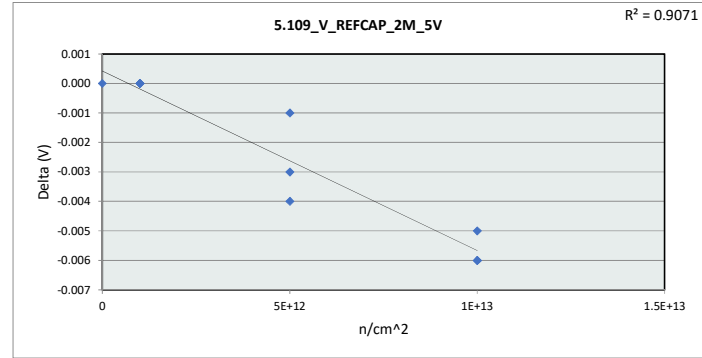


5.108_V_REFCAP_2M_4V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V		
Min Limit	1.213	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.226	1.224	1.221
Average	1.226	1.227	1.225	1.221
Max	1.226	1.227	1.225	1.222
UL	1.237	1.237	1.237	1.237

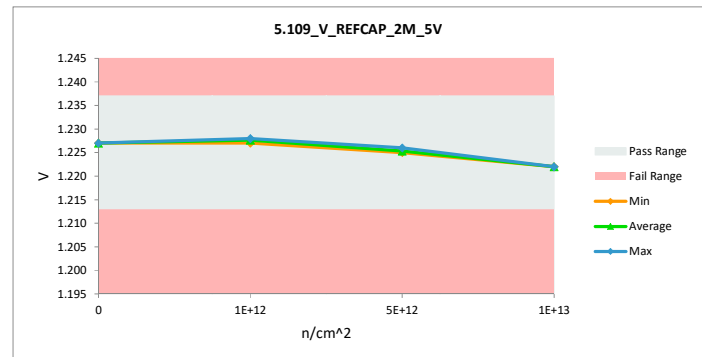


NDD Characterization Report TPS7H5005-SEP

5.109_V_REFCAP_2M_5V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	1.237		1.237	
Min Limit	1.213		1.213	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.227	1.227	0.000
1E+12	1	1.228	1.228	0.000
1E+12	2	1.227	1.227	0.000
1E+12	3	1.228	1.228	0.000
5E+12	4	1.229	1.225	-0.004
5E+12	5	1.228	1.225	-0.003
5E+12	6	1.227	1.226	-0.001
1E+13	7	1.228	1.222	-0.006
1E+13	8	1.228	1.222	-0.006
1E+13	9	1.227	1.222	-0.005
Max		1.229	1.228	0.000
Average		1.228	1.225	-0.003
Min		1.227	1.222	-0.006
Std Dev		0.001	0.002	0.003

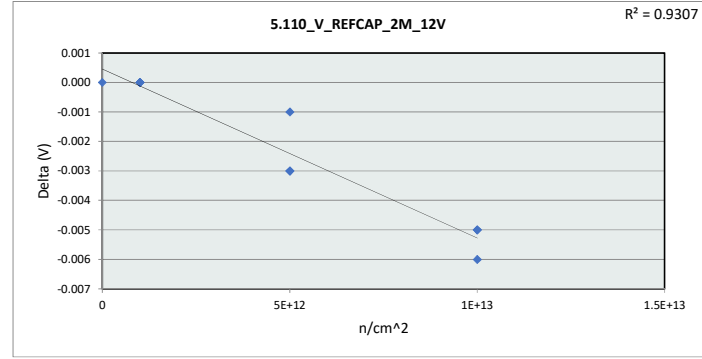


5.109_V_REFCAP_2M_5V				
Test Site				
Tester				
Test Number				
Max Limit	1.237		V	
Min Limit	1.213		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.227	1.227	1.225	1.222
Average	1.227	1.228	1.225	1.222
Max	1.227	1.228	1.226	1.222
UL	1.237	1.237	1.237	1.237

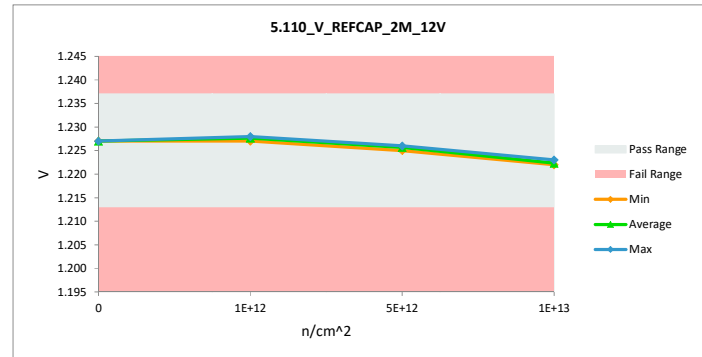


NDD Characterization Report TPS7H5005-SEP

5.110_V_REFCAP_2M_12V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	1.237		1.237	
Min Limit	1.213		1.213	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.227	1.227	0.000
1E+12	1	1.228	1.228	0.000
1E+12	2	1.227	1.227	0.000
1E+12	3	1.228	1.228	0.000
5E+12	4	1.229	1.226	-0.003
5E+12	5	1.228	1.225	-0.003
5E+12	6	1.227	1.226	-0.001
1E+13	7	1.228	1.223	-0.005
1E+13	8	1.228	1.222	-0.006
1E+13	9	1.227	1.222	-0.005
Max		1.229	1.228	0.000
Average		1.228	1.225	-0.002
Min		1.227	1.222	-0.006
Std Dev		0.001	0.002	0.002

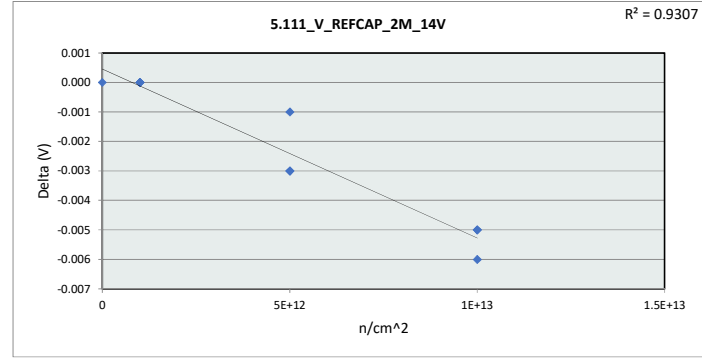


5.110_V_REFCAP_2M_12V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V		
Min Limit	1.213	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.227	1.227	1.225	1.222
Average	1.227	1.228	1.226	1.222
Max	1.227	1.228	1.226	1.223
UL	1.237	1.237	1.237	1.237

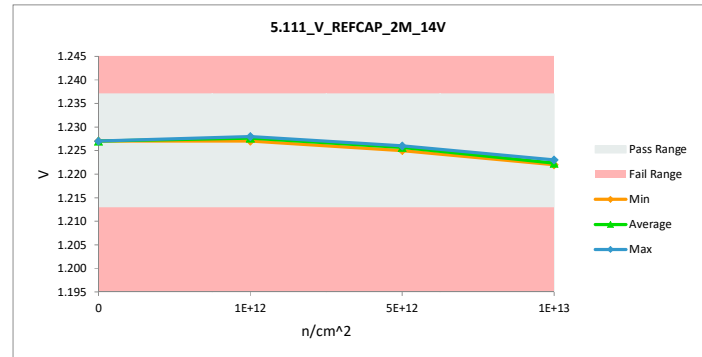


NDD Characterization Report TPS7H5005-SEP

5.111_V_REFCAP_2M_14V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.237	1.237	1.237	1.237
Min Limit	1.213	1.213	1.213	1.213
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.227	1.227	0.000
1E+12	1	1.228	1.228	0.000
1E+12	2	1.227	1.227	0.000
1E+12	3	1.228	1.228	0.000
5E+12	4	1.229	1.226	-0.003
5E+12	5	1.228	1.225	-0.003
5E+12	6	1.227	1.226	-0.001
1E+13	7	1.228	1.223	-0.005
1E+13	8	1.228	1.222	-0.006
1E+13	9	1.227	1.222	-0.005
Max		1.229	1.228	0.000
Average		1.228	1.225	-0.002
Min		1.227	1.222	-0.006
Std Dev		0.001	0.002	0.002

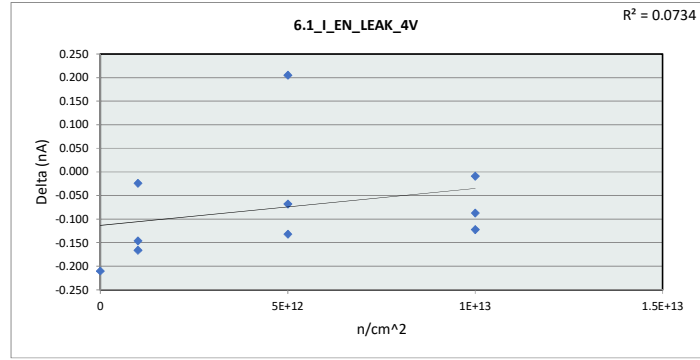


5.111_V_REFCAP_2M_14V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V	V	V
Min Limit	1.213	V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.227	1.227	1.225	1.222
Average	1.227	1.228	1.226	1.222
Max	1.227	1.228	1.226	1.223
UL	1.237	1.237	1.237	1.237

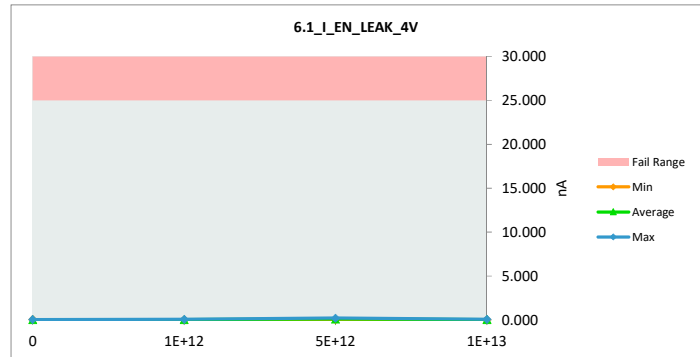


NDD Characterization Report TPS7H5005-SEP

6.1_I_EN_LEAK_4V				
Test Site				
Tester				
Test Number				
Unit	nA		nA	
Max Limit	25		25	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.256	0.046	-0.210
1E+12	1	0.178	0.032	-0.146
1E+12	2	0.227	0.061	-0.166
1E+12	3	0.056	0.032	-0.024
5E+12	4	0.105	0.037	-0.068
5E+12	5	0.002	0.207	0.205
5E+12	6	0.178	0.046	-0.132
1E+13	7	0.041	0.032	-0.009
1E+13	8	0.159	0.037	-0.122
1E+13	9	0.168	0.081	-0.087
Max		0.256	0.207	0.205
Average		0.137	0.061	-0.076
Min		0.002	0.032	-0.210
Std Dev		0.083	0.054	0.117

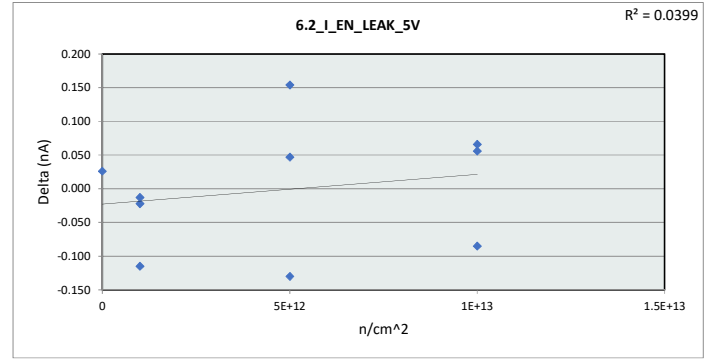


6.1_I_EN_LEAK_4V				
Test Site				
Tester				
Test Number				
Max Limit	25		nA	
Min Limit			nA	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	0.046	0.032	0.037	0.032
Average	0.046	0.042	0.097	0.050
Max	0.046	0.061	0.207	0.081
UL	25.000	25.000	25.000	25.000

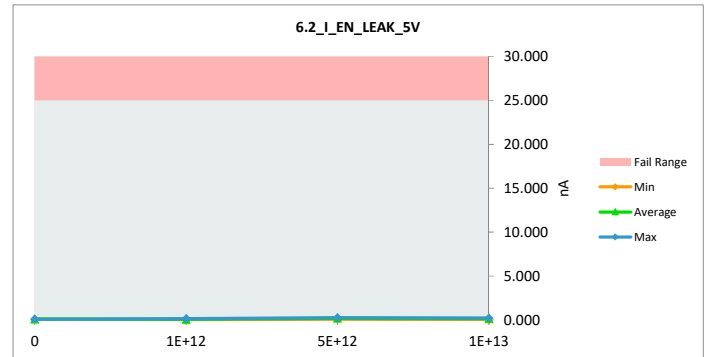


NDD Characterization Report TPS7H5005-SEP

6.2_I_EN_LEAK_5V				
Test Site				
Tester				
Test Number				
Unit	nA	nA		
Max Limit	25	25		
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.059	0.085	0.026
1E+12	1	0.156	0.041	-0.115
1E+12	2	0.059	0.037	-0.022
1E+12	3	0.176	0.163	-0.013
5E+12	4	0.107	0.261	0.154
5E+12	5	0.195	0.242	0.047
5E+12	6	0.215	0.085	-0.130
1E+13	7	0.068	0.124	0.056
1E+13	8	0.166	0.232	0.066
1E+13	9	0.107	0.022	-0.085
Max		0.215	0.261	0.154
Average		0.131	0.129	-0.002
Min		0.059	0.022	-0.130
Std Dev		0.058	0.090	0.089

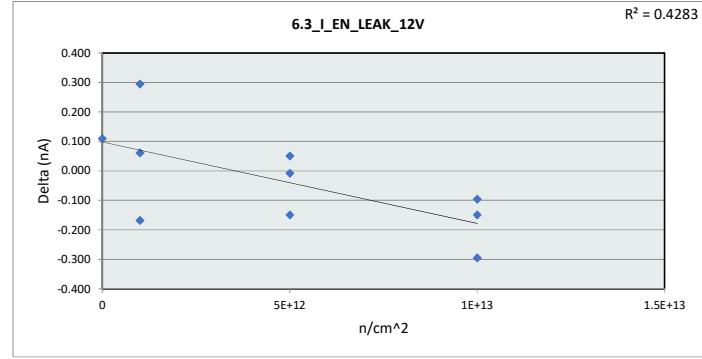


6.2_I_EN_LEAK_5V				
Test Site				
Tester				
Test Number				
Max Limit	25	nA		
Min Limit		nA		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	0.085	0.037	0.085	0.022
Average	0.085	0.080	0.196	0.126
Max	0.085	0.163	0.261	0.232
UL	25.000	25.000	25.000	25.000

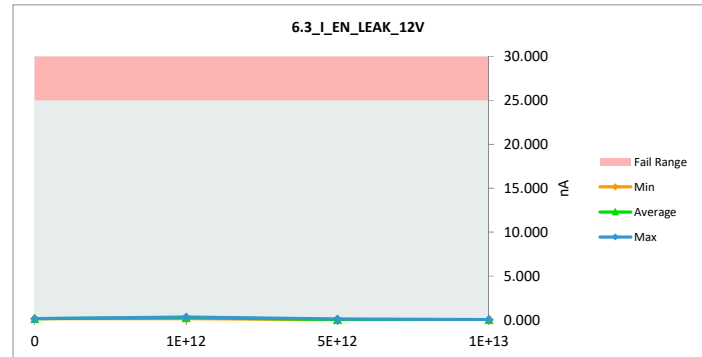


NDD Characterization Report TPS7H5005-SEP

6.3_I_EN_LEAK_12V				
Test Site				
Tester				
Test Number				
Unit		nA	nA	
Max Limit		25	25	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.029	0.139	0.110
1E+12	1	0.322	0.154	-0.168
1E+12	2	0.039	0.334	0.295
1E+12	3	0.254	0.315	0.061
5E+12	4	0.059	0.110	0.051
5E+12	5	0.166	0.017	-0.149
5E+12	6	0.059	0.051	-0.008
1E+13	7	0.322	0.027	-0.295
1E+13	8	0.156	0.007	-0.149
1E+13	9	0.137	0.041	-0.096
Max		0.322	0.334	0.295
Average		0.154	0.119	-0.035
Min		0.029	0.007	-0.295
Std Dev		0.112	0.119	0.171

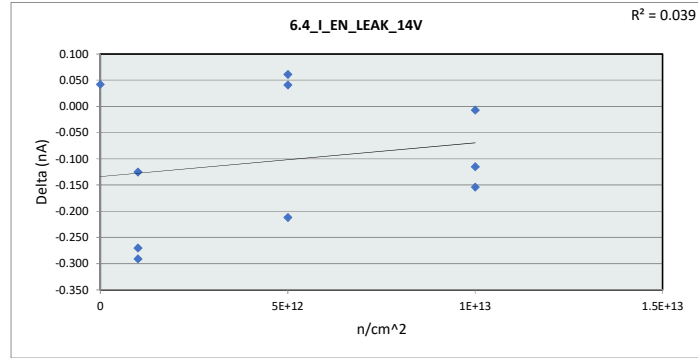


6.3_I_EN_LEAK_12V				
Test Site				
Tester				
Test Number				
Max Limit	25	nA		
Min Limit		nA		
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	0.139	0.154	0.017	0.007
Average	0.139	0.268	0.059	0.025
Max	0.139	0.334	0.110	0.041
UL	25.000	25.000	25.000	25.000

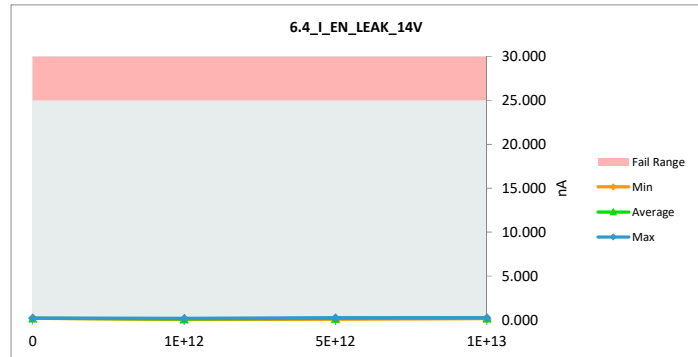


NDD Characterization Report TPS7H5005-SEP

6.4_I_EN_LEAK_14V				
Test Site				
Tester				
Test Number				
Unit	nA	nA		
Max Limit	25	25		
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.156	0.198	0.042
1E+12	1	0.293	0.168	-0.125
1E+12	2	0.390	0.120	-0.270
1E+12	3	0.332	0.041	-0.291
5E+12	4	0.146	0.207	0.061
5E+12	5	0.293	0.081	-0.212
5E+12	6	0.215	0.256	0.041
1E+13	7	0.371	0.256	-0.115
1E+13	8	0.185	0.178	-0.007
1E+13	9	0.303	0.149	-0.154
Max		0.390	0.256	0.061
Average		0.268	0.165	-0.103
Min		0.146	0.041	-0.291
Std Dev		0.088	0.070	0.132

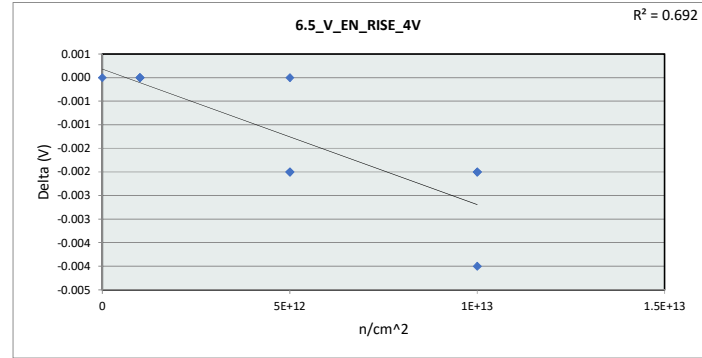


6.4_I_EN_LEAK_14V				
Test Site				
Tester				
Test Number				
Max Limit	25	nA		
Min Limit		nA		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	0.198	0.041	0.081	0.149
Average	0.198	0.110	0.181	0.194
Max	0.198	0.168	0.256	0.256
UL	25.000	25.000	25.000	25.000

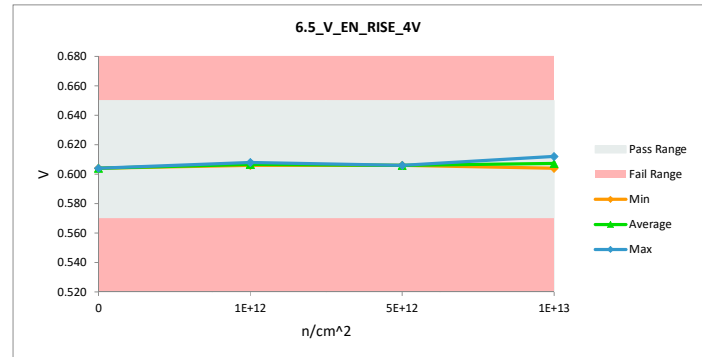


NDD Characterization Report TPS7H5005-SEP

6.5_V_EN_RISE_4V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	0.65	0.65	0.65	0.65
Min Limit	0.57	0.57	0.57	0.57
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.604	0.604	0.000
1E+12	1	0.606	0.606	0.000
1E+12	2	0.608	0.608	0.000
1E+12	3	0.606	0.606	0.000
5E+12	4	0.608	0.606	-0.002
5E+12	5	0.608	0.606	-0.002
5E+12	6	0.606	0.606	0.000
1E+13	7	0.606	0.604	-0.002
1E+13	8	0.616	0.612	-0.004
1E+13	9	0.608	0.606	-0.002
Max		0.616	0.612	0.000
Average		0.608	0.606	-0.001
Min		0.604	0.604	-0.004
Std Dev		0.003	0.002	0.001

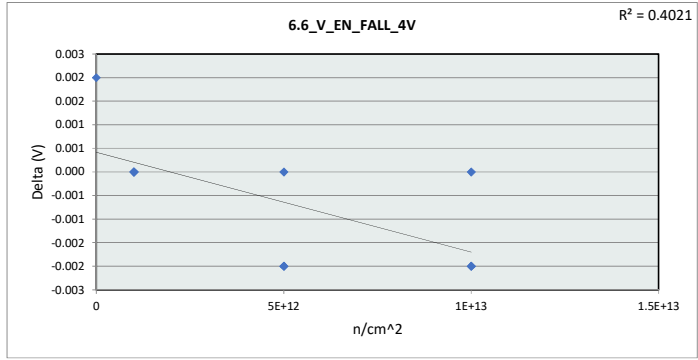


6.5_V_EN_RISE_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.65	V		
Min Limit	0.57	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.604	0.606	0.606	0.604
Average	0.604	0.607	0.606	0.607
Max	0.604	0.608	0.606	0.612
UL	0.650	0.650	0.650	0.650

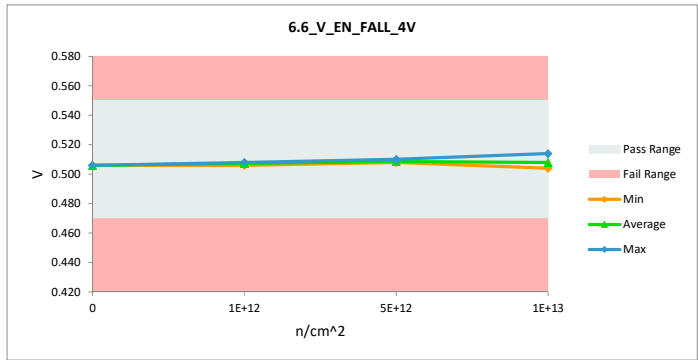


NDD Characterization Report TPS7H5005-SEP

6.6_V_EN_FALL_4V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.55		0.55	
Min Limit	0.47		0.47	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.504	0.506	0.002
1E+12	1	0.506	0.506	0.000
1E+12	2	0.508	0.508	0.000
1E+12	3	0.508	0.508	0.000
5E+12	4	0.512	0.510	-0.002
5E+12	5	0.510	0.508	-0.002
5E+12	6	0.508	0.508	0.000
1E+13	7	0.506	0.504	-0.002
1E+13	8	0.514	0.514	0.000
1E+13	9	0.508	0.506	-0.002
Max		0.514	0.514	0.002
Average		0.508	0.508	-0.001
Min		0.504	0.504	-0.002
Std Dev		0.003	0.003	0.001

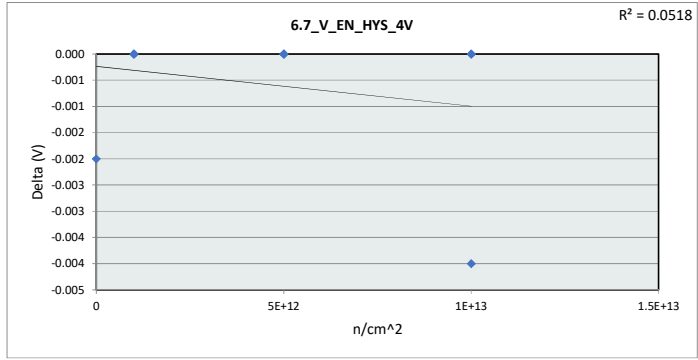


6.6_V_EN_FALL_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.55		V	
Min Limit	0.47		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.506	0.506	0.508	0.504
Average	0.506	0.507	0.509	0.508
Max	0.506	0.508	0.510	0.514
UL	0.550	0.550	0.550	0.550

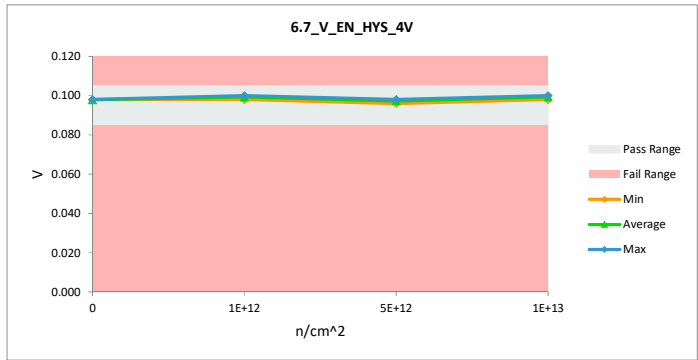


NDD Characterization Report TPS7H5005-SEP

6.7_V_EN_HYS_4V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.105		0.105	
Min Limit	0.085		0.085	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.100	0.098	-0.002
1E+12	1	0.100	0.100	0.000
1E+12	2	0.100	0.100	0.000
1E+12	3	0.098	0.098	0.000
5E+12	4	0.096	0.096	0.000
5E+12	5	0.098	0.098	0.000
5E+12	6	0.098	0.098	0.000
1E+13	7	0.100	0.100	0.000
1E+13	8	0.102	0.098	-0.004
1E+13	9	0.100	0.100	0.000
Max		0.102	0.100	0.000
Average		0.099	0.099	-0.001
Min		0.096	0.096	-0.004
Std Dev		0.002	0.001	0.001

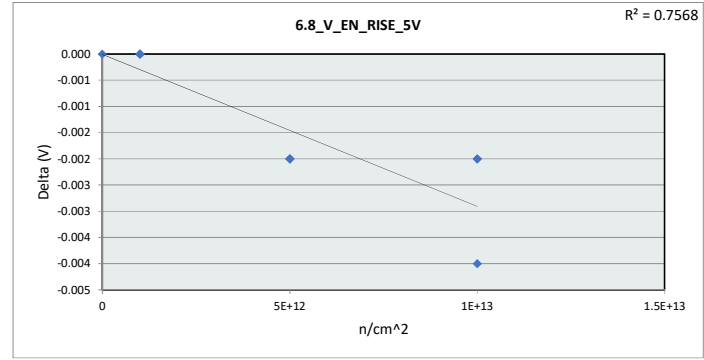


6.7_V_EN_HYS_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.105		V	
Min Limit	0.085		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.085	0.085	0.085	0.085
Min	0.098	0.098	0.096	0.098
Average	0.098	0.099	0.097	0.099
Max	0.098	0.100	0.098	0.100
UL	0.105	0.105	0.105	0.105

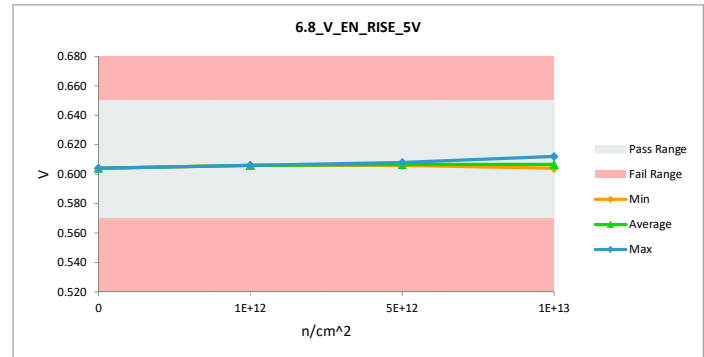


NDD Characterization Report TPS7H5005-SEP

6.8_V_EN_RISE_5V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	0.65	0.65	0.65	0.65
Min Limit	0.57	0.57	0.57	0.57
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.604	0.604	0.000
1E+12	1	0.606	0.606	0.000
1E+12	2	0.606	0.606	0.000
1E+12	3	0.606	0.606	0.000
5E+12	4	0.610	0.608	-0.002
5E+12	5	0.608	0.606	-0.002
5E+12	6	0.608	0.606	-0.002
1E+13	7	0.606	0.604	-0.002
1E+13	8	0.616	0.612	-0.004
1E+13	9	0.606	0.604	-0.002
Max		0.616	0.612	0.000
Average		0.608	0.606	-0.001
Min		0.604	0.604	-0.004
Std Dev		0.003	0.002	0.001

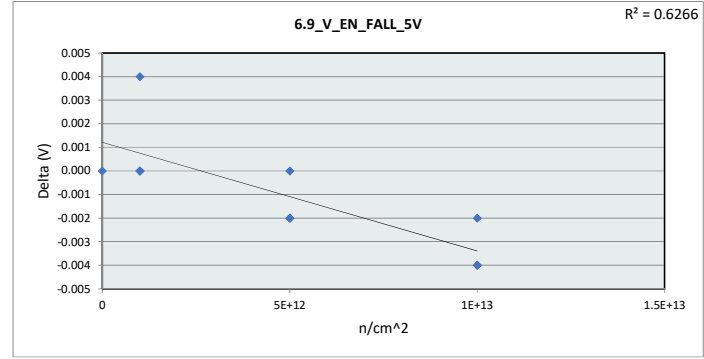


6.8_V_EN_RISE_5V				
Test Site				
Tester				
Test Number				
Max Limit	0.65	V		
Min Limit	0.57	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.604	0.606	0.606	0.604
Average	0.604	0.606	0.607	0.607
Max	0.604	0.606	0.608	0.612
UL	0.650	0.650	0.650	0.650

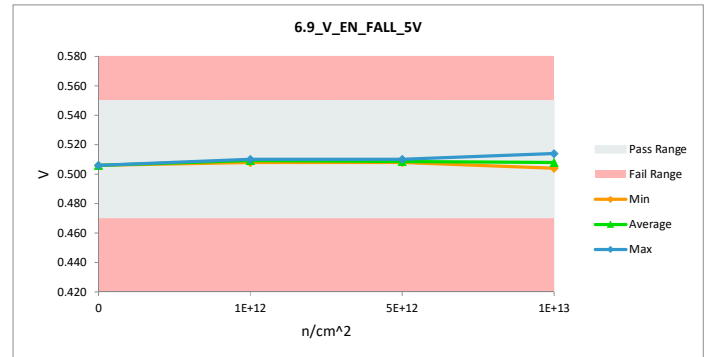


NDD Characterization Report TPS7H5005-SEP

6.9_V_EN_FALL_5V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.55		0.55	
Min Limit	0.47		0.47	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.506	0.506	0.000
1E+12	1	0.506	0.510	0.004
1E+12	2	0.510	0.510	0.000
1E+12	3	0.508	0.508	0.000
5E+12	4	0.512	0.510	-0.002
5E+12	5	0.510	0.508	-0.002
5E+12	6	0.508	0.508	0.000
1E+13	7	0.506	0.504	-0.002
1E+13	8	0.518	0.514	-0.004
1E+13	9	0.510	0.506	-0.004
Max		0.518	0.514	0.004
Average		0.509	0.508	-0.001
Min		0.506	0.504	-0.004
Std Dev		0.004	0.003	0.002

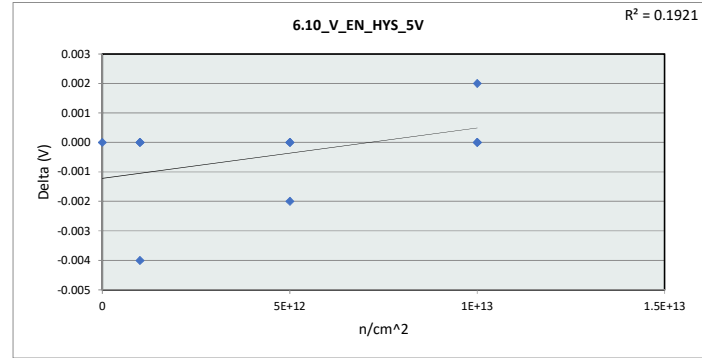


6.9_V_EN_FALL_5V				
Test Site				
Tester				
Test Number				
Max Limit	0.55		V	
Min Limit	0.47		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.506	0.508	0.508	0.504
Average	0.506	0.509	0.509	0.508
Max	0.506	0.510	0.510	0.514
UL	0.550	0.550	0.550	0.550

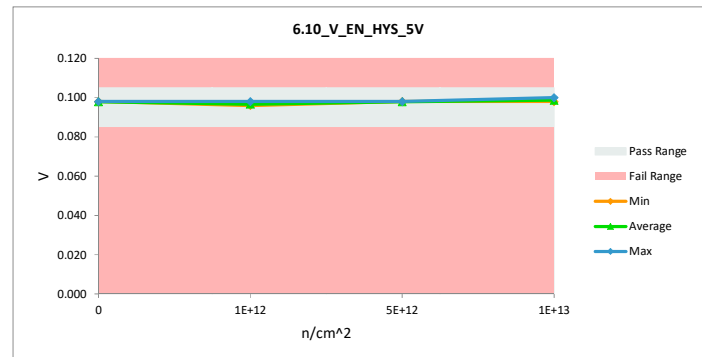


NDD Characterization Report TPS7H5005-SEP

6.10_V_EN_HYS_5V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.105		0.105	
Min Limit	0.085		0.085	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.098	0.098	0.000
1E+12	1	0.100	0.096	-0.004
1E+12	2	0.096	0.096	0.000
1E+12	3	0.098	0.098	0.000
5E+12	4	0.098	0.098	0.000
5E+12	5	0.098	0.098	0.000
5E+12	6	0.100	0.098	-0.002
1E+13	7	0.100	0.100	0.000
1E+13	8	0.098	0.098	0.000
1E+13	9	0.096	0.098	0.002
Max		0.100	0.100	0.002
Average		0.098	0.098	0.000
Min		0.096	0.096	-0.004
Std Dev		0.001	0.001	0.002

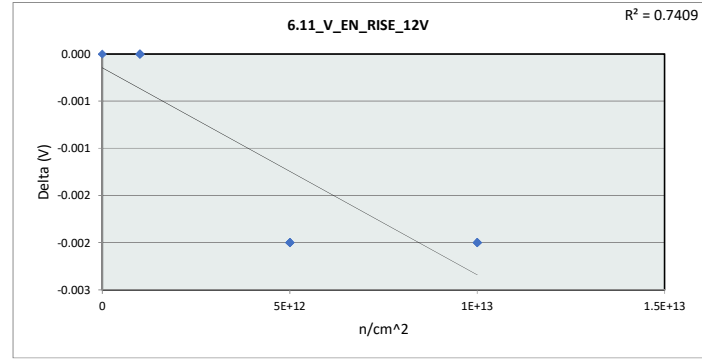


6.10_V_EN_HYS_5V				
Test Site				
Tester				
Test Number				
Max Limit	0.105		V	
Min Limit	0.085		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.085	0.085	0.085	0.085
Min	0.098	0.096	0.098	0.098
Average	0.098	0.097	0.098	0.099
Max	0.098	0.098	0.098	0.100
UL	0.105	0.105	0.105	0.105

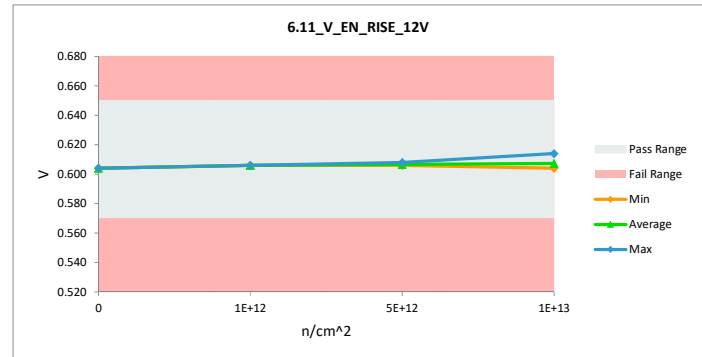


NDD Characterization Report TPS7H5005-SEP

6.11_V_EN_RISE_12V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	0.65	0.65	0.65	0.65
Min Limit	0.57	0.57	0.57	0.57
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.604	0.604	0.000
1E+12	1	0.606	0.606	0.000
1E+12	2	0.606	0.606	0.000
1E+12	3	0.606	0.606	0.000
5E+12	4	0.610	0.608	-0.002
5E+12	5	0.608	0.606	-0.002
5E+12	6	0.608	0.606	-0.002
1E+13	7	0.606	0.604	-0.002
1E+13	8	0.616	0.614	-0.002
1E+13	9	0.606	0.604	-0.002
Max		0.616	0.614	0.000
Average		0.608	0.606	-0.001
Min		0.604	0.604	-0.002
Std Dev		0.003	0.003	0.001

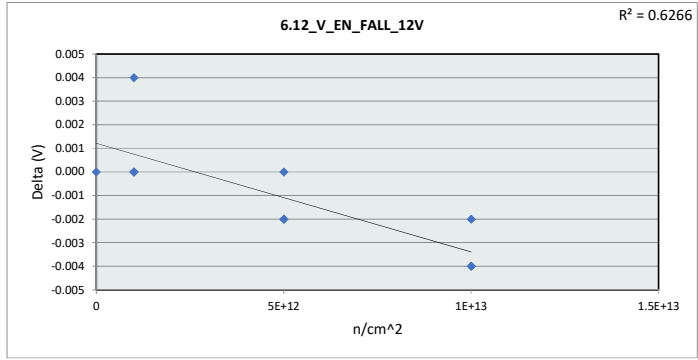


6.11_V_EN_RISE_12V				
Test Site				
Tester				
Test Number				
Max Limit	0.65	V		
Min Limit	0.57	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.604	0.606	0.606	0.604
Average	0.604	0.606	0.607	0.607
Max	0.604	0.606	0.608	0.614
UL	0.650	0.650	0.650	0.650

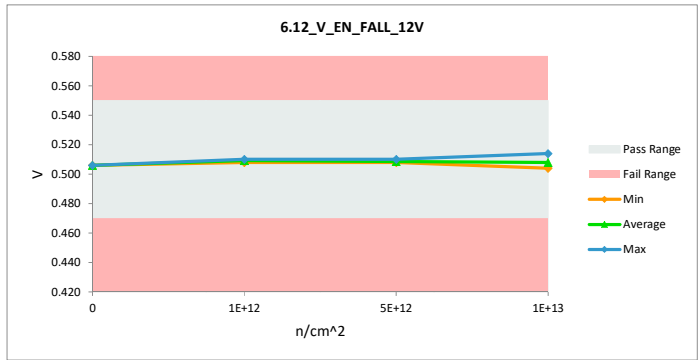


NDD Characterization Report TPS7H5005-SEP

6.12_V_EN_FALL_12V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.55		0.55	
Min Limit	0.47		0.47	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.506	0.506	0.000
1E+12	1	0.506	0.510	0.004
1E+12	2	0.510	0.510	0.000
1E+12	3	0.508	0.508	0.000
5E+12	4	0.512	0.510	-0.002
5E+12	5	0.510	0.508	-0.002
5E+12	6	0.508	0.508	0.000
1E+13	7	0.506	0.504	-0.002
1E+13	8	0.518	0.514	-0.004
1E+13	9	0.510	0.506	-0.004
Max		0.518	0.514	0.004
Average		0.509	0.508	-0.001
Min		0.506	0.504	-0.004
Std Dev		0.004	0.003	0.002

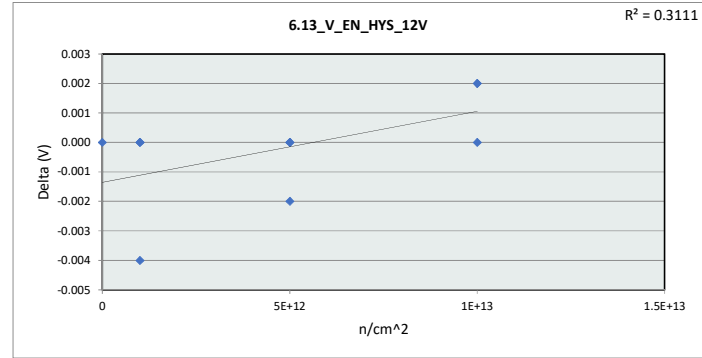


6.12_V_EN_FALL_12V				
Test Site				
Tester				
Test Number				
Max Limit	0.55		V	
Min Limit	0.47		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.506	0.508	0.508	0.504
Average	0.506	0.509	0.509	0.508
Max	0.506	0.510	0.510	0.514
UL	0.550	0.550	0.550	0.550

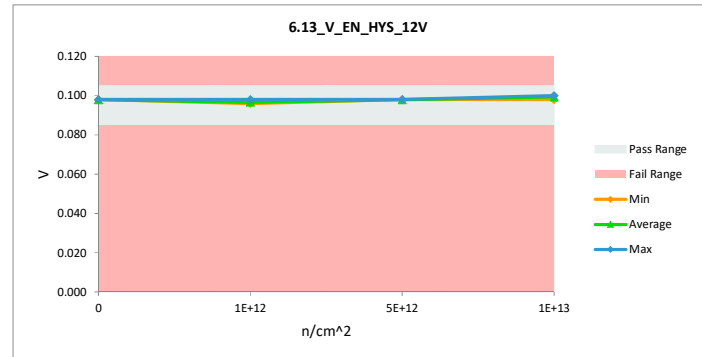


NDD Characterization Report TPS7H5005-SEP

6.13_V_EN_HYS_12V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.105		0.105	
Min Limit	0.085		0.085	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.098	0.098	0.000
1E+12	1	0.100	0.096	-0.004
1E+12	2	0.096	0.096	0.000
1E+12	3	0.098	0.098	0.000
5E+12	4	0.098	0.098	0.000
5E+12	5	0.098	0.098	0.000
5E+12	6	0.100	0.098	-0.002
1E+13	7	0.100	0.100	0.000
1E+13	8	0.098	0.100	0.002
1E+13	9	0.096	0.098	0.002
Max		0.100	0.100	0.002
Average		0.098	0.098	0.000
Min		0.096	0.096	-0.004
Std Dev		0.001	0.001	0.002

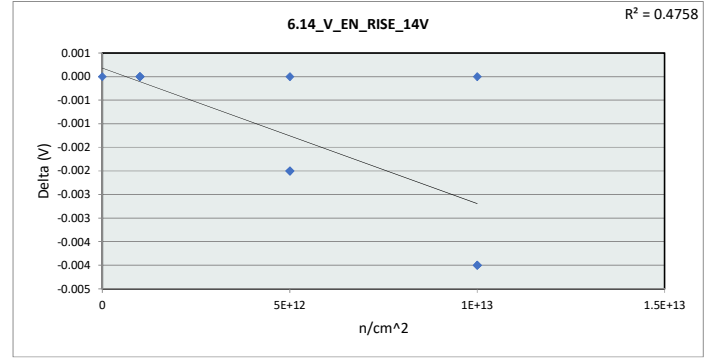


6.13_V_EN_HYS_12V				
Test Site				
Tester				
Test Number				
Max Limit	0.105		V	
Min Limit	0.085		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.085	0.085	0.085	0.085
Min	0.098	0.096	0.098	0.098
Average	0.098	0.097	0.098	0.099
Max	0.098	0.098	0.098	0.100
UL	0.105	0.105	0.105	0.105

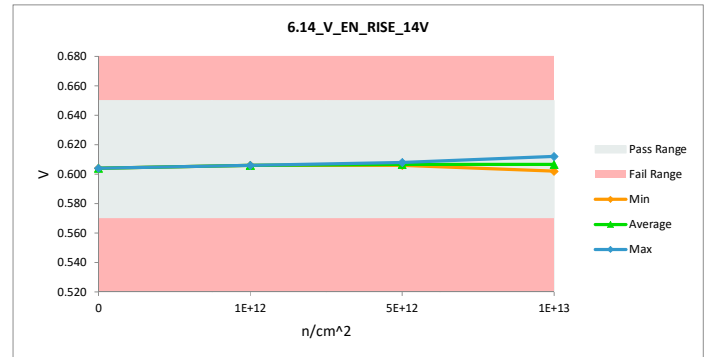


NDD Characterization Report TPS7H5005-SEP

6.14_V_EN_RISE_14V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.65		0.65	
Min Limit	0.57		0.57	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.604	0.604	0.000
1E+12	1	0.606	0.606	0.000
1E+12	2	0.606	0.606	0.000
1E+12	3	0.606	0.606	0.000
5E+12	4	0.608	0.608	0.000
5E+12	5	0.608	0.606	-0.002
5E+12	6	0.608	0.606	-0.002
1E+13	7	0.606	0.602	-0.004
1E+13	8	0.616	0.612	-0.004
1E+13	9	0.606	0.606	0.000
Max		0.616	0.612	0.000
Average		0.607	0.606	-0.001
Min		0.604	0.602	-0.004
Std Dev		0.003	0.003	0.002

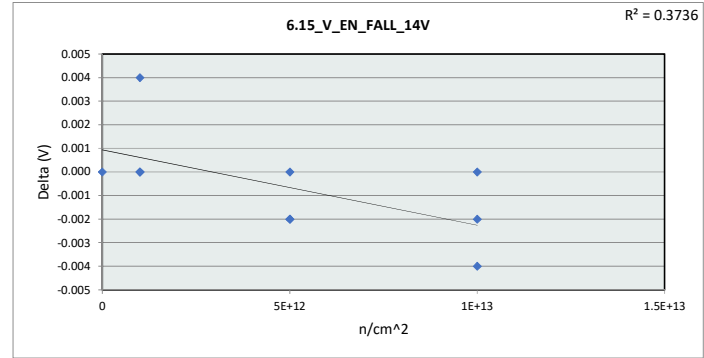


6.14_V_EN_RISE_14V				
Test Site				
Tester				
Test Number				
Max Limit	0.65		V	
Min Limit	0.57		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.604	0.606	0.606	0.602
Average	0.604	0.606	0.607	0.607
Max	0.604	0.606	0.608	0.612
UL	0.650	0.650	0.650	0.650

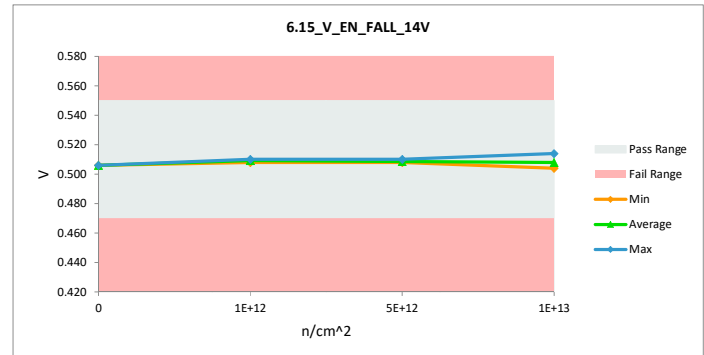


NDD Characterization Report TPS7H5005-SEP

6.15_V_EN_FALL_14V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.55		0.55	
Min Limit	0.47		0.47	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.506	0.506	0.000
1E+12	1	0.506	0.510	0.004
1E+12	2	0.510	0.510	0.000
1E+12	3	0.508	0.508	0.000
5E+12	4	0.512	0.510	-0.002
5E+12	5	0.510	0.508	-0.002
5E+12	6	0.508	0.508	0.000
1E+13	7	0.506	0.504	-0.002
1E+13	8	0.514	0.514	0.000
1E+13	9	0.510	0.506	-0.004
Max		0.514	0.514	0.004
Average		0.509	0.508	-0.001
Min		0.506	0.504	-0.004
Std Dev		0.003	0.003	0.002

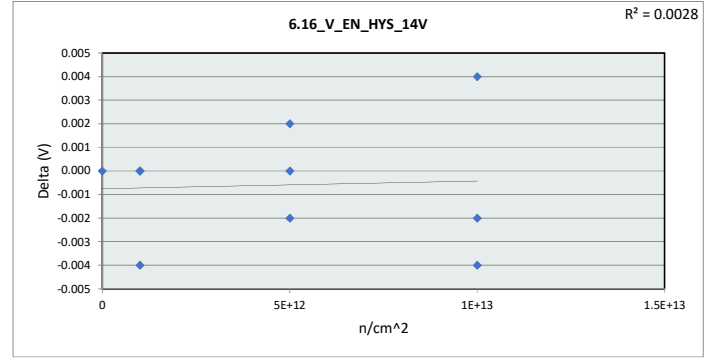


6.15_V_EN_FALL_14V				
Test Site				
Tester				
Test Number				
Max Limit	0.55		V	
Min Limit	0.47		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.506	0.508	0.508	0.504
Average	0.506	0.509	0.509	0.508
Max	0.506	0.510	0.510	0.514
UL	0.550	0.550	0.550	0.550

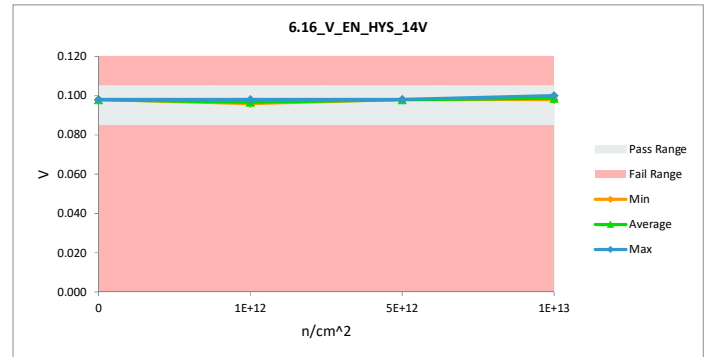


NDD Characterization Report TPS7H5005-SEP

6.16_V_EN_HYS_14V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.105		0.105	
Min Limit	0.085		0.085	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.098	0.098	0.000
1E+12	1	0.100	0.096	-0.004
1E+12	2	0.096	0.096	0.000
1E+12	3	0.098	0.098	0.000
5E+12	4	0.096	0.098	0.002
5E+12	5	0.098	0.098	0.000
5E+12	6	0.100	0.098	-0.002
1E+13	7	0.100	0.098	-0.002
1E+13	8	0.102	0.098	-0.004
1E+13	9	0.096	0.100	0.004
Max		0.102	0.100	0.004
Average		0.098	0.098	-0.001
Min		0.096	0.096	-0.004
Std Dev		0.002	0.001	0.003

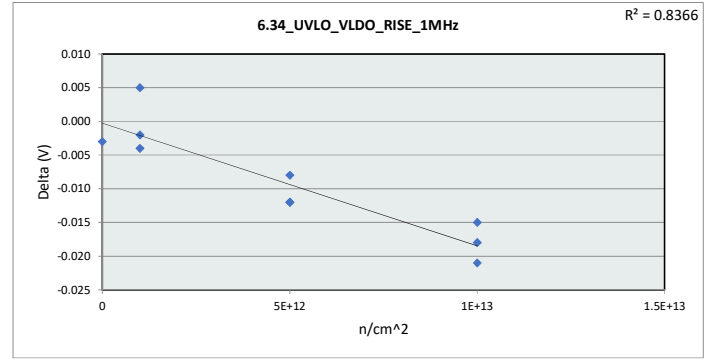


6.16_V_EN_HYS_14V				
Test Site				
Tester				
Test Number				
Max Limit	0.105		V	
Min Limit	0.085		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.085	0.085	0.085	0.085
Min	0.098	0.096	0.098	0.098
Average	0.098	0.097	0.098	0.099
Max	0.098	0.098	0.098	0.100
UL	0.105	0.105	0.105	0.105

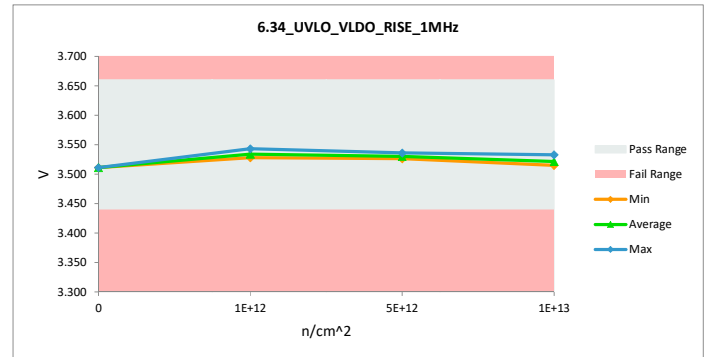


NDD Characterization Report TPS7H5005-SEP

6.34_UVLO_VLDO_RISE_1MHz				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	3.66		3.66	
Min Limit	3.44		3.44	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	3.514	3.511	-0.003
1E+12	1	3.535	3.531	-0.004
1E+12	2	3.538	3.543	0.005
1E+12	3	3.530	3.528	-0.002
5E+12	4	3.548	3.536	-0.012
5E+12	5	3.538	3.526	-0.012
5E+12	6	3.536	3.528	-0.008
1E+13	7	3.533	3.515	-0.018
1E+13	8	3.554	3.533	-0.021
1E+13	9	3.532	3.517	-0.015
Max		3.554	3.543	0.005
Average		3.536	3.527	-0.009
Min		3.514	3.511	-0.021
Std Dev		0.011	0.010	0.008

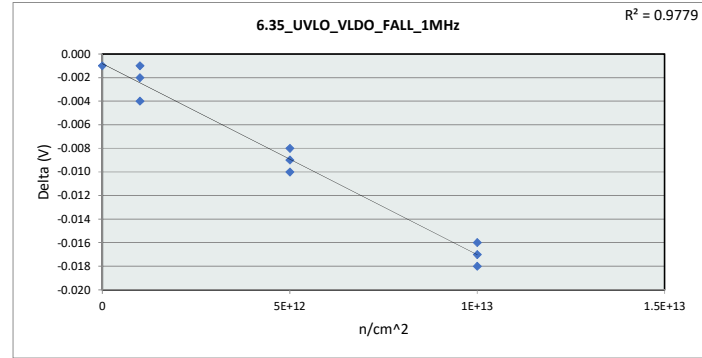


6.34_UVLO_VLDO_RISE_1MHz				
Test Site				
Tester				
Test Number				
Max Limit	3.66		V	
Min Limit	3.44		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	3.440	3.440	3.440	3.440
Min	3.511	3.528	3.526	3.515
Average	3.511	3.534	3.530	3.522
Max	3.511	3.543	3.536	3.533
UL	3.660	3.660	3.660	3.660

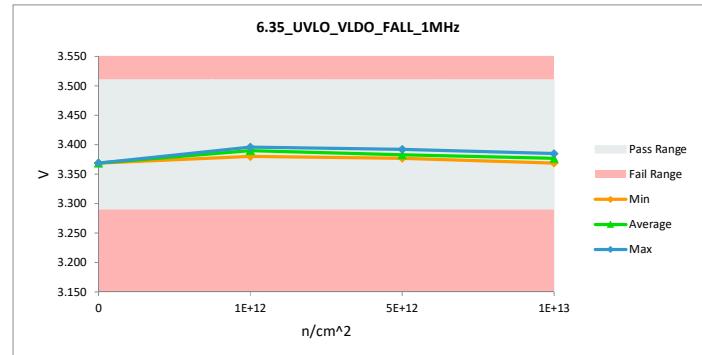


NDD Characterization Report TPS7H5005-SEP

6.35_UVLO_VLDO_FALL_1MHz				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	3.51		3.51	
Min Limit	3.29		3.29	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	3.370	3.369	-0.001
1E+12	1	3.398	3.396	-0.002
1E+12	2	3.395	3.394	-0.001
1E+12	3	3.384	3.380	-0.004
5E+12	4	3.401	3.392	-0.009
5E+12	5	3.387	3.377	-0.010
5E+12	6	3.387	3.379	-0.008
1E+13	7	3.385	3.369	-0.016
1E+13	8	3.403	3.385	-0.018
1E+13	9	3.393	3.376	-0.017
Max		3.403	3.396	-0.001
Average		3.390	3.382	-0.009
Min		3.370	3.369	-0.018
Std Dev		0.010	0.010	0.007

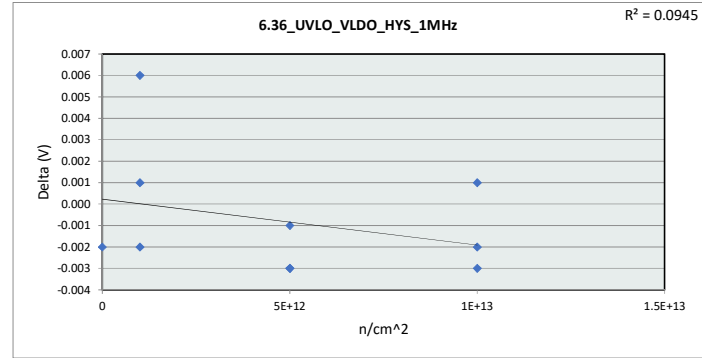


6.35_UVLO_VLDO_FALL_1MHz				
Test Site				
Tester				
Test Number				
Max Limit	3.51		V	
Min Limit	3.29		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	3.290	3.290	3.290	3.290
Min	3.369	3.380	3.377	3.369
Average	3.369	3.390	3.383	3.377
Max	3.369	3.396	3.392	3.385
UL	3.510	3.510	3.510	3.510

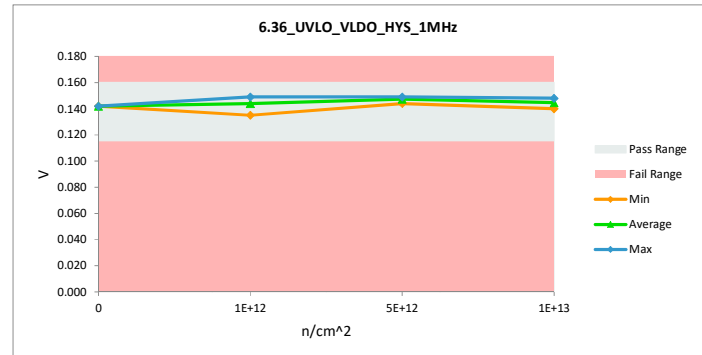


NDD Characterization Report TPS7H5005-SEP

6.36_UVLO_VLDO_HYS_1MHz				
Test Site				
Tester				
Test Number				
Unit		V	V	
Max Limit		0.16	0.16	
Min Limit		0.115	0.115	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.144	0.142	-0.002
1E+12	1	0.137	0.135	-0.002
1E+12	2	0.143	0.149	0.006
1E+12	3	0.147	0.148	0.001
5E+12	4	0.147	0.144	-0.003
5E+12	5	0.152	0.149	-0.003
5E+12	6	0.150	0.149	-0.001
1E+13	7	0.148	0.146	-0.002
1E+13	8	0.151	0.148	-0.003
1E+13	9	0.139	0.140	0.001
Max		0.152	0.149	0.006
Average		0.146	0.145	-0.001
Min		0.137	0.135	-0.003
Std Dev		0.005	0.005	0.003

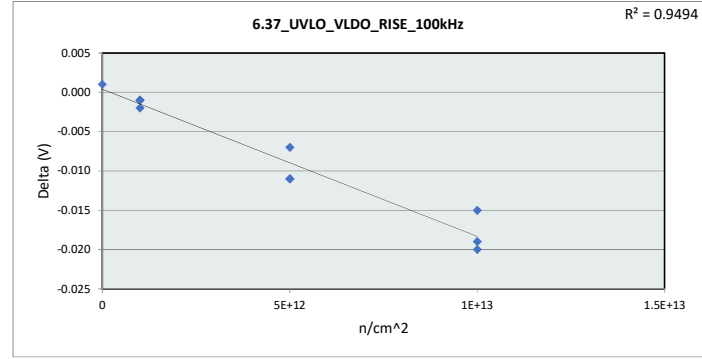


6.36_UVLO_VLDO_HYS_1MHz				
Test Site				
Tester				
Test Number				
Max Limit	0.16	V		
Min Limit	0.115	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.115	0.115	0.115	0.115
Min	0.142	0.135	0.144	0.140
Average	0.142	0.144	0.147	0.145
Max	0.142	0.149	0.149	0.148
UL	0.160	0.160	0.160	0.160

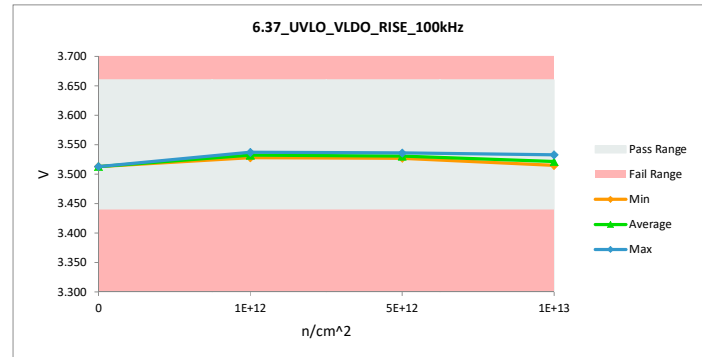


NDD Characterization Report TPS7H5005-SEP

6.37_UVLO_VLDO_RISE_100kHz				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	3.66		3.66	
Min Limit	3.44		3.44	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	3.512	3.513	0.001
1E+12	1	3.533	3.532	-0.001
1E+12	2	3.538	3.537	-0.001
1E+12	3	3.530	3.528	-0.002
5E+12	4	3.547	3.536	-0.011
5E+12	5	3.538	3.527	-0.011
5E+12	6	3.536	3.529	-0.007
1E+13	7	3.534	3.515	-0.019
1E+13	8	3.553	3.533	-0.020
1E+13	9	3.531	3.516	-0.015
Max		3.553	3.537	0.001
Average		3.535	3.527	-0.009
Min		3.512	3.513	-0.020
Std Dev		0.011	0.009	0.008

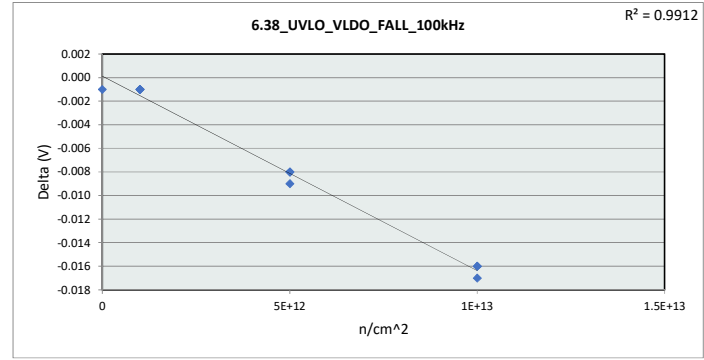


6.37_UVLO_VLDO_RISE_100k				
Test Site				
Tester				
Test Number				
Max Limit	3.66		V	
Min Limit	3.44		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	3.440	3.440	3.440	3.440
Min	3.513	3.528	3.527	3.515
Average	3.513	3.532	3.531	3.521
Max	3.513	3.537	3.536	3.533
UL	3.660	3.660	3.660	3.660

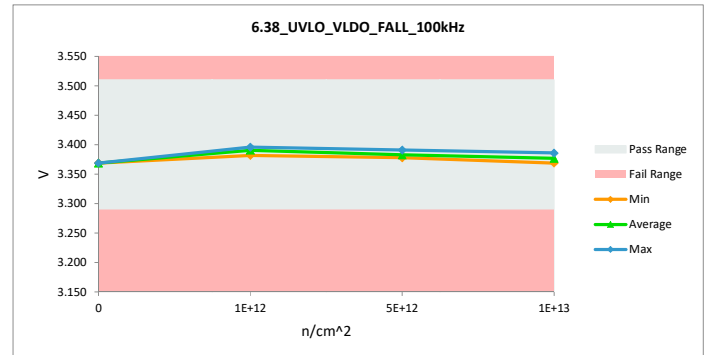


NDD Characterization Report TPS7H5005-SEP

6.38_UVLO_VLDO_FALL_100kHz				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	3.51	3.51		
Min Limit	3.29	3.29		
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	3.370	3.369	-0.001
1E+12	1	3.397	3.396	-0.001
1E+12	2	3.395	3.394	-0.001
1E+12	3	3.383	3.382	-0.001
5E+12	4	3.400	3.391	-0.009
5E+12	5	3.386	3.378	-0.008
5E+12	6	3.387	3.379	-0.008
1E+13	7	3.385	3.369	-0.016
1E+13	8	3.403	3.386	-0.017
1E+13	9	3.392	3.376	-0.016
Max		3.403	3.396	-0.001
Average		3.390	3.382	-0.008
Min		3.370	3.369	-0.017
Std Dev		0.010	0.010	0.007

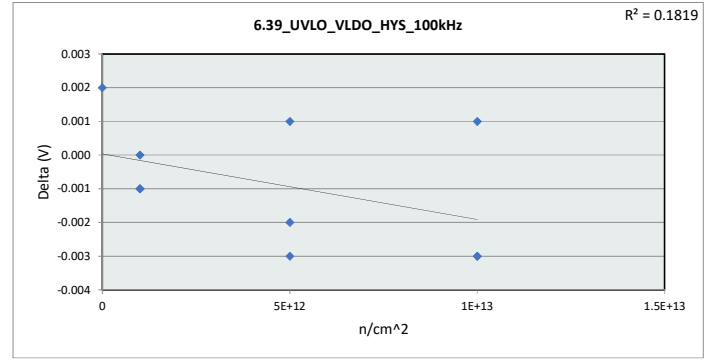


6.38_UVLO_VLDO_FALL_100k				
Test Site				
Tester				
Test Number				
Max Limit	3.51	V		
Min Limit	3.29	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	3.290	3.290	3.290	3.290
Min	3.369	3.382	3.378	3.369
Average	3.369	3.391	3.383	3.377
Max	3.369	3.396	3.391	3.386
UL	3.510	3.510	3.510	3.510

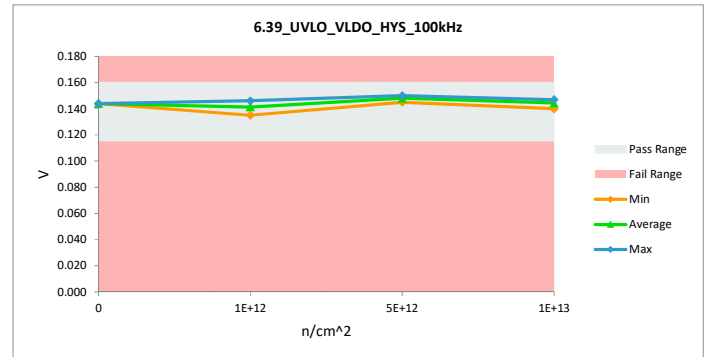


NDD Characterization Report TPS7H5005-SEP

6.39_UVLO_VLDO_HYS_100kHz				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.16		0.16	
Min Limit	0.115		0.115	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.142	0.144	0.002
1E+12	1	0.136	0.135	-0.001
1E+12	2	0.143	0.143	0.000
1E+12	3	0.147	0.146	-0.001
5E+12	4	0.147	0.145	-0.002
5E+12	5	0.152	0.149	-0.003
5E+12	6	0.149	0.150	0.001
1E+13	7	0.149	0.146	-0.003
1E+13	8	0.150	0.147	-0.003
1E+13	9	0.139	0.140	0.001
Max		0.152	0.150	0.002
Average		0.145	0.145	-0.001
Min		0.136	0.135	-0.003
Std Dev		0.005	0.004	0.002

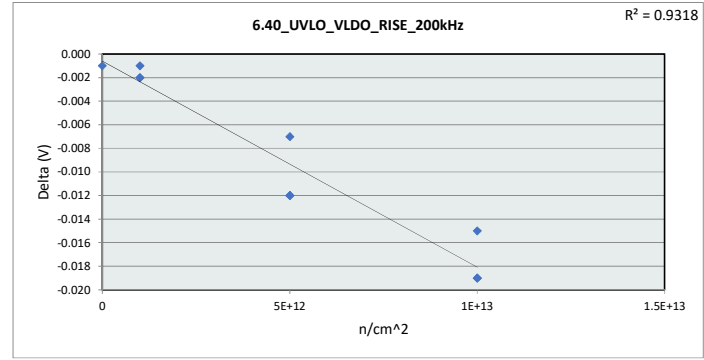


6.39_UVLO_VLDO_HYS_100kHz				
Test Site				
Tester				
Test Number				
Max Limit	0.16		V	
Min Limit	0.115		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.115	0.115	0.115	0.115
Min	0.144	0.135	0.145	0.140
Average	0.144	0.141	0.148	0.144
Max	0.144	0.146	0.150	0.147
UL	0.160	0.160	0.160	0.160

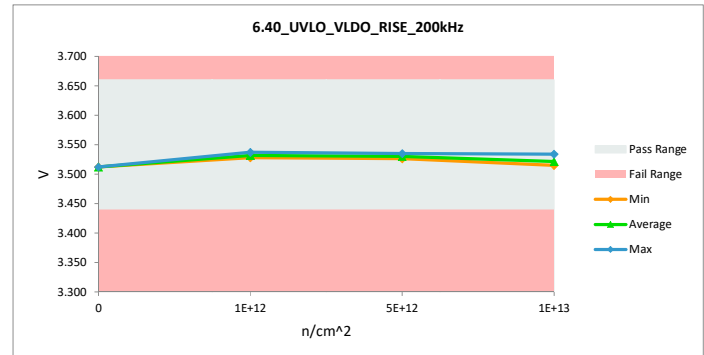


NDD Characterization Report TPS7H5005-SEP

6.40_UVLO_VLDO_RISE_200kHz				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	3.66		3.66	
Min Limit	3.44		3.44	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	3.513	3.512	-0.001
1E+12	1	3.533	3.531	-0.002
1E+12	2	3.538	3.537	-0.001
1E+12	3	3.530	3.528	-0.002
5E+12	4	3.547	3.535	-0.012
5E+12	5	3.538	3.526	-0.012
5E+12	6	3.536	3.529	-0.007
1E+13	7	3.534	3.515	-0.019
1E+13	8	3.553	3.534	-0.019
1E+13	9	3.531	3.516	-0.015
Max		3.553	3.537	-0.001
Average		3.535	3.526	-0.009
Min		3.513	3.512	-0.019
Std Dev		0.011	0.009	0.007

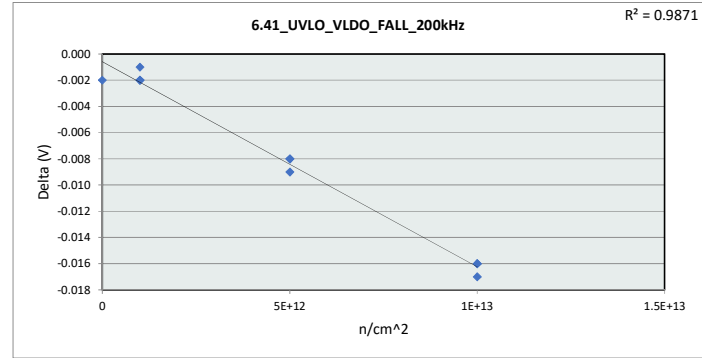


6.40_UVLO_VLDO_RISE_200k				
Test Site				
Tester				
Test Number				
Max Limit	3.66		V	
Min Limit	3.44		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	3.440	3.440	3.440	3.440
Min	3.512	3.528	3.526	3.515
Average	3.512	3.532	3.530	3.522
Max	3.512	3.537	3.535	3.534
UL	3.660	3.660	3.660	3.660

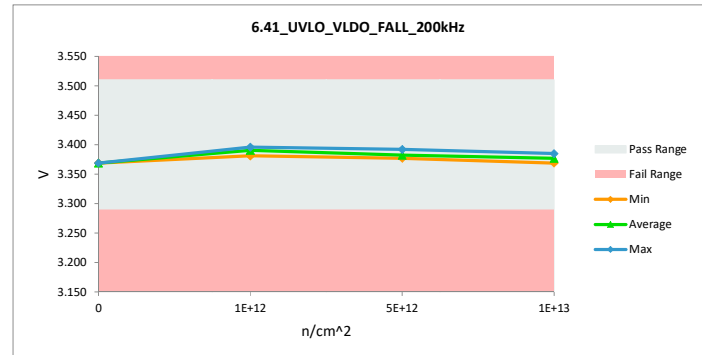


NDD Characterization Report TPS7H5005-SEP

6.41_UVLO_VLDO_FALL_200kHz				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	3.51		3.51	
Min Limit	3.29		3.29	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	3.371	3.369	-0.002
1E+12	1	3.398	3.396	-0.002
1E+12	2	3.395	3.394	-0.001
1E+12	3	3.383	3.381	-0.002
5E+12	4	3.400	3.392	-0.008
5E+12	5	3.386	3.377	-0.009
5E+12	6	3.386	3.378	-0.008
1E+13	7	3.385	3.369	-0.016
1E+13	8	3.402	3.385	-0.017
1E+13	9	3.393	3.377	-0.016
Max		3.402	3.396	-0.001
Average		3.390	3.382	-0.008
Min		3.371	3.369	-0.017
Std Dev		0.009	0.010	0.006

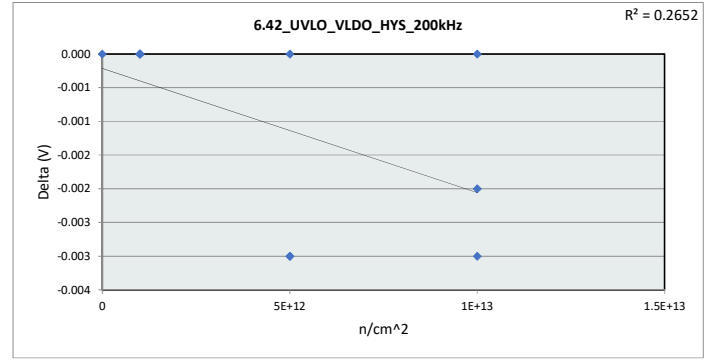


6.41_UVLO_VLDO_FALL_200k				
Test Site				
Tester				
Test Number				
Max Limit	3.51		V	
Min Limit	3.29		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	3.290	3.290	3.290	3.290
Min	3.369	3.381	3.377	3.369
Average	3.369	3.390	3.382	3.377
Max	3.369	3.396	3.392	3.385
UL	3.510	3.510	3.510	3.510

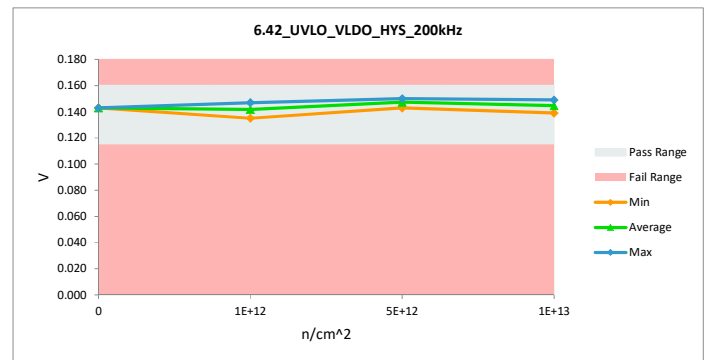


NDD Characterization Report TPS7H5005-SEP

6.42_UVLO_VLDO_HYS_200kHz				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.16		0.16	
Min Limit	0.115		0.115	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.143	0.143	0.000
1E+12	1	0.135	0.135	0.000
1E+12	2	0.143	0.143	0.000
1E+12	3	0.147	0.147	0.000
5E+12	4	0.146	0.143	-0.003
5E+12	5	0.152	0.149	-0.003
5E+12	6	0.150	0.150	0.000
1E+13	7	0.149	0.146	-0.003
1E+13	8	0.151	0.149	-0.002
1E+13	9	0.139	0.139	0.000
Max		0.152	0.150	0.000
Average		0.146	0.144	-0.001
Min		0.135	0.135	-0.003
Std Dev		0.006	0.005	0.001

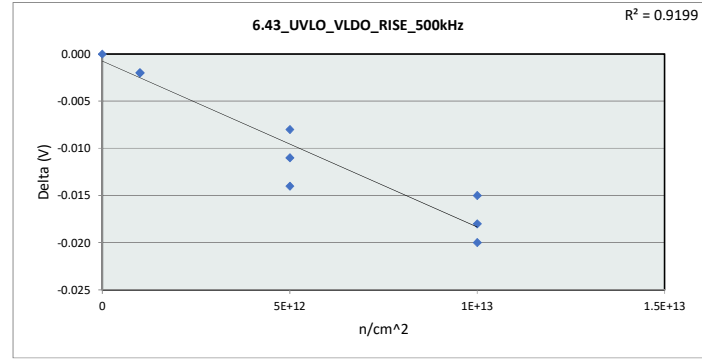


6.42_UVLO_VLDO_HYS_200kHz				
Test Site				
Tester				
Test Number				
Max Limit	0.16		V	
Min Limit	0.115		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.115	0.115	0.115	0.115
Min	0.143	0.135	0.143	0.139
Average	0.143	0.142	0.147	0.145
Max	0.143	0.147	0.150	0.149
UL	0.160	0.160	0.160	0.160

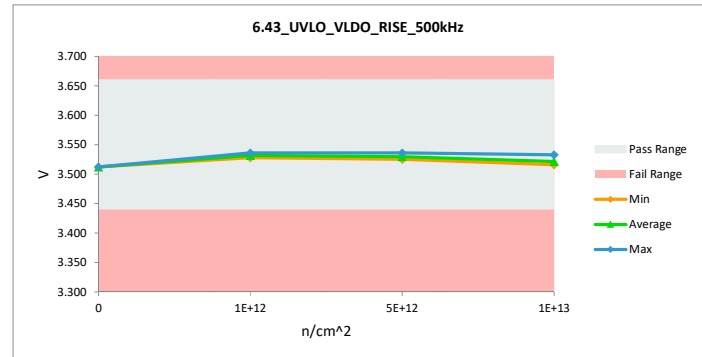


NDD Characterization Report TPS7H5005-SEP

6.43_UVLO_VLDO_RISE_500kHz				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	3.66	3.66	3.66	3.66
Min Limit	3.44	3.44	3.44	3.44
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	3.512	3.512	0.000
1E+12	1	3.533	3.531	-0.002
1E+12	2	3.538	3.536	-0.002
1E+12	3	3.530	3.528	-0.002
5E+12	4	3.547	3.536	-0.011
5E+12	5	3.539	3.525	-0.014
5E+12	6	3.536	3.528	-0.008
1E+13	7	3.534	3.516	-0.018
1E+13	8	3.553	3.533	-0.020
1E+13	9	3.531	3.516	-0.015
Max		3.553	3.536	0.000
Average		3.535	3.526	-0.009
Min		3.512	3.512	-0.020
Std Dev		0.011	0.009	0.007

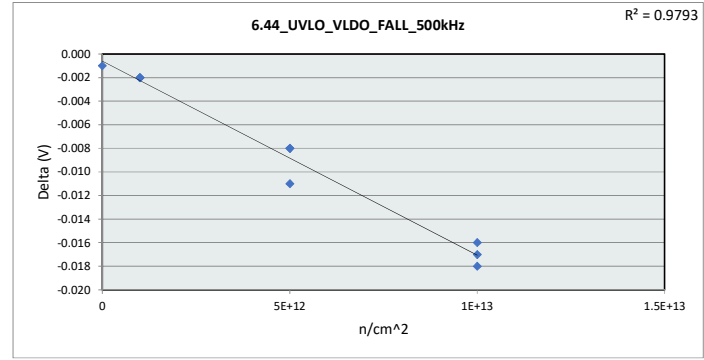


6.43_UVLO_VLDO_RISE_500k				
Test Site				
Tester				
Test Number				
Max Limit	3.66	V		
Min Limit	3.44	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	3.440	3.440	3.440	3.440
Min	3.512	3.528	3.525	3.516
Average	3.512	3.532	3.530	3.522
Max	3.512	3.536	3.536	3.533
UL	3.660	3.660	3.660	3.660

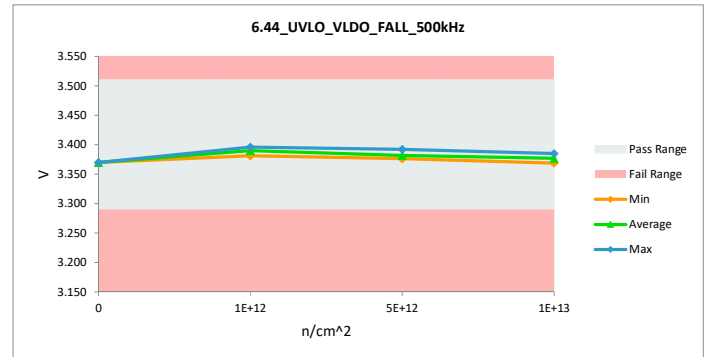


NDD Characterization Report TPS7H5005-SEP

6.44_UVLO_VLDO_FALL_500kHz				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	3.51		3.51	
Min Limit	3.29		3.29	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	3.371	3.370	-0.001
1E+12	1	3.398	3.396	-0.002
1E+12	2	3.395	3.393	-0.002
1E+12	3	3.383	3.381	-0.002
5E+12	4	3.400	3.392	-0.008
5E+12	5	3.387	3.376	-0.011
5E+12	6	3.386	3.378	-0.008
1E+13	7	3.385	3.369	-0.016
1E+13	8	3.403	3.385	-0.018
1E+13	9	3.393	3.376	-0.017
Max		3.403	3.396	-0.001
Average		3.390	3.382	-0.009
Min		3.371	3.369	-0.018
Std Dev		0.010	0.010	0.007

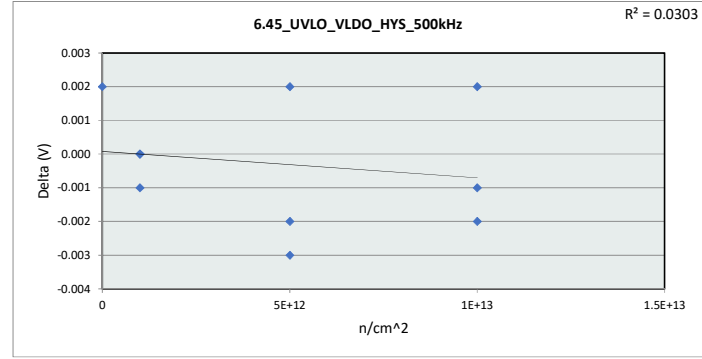


6.44_UVLO_VLDO_FALL_500k				
Test Site				
Tester				
Test Number				
Max Limit	3.51		V	
Min Limit	3.29		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	3.290	3.290	3.290	3.290
Min	3.370	3.381	3.376	3.369
Average	3.370	3.390	3.382	3.377
Max	3.370	3.396	3.392	3.385
UL	3.510	3.510	3.510	3.510

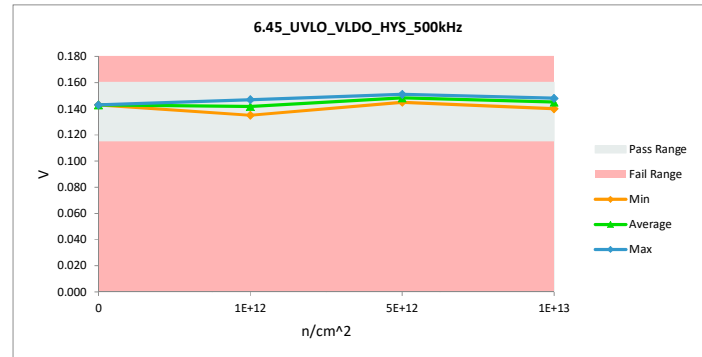


NDD Characterization Report TPS7H5005-SEP

6.45_UVLO_VLDO_HYS_500kHz				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.16		0.16	
Min Limit	0.115		0.115	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.141	0.143	0.002
1E+12	1	0.135	0.135	0.000
1E+12	2	0.143	0.143	0.000
1E+12	3	0.148	0.147	-0.001
5E+12	4	0.147	0.145	-0.002
5E+12	5	0.152	0.149	-0.003
5E+12	6	0.149	0.151	0.002
1E+13	7	0.149	0.147	-0.002
1E+13	8	0.149	0.148	-0.001
1E+13	9	0.138	0.140	0.002
Max		0.152	0.151	0.002
Average		0.145	0.145	0.000
Min		0.135	0.135	-0.003
Std Dev		0.006	0.005	0.002

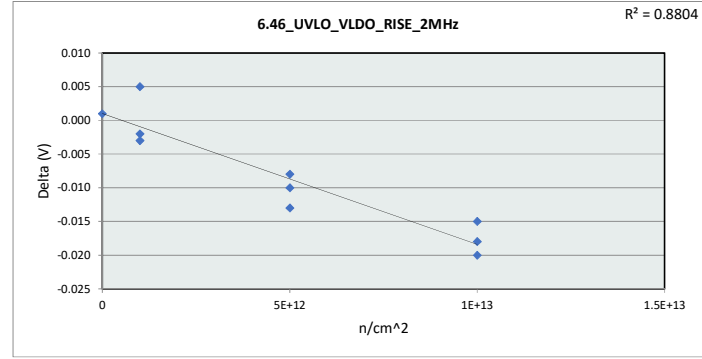


6.45_UVLO_VLDO_HYS_500kHz				
Test Site				
Tester				
Test Number				
Max Limit	0.16		V	
Min Limit	0.115		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.115	0.115	0.115	0.115
Min	0.143	0.135	0.145	0.140
Average	0.143	0.142	0.148	0.145
Max	0.143	0.147	0.151	0.148
UL	0.160	0.160	0.160	0.160

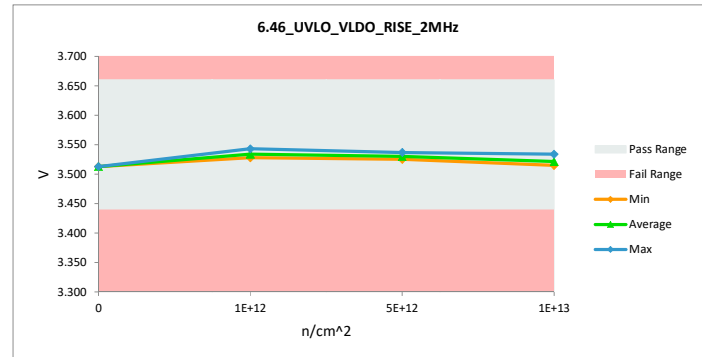


NDD Characterization Report TPS7H5005-SEP

6.46_UVLO_VLDO_RISE_2MHz				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	3.66		3.66	
Min Limit	3.44		3.44	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	3.512	3.513	0.001
1E+12	1	3.534	3.531	-0.003
1E+12	2	3.538	3.543	0.005
1E+12	3	3.530	3.528	-0.002
5E+12	4	3.547	3.537	-0.010
5E+12	5	3.538	3.525	-0.013
5E+12	6	3.536	3.528	-0.008
1E+13	7	3.533	3.515	-0.018
1E+13	8	3.554	3.534	-0.020
1E+13	9	3.531	3.516	-0.015
Max		3.554	3.543	0.005
Average		3.535	3.527	-0.008
Min		3.512	3.513	-0.020
Std Dev		0.011	0.010	0.008

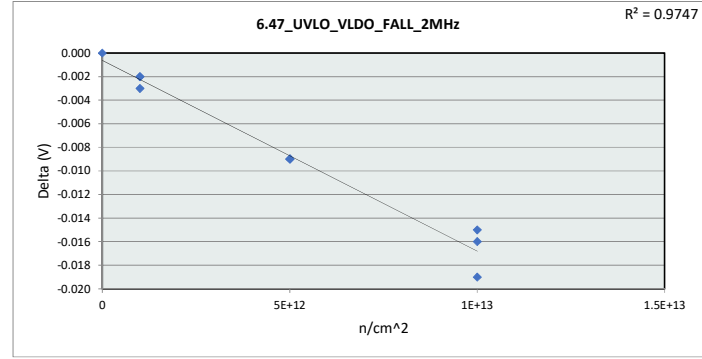


6.46_UVLO_VLDO_RISE_2MHz				
Test Site				
Tester				
Test Number				
Max Limit	3.66		V	
Min Limit	3.44		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	3.440	3.440	3.440	3.440
Min	3.513	3.528	3.525	3.515
Average	3.513	3.534	3.530	3.522
Max	3.513	3.543	3.537	3.534
UL	3.660	3.660	3.660	3.660

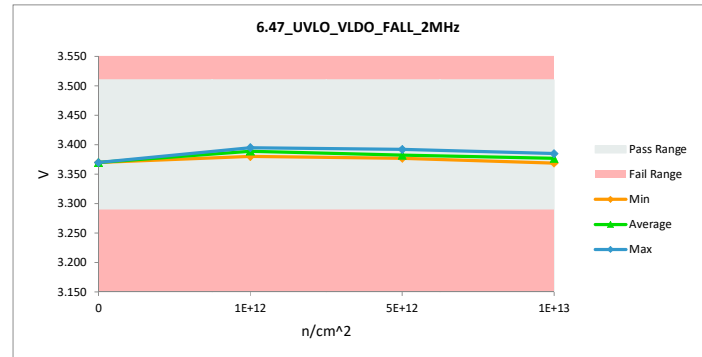


NDD Characterization Report TPS7H5005-SEP

6.47_UVLO_VLDO_FALL_2MHz				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	3.51		3.51	
Min Limit	3.29		3.29	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	3.370	3.370	0.000
1E+12	1	3.397	3.395	-0.002
1E+12	2	3.395	3.392	-0.003
1E+12	3	3.382	3.380	-0.002
5E+12	4	3.401	3.392	-0.009
5E+12	5	3.386	3.377	-0.009
5E+12	6	3.387	3.378	-0.009
1E+13	7	3.384	3.369	-0.015
1E+13	8	3.404	3.385	-0.019
1E+13	9	3.392	3.376	-0.016
Max		3.404	3.395	0.000
Average		3.390	3.381	-0.008
Min		3.370	3.369	-0.001
Std Dev		0.010	0.009	0.007

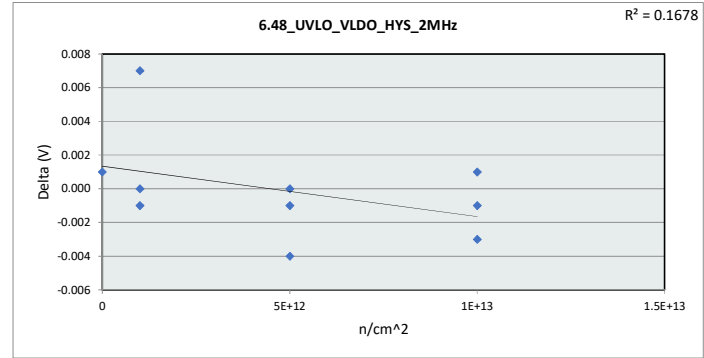


6.47_UVLO_VLDO_FALL_2MHz				
Test Site				
Tester				
Test Number				
Max Limit	3.51		V	
Min Limit	3.29		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	3.290	3.290	3.290	3.290
Min	3.370	3.380	3.377	3.369
Average	3.370	3.389	3.382	3.377
Max	3.370	3.395	3.392	3.385
UL	3.510	3.510	3.510	3.510

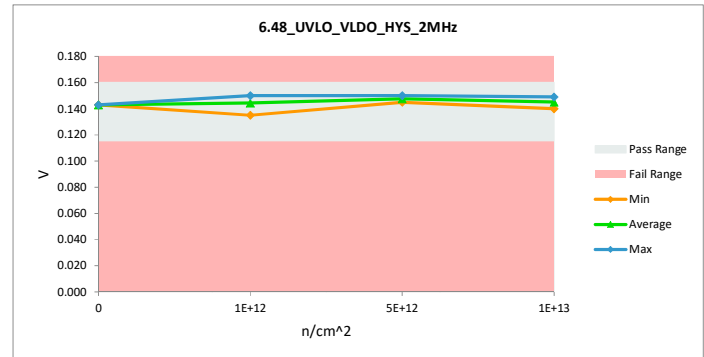


NDD Characterization Report TPS7H5005-SEP

6.48_UVLO_VLDO_HYS_2MHz				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.16		0.16	
Min Limit	0.115		0.115	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.142	0.143	0.001
1E+12	1	0.136	0.135	-0.001
1E+12	2	0.143	0.150	0.007
1E+12	3	0.148	0.148	0.000
5E+12	4	0.146	0.145	-0.001
5E+12	5	0.152	0.148	-0.004
5E+12	6	0.150	0.150	0.000
1E+13	7	0.149	0.146	-0.003
1E+13	8	0.150	0.149	-0.001
1E+13	9	0.139	0.140	0.001
Max		0.152	0.150	0.007
Average		0.146	0.145	0.000
Min		0.136	0.135	-0.004
Std Dev		0.005	0.005	0.003

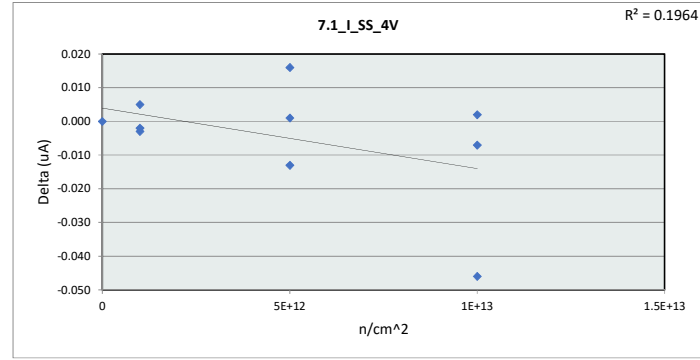


6.48_UVLO_VLDO_HYS_2MHz				
Test Site				
Tester				
Test Number				
Max Limit	0.16		V	
Min Limit	0.115		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.115	0.115	0.115	0.115
Min	0.143	0.135	0.145	0.140
Average	0.143	0.144	0.148	0.145
Max	0.143	0.150	0.150	0.149
UL	0.160	0.160	0.160	0.160

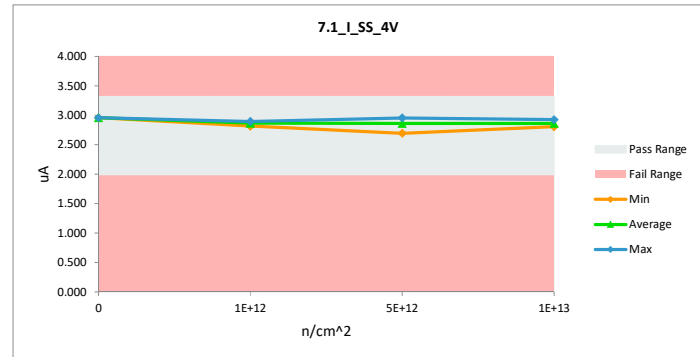


NDD Characterization Report TPS7H5005-SEP

7.1_I_SS_4V				
Test Site				
Tester				
Test Number				
Unit		uA	uA	
Max Limit		3.32	3.32	
Min Limit		1.98	1.98	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	2.959	2.959	0.000
1E+12	1	2.891	2.896	0.005
1E+12	2	2.897	2.894	-0.003
1E+12	3	2.817	2.815	-0.002
5E+12	4	2.708	2.695	-0.013
5E+12	5	2.934	2.935	0.001
5E+12	6	2.939	2.955	0.016
1E+13	7	2.814	2.807	-0.007
1E+13	8	2.894	2.848	-0.046
1E+13	9	2.925	2.927	0.002
Max		2.959	2.959	0.016
Average		2.878	2.873	-0.005
Min		2.708	2.695	-0.046
Std Dev		0.077	0.083	0.016

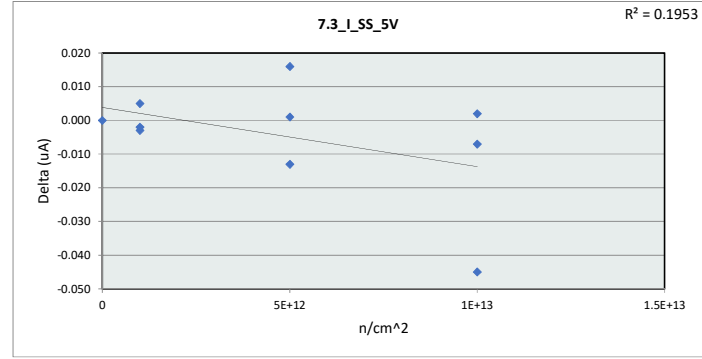


7.1_I_SS_4V				
Test Site				
Tester				
Test Number				
Max Limit	3.32	uA		
Min Limit	1.98	uA		
n/cm ²	0	1E+12	5E+12	1E+13
LL	1.980	1.980	1.980	1.980
Min	2.959	2.815	2.695	2.807
Average	2.959	2.868	2.862	2.861
Max	2.959	2.896	2.955	2.927
UL	3.320	3.320	3.320	3.320

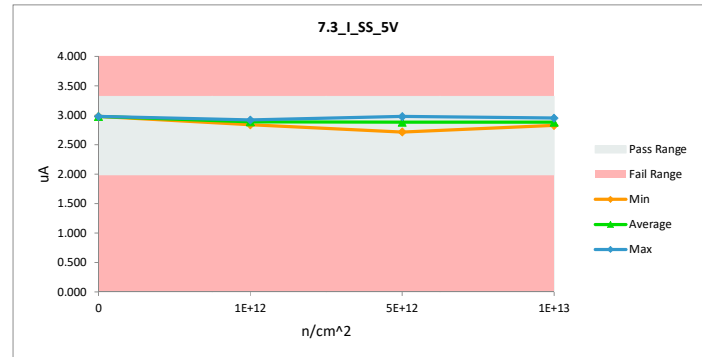


NDD Characterization Report TPS7H5005-SEP

7.3_I_SS_5V				
Test Site				
Tester				
Test Number				
Unit		uA	uA	
Max Limit		3.32	3.32	
Min Limit		1.98	1.98	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	2.981	2.981	0.000
1E+12	1	2.914	2.919	0.005
1E+12	2	2.921	2.918	-0.003
1E+12	3	2.840	2.838	-0.002
5E+12	4	2.730	2.717	-0.013
5E+12	5	2.957	2.958	0.001
5E+12	6	2.963	2.979	0.016
1E+13	7	2.836	2.829	-0.007
1E+13	8	2.916	2.871	-0.045
1E+13	9	2.950	2.952	0.002
Max		2.981	2.981	0.016
Average		2.901	2.896	-0.005
Min		2.730	2.717	-0.045
Std Dev		0.077	0.083	0.016

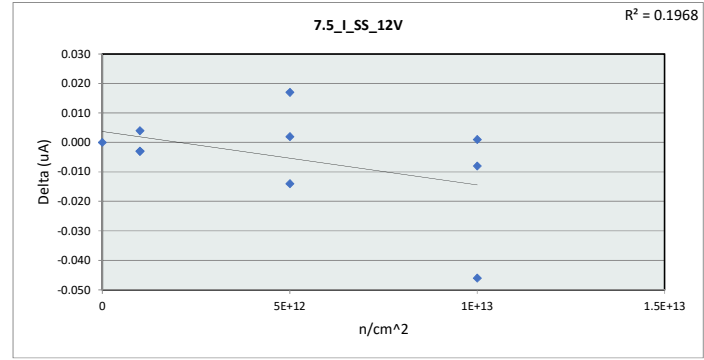


7.3_I_SS_5V				
Test Site				
Tester				
Test Number				
Max Limit	3.32	uA		
Min Limit	1.98	uA		
n/cm^2	0	1E+12	5E+12	1E+13
LL	1.980	1.980	1.980	1.980
Min	2.981	2.838	2.717	2.829
Average	2.981	2.892	2.885	2.884
Max	2.981	2.919	2.979	2.952
UL	3.320	3.320	3.320	3.320

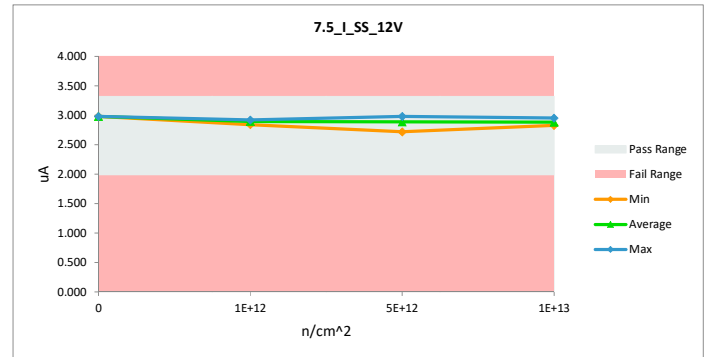


NDD Characterization Report TPS7H5005-SEP

7.5_I_SS_12V				
Test Site				
Tester				
Test Number				
Unit		uA	uA	
Max Limit		3.32	3.32	
Min Limit		1.98	1.98	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	2.983	2.983	0.000
1E+12	1	2.916	2.920	0.004
1E+12	2	2.922	2.919	-0.003
1E+12	3	2.843	2.840	-0.003
5E+12	4	2.732	2.718	-0.014
5E+12	5	2.958	2.960	0.002
5E+12	6	2.964	2.981	0.017
1E+13	7	2.837	2.829	-0.008
1E+13	8	2.918	2.872	-0.046
1E+13	9	2.953	2.954	0.001
Max		2.983	2.983	0.017
Average		2.903	2.898	-0.005
Min		2.732	2.718	-0.046
Std Dev		0.077	0.084	0.017

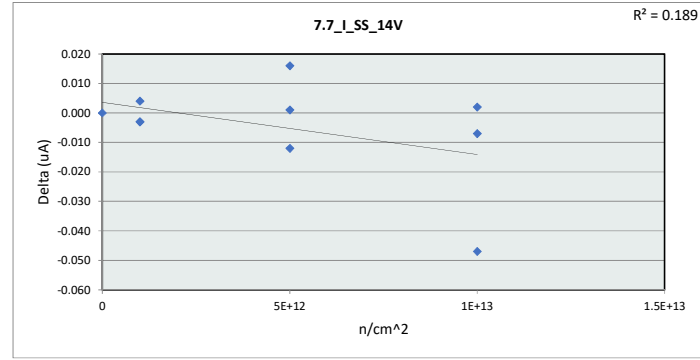


7.5_I_SS_12V				
Test Site				
Tester				
Test Number				
Max Limit	3.32	uA		
Min Limit	1.98	uA		
n/cm^2	0	1E+12	5E+12	1E+13
LL	1.980	1.980	1.980	1.980
Min	2.983	2.840	2.718	2.829
Average	2.983	2.893	2.886	2.885
Max	2.983	2.920	2.981	2.954
UL	3.320	3.320	3.320	3.320

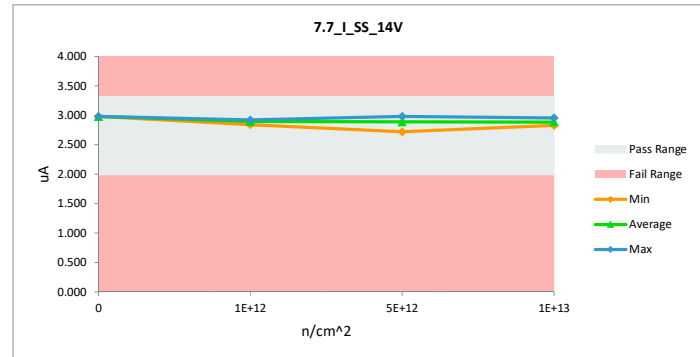


NDD Characterization Report TPS7H5005-SEP

7.7_I_SS_14V				
Test Site				
Tester				
Test Number				
Unit		uA	uA	
Max Limit		3.32	3.32	
Min Limit		1.98	1.98	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	2.983	2.983	0.000
1E+12	1	2.916	2.920	0.004
1E+12	2	2.922	2.919	-0.003
1E+12	3	2.844	2.841	-0.003
5E+12	4	2.731	2.719	-0.012
5E+12	5	2.958	2.959	0.001
5E+12	6	2.965	2.981	0.016
1E+13	7	2.837	2.830	-0.007
1E+13	8	2.919	2.872	-0.047
1E+13	9	2.953	2.955	0.002
Max		2.983	2.983	0.016
Average		2.903	2.898	-0.005
Min		2.731	2.719	-0.047
Std Dev		0.077	0.083	0.017

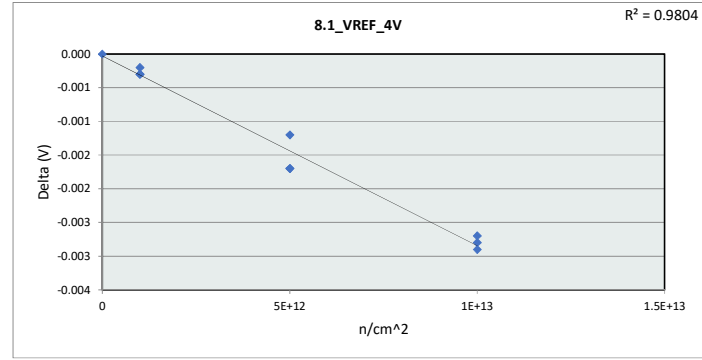


7.7_I_SS_14V				
Test Site				
Tester				
Test Number				
Max Limit	3.32	uA		
Min Limit	1.98	uA		
n/cm^2	0	1E+12	5E+12	1E+13
LL	1.980	1.980	1.980	1.980
Min	2.983	2.841	2.719	2.830
Average	2.983	2.893	2.886	2.886
Max	2.983	2.920	2.981	2.955
UL	3.320	3.320	3.320	3.320

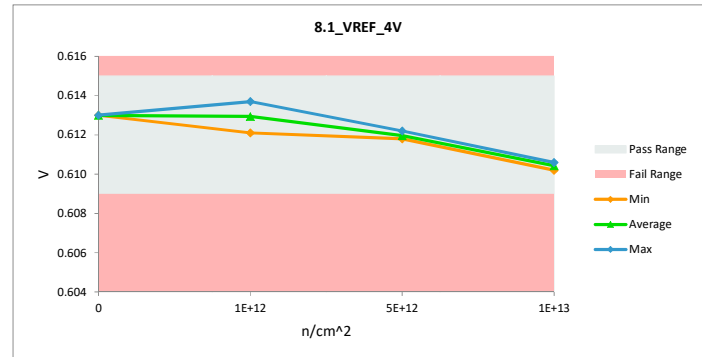


NDD Characterization Report TPS7H5005-SEP

8.1_VREF_4V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.615		0.615	
Min Limit	0.609		0.609	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.613	0.613	0.000
1E+12	1	0.614	0.614	0.000
1E+12	2	0.612	0.612	0.000
1E+12	3	0.613	0.613	0.000
5E+12	4	0.614	0.612	-0.002
5E+12	5	0.613	0.612	-0.002
5E+12	6	0.613	0.612	-0.001
1E+13	7	0.613	0.611	-0.003
1E+13	8	0.613	0.610	-0.003
1E+13	9	0.613	0.610	-0.003
Max		0.614	0.614	0.000
Average		0.613	0.612	-0.001
Min		0.612	0.610	-0.003
Std Dev		0.000	0.001	0.001

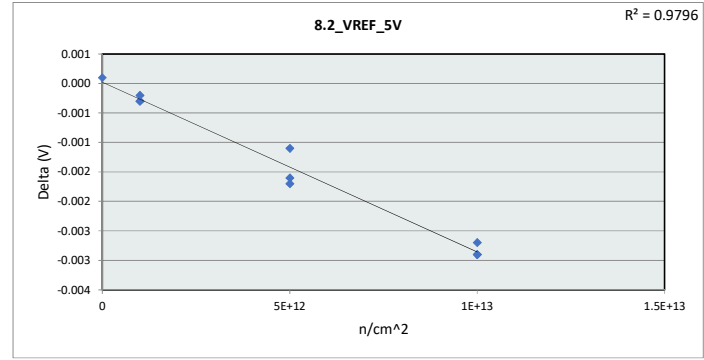


8.1_VREF_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.615		V	
Min Limit	0.609		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.609	0.609	0.609	0.609
Min	0.613	0.612	0.612	0.610
Average	0.613	0.613	0.612	0.610
Max	0.613	0.614	0.612	0.611
UL	0.615	0.615	0.615	0.615

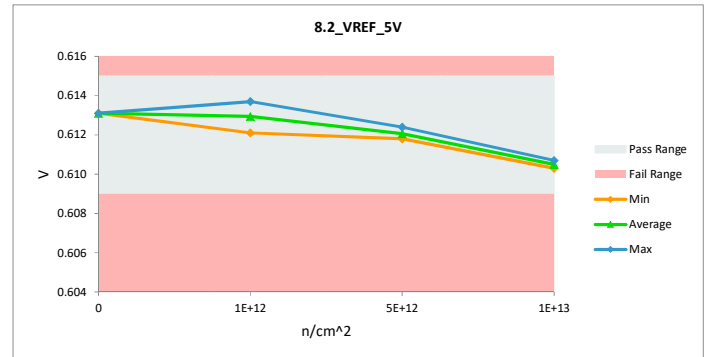


NDD Characterization Report TPS7H5005-SEP

8.2_VREF_5V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.615		0.615	
Min Limit	0.609		0.609	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.613	0.613	0.000
1E+12	1	0.614	0.614	0.000
1E+12	2	0.612	0.612	0.000
1E+12	3	0.613	0.613	0.000
5E+12	4	0.614	0.612	-0.002
5E+12	5	0.613	0.612	-0.002
5E+12	6	0.613	0.612	-0.001
1E+13	7	0.614	0.611	-0.003
1E+13	8	0.613	0.610	-0.003
1E+13	9	0.613	0.610	-0.003
Max		0.614	0.614	0.000
Average		0.613	0.612	-0.001
Min		0.612	0.610	-0.003
Std Dev		0.000	0.001	0.001

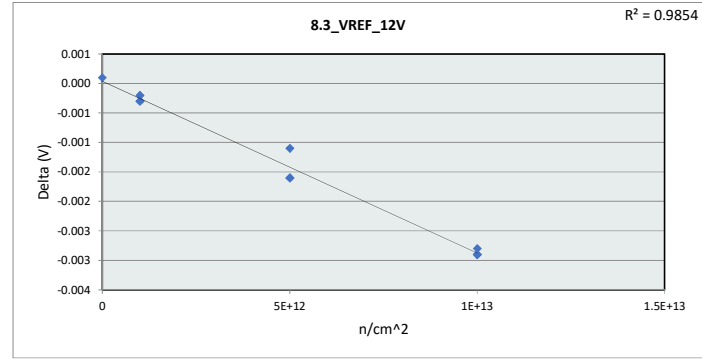


8.2_VREF_5V				
Test Site				
Tester				
Test Number				
Max Limit	0.615		V	
Min Limit	0.609		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.609	0.609	0.609	0.609
Min	0.613	0.612	0.612	0.610
Average	0.613	0.613	0.612	0.611
Max	0.613	0.614	0.612	0.611
UL	0.615	0.615	0.615	0.615

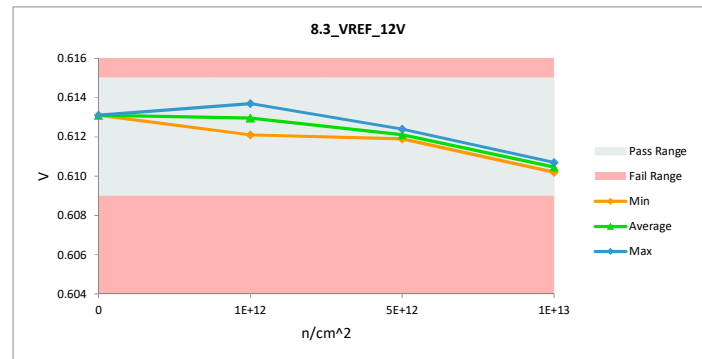


NDD Characterization Report TPS7H5005-SEP

8.3_VREF_12V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.615		0.615	
Min Limit	0.609		0.609	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.613	0.613	0.000
1E+12	1	0.614	0.614	0.000
1E+12	2	0.612	0.612	0.000
1E+12	3	0.613	0.613	0.000
5E+12	4	0.614	0.612	-0.002
5E+12	5	0.613	0.612	-0.002
5E+12	6	0.613	0.612	-0.001
1E+13	7	0.614	0.611	-0.003
1E+13	8	0.613	0.610	-0.003
1E+13	9	0.613	0.610	-0.003
Max		0.614	0.614	0.000
Average		0.613	0.612	-0.001
Min		0.612	0.610	-0.003
Std Dev		0.000	0.001	0.001

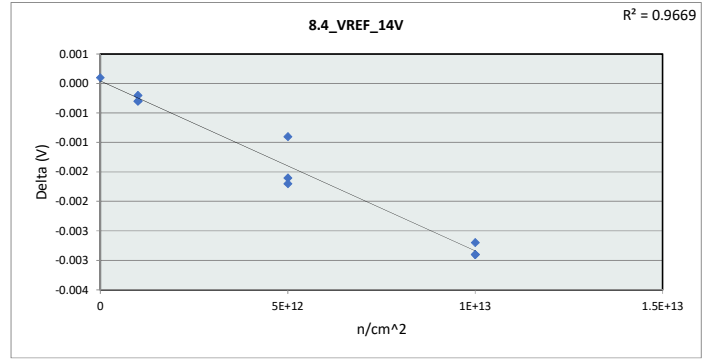


8.3_VREF_12V				
Test Site				
Tester				
Test Number				
Max Limit	0.615		V	
Min Limit	0.609		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.609	0.609	0.609	0.609
Min	0.613	0.612	0.612	0.610
Average	0.613	0.613	0.612	0.610
Max	0.613	0.614	0.612	0.611
UL	0.615	0.615	0.615	0.615

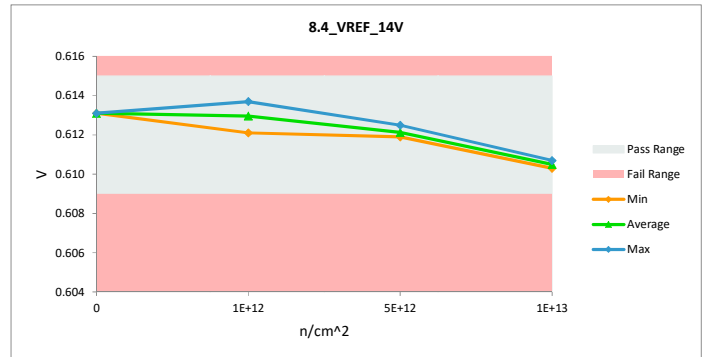


NDD Characterization Report TPS7H5005-SEP

8.4_VREF_14V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.615		0.615	
Min Limit	0.609		0.609	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.613	0.613	0.000
1E+12	1	0.614	0.614	0.000
1E+12	2	0.612	0.612	0.000
1E+12	3	0.613	0.613	0.000
5E+12	4	0.614	0.612	-0.002
5E+12	5	0.614	0.612	-0.002
5E+12	6	0.613	0.613	-0.001
1E+13	7	0.614	0.611	-0.003
1E+13	8	0.613	0.610	-0.003
1E+13	9	0.613	0.610	-0.003
Max		0.614	0.614	0.000
Average		0.613	0.612	-0.001
Min		0.612	0.610	-0.003
Std Dev		0.000	0.001	0.001

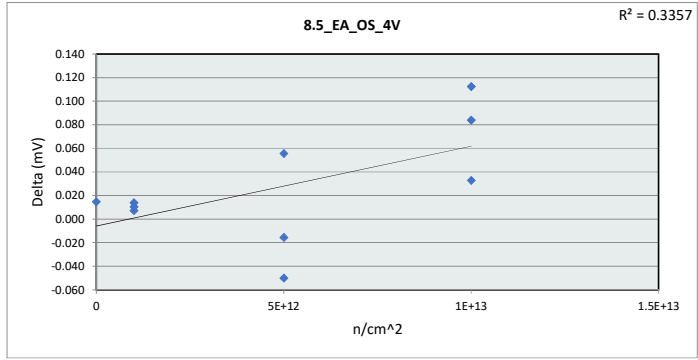


8.4_VREF_14V				
Test Site				
Tester				
Test Number				
Max Limit	0.615		V	
Min Limit	0.609		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.609	0.609	0.609	0.609
Min	0.613	0.612	0.612	0.610
Average	0.613	0.613	0.612	0.611
Max	0.613	0.614	0.613	0.611
UL	0.615	0.615	0.615	0.615

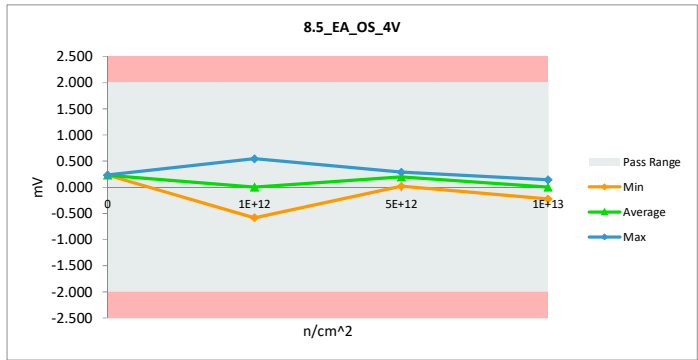


NDD Characterization Report TPS7H5005-SEP

8.5_EA_OS_4V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		2	2	
Min Limit		-2	-2	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.218	0.233	0.015
1E+12	1	0.533	0.547	0.014
1E+12	2	-0.589	-0.582	0.007
1E+12	3	0.039	0.049	0.010
5E+12	4	0.070	0.020	-0.050
5E+12	5	0.291	0.276	-0.016
5E+12	6	0.234	0.290	0.056
1E+13	7	0.014	0.098	0.084
1E+13	8	0.034	0.147	0.112
1E+13	9	-0.256	-0.223	0.033
Max		0.533	0.547	0.112
Average		0.059	0.085	0.027
Min		-0.589	-0.582	-0.050
Std Dev		0.309	0.310	0.047

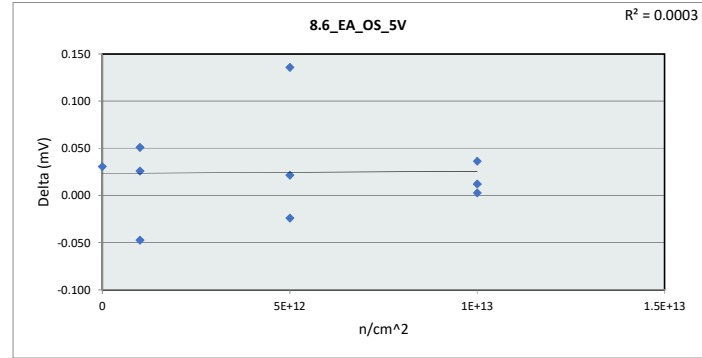


8.5_EA_OS_4V				
Test Site				
Tester				
Test Number				
Max Limit		2	mV	
Min Limit		-2	mV	
n/cm ²	0	1E+12	5E+12	1E+13
LL	-2.000	-2.000	-2.000	-2.000
Min	0.233	-0.582	0.020	-0.223
Average	0.233	0.005	0.195	0.007
Max	0.233	0.547	0.290	0.147
UL	2.000	2.000	2.000	2.000

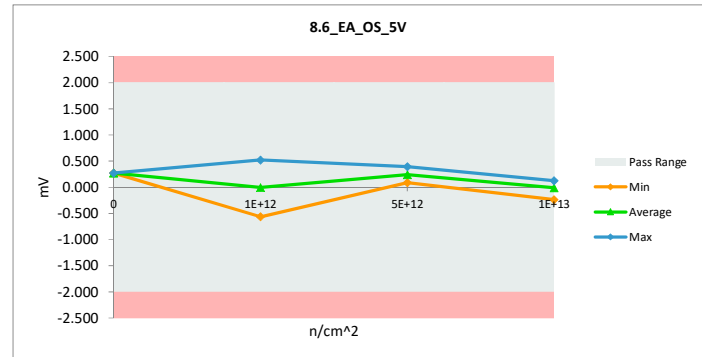


NDD Characterization Report TPS7H5005-SEP

8.6_EA_OS_5V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		2	2	
Min Limit		-2	-2	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.242	0.273	0.031
1E+12	1	0.568	0.521	-0.047
1E+12	2	-0.614	-0.563	0.051
1E+12	3	0.000	0.026	0.026
5E+12	4	0.067	0.089	0.022
5E+12	5	0.269	0.245	-0.024
5E+12	6	0.258	0.393	0.136
1E+13	7	0.072	0.084	0.012
1E+13	8	0.089	0.125	0.036
1E+13	9	-0.239	-0.236	0.003
Max		0.568	0.521	0.136
Average		0.071	0.096	0.025
Min		-0.614	-0.563	-0.047
Std Dev		0.320	0.312	0.049

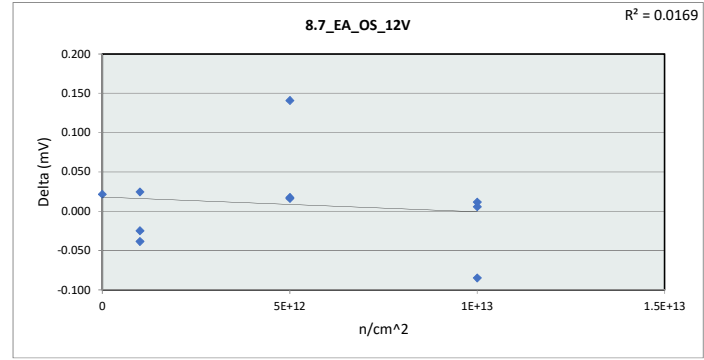


8.6_EA_OS_5V				
Test Site				
Tester				
Test Number				
Max Limit	2	mV		
Min Limit	-2	mV		
n/cm ²	0	1E+12	5E+12	1E+13
LL	-2.000	-2.000	-2.000	-2.000
Min	0.273	-0.563	0.089	-0.236
Average	0.273	-0.005	0.242	-0.009
Max	0.273	0.521	0.393	0.125
UL	2.000	2.000	2.000	2.000

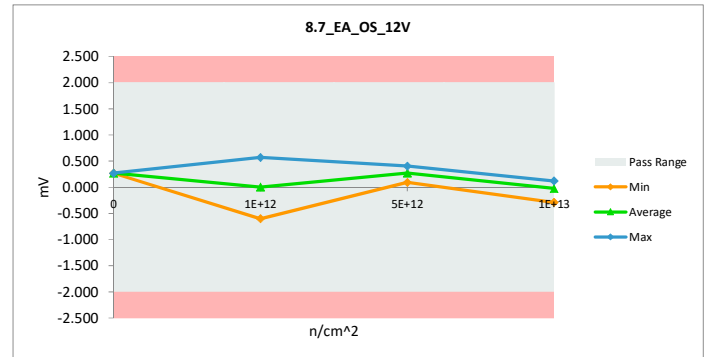


NDD Characterization Report TPS7H5005-SEP

8.7_EA_OS_12V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		2	2	
Min Limit		-2	-2	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.249	0.270	0.022
1E+12	1	0.548	0.572	0.025
1E+12	2	-0.563	-0.601	-0.038
1E+12	3	0.067	0.042	-0.025
5E+12	4	0.076	0.094	0.017
5E+12	5	0.308	0.324	0.016
5E+12	6	0.267	0.408	0.141
1E+13	7	0.085	0.097	0.012
1E+13	8	0.117	0.123	0.006
1E+13	9	-0.203	-0.288	-0.085
Max		0.548	0.572	0.141
Average		0.095	0.104	0.009
Min		-0.563	-0.601	-0.085
Std Dev		0.303	0.341	0.058

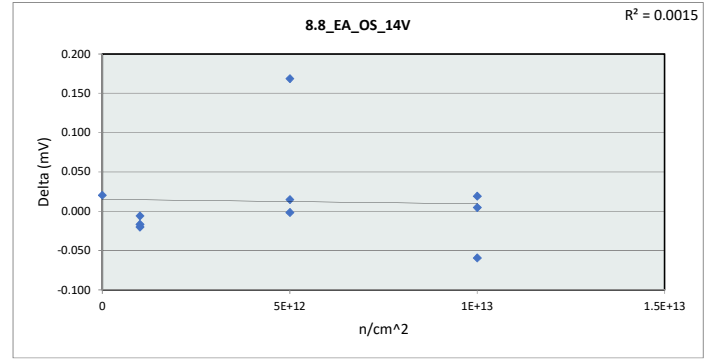


8.7_EA_OS_12V				
Test Site				
Tester				
Test Number				
Max Limit	2	mV		
Min Limit	-2	mV		
n/cm ²	0	1E+12	5E+12	1E+13
LL	-2.000	-2.000	-2.000	-2.000
Min	0.270	-0.602	0.094	-0.288
Average	0.270	0.004	0.275	-0.023
Max	0.270	0.572	0.408	0.123
UL	2.000	2.000	2.000	2.000

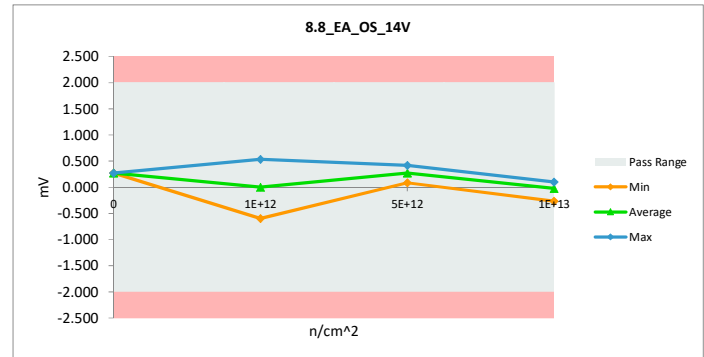


NDD Characterization Report TPS7H5005-SEP

8.8_EA_OS_14V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		2	2	
Min Limit		-2	-2	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.253	0.274	0.020
1E+12	1	0.539	0.534	-0.006
1E+12	2	-0.577	-0.597	-0.020
1E+12	3	0.082	0.065	-0.017
5E+12	4	0.071	0.086	0.015
5E+12	5	0.317	0.315	-0.001
5E+12	6	0.252	0.421	0.169
1E+13	7	0.081	0.100	0.019
1E+13	8	0.098	0.103	0.005
1E+13	9	-0.206	-0.266	-0.059
Max		0.539	0.534	0.169
Average		0.091	0.103	0.012
Min		-0.577	-0.597	-0.059
Std Dev		0.305	0.331	0.060

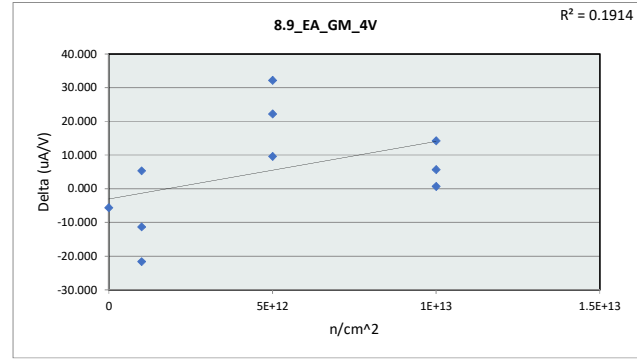


8.8_EA_OS_14V				
Test Site				
Tester				
Test Number				
Max Limit	2	mV		
Min Limit	-2	mV		
n/cm ²	0	1E+12	5E+12	1E+13
LL	-2.000	-2.000	-2.000	-2.000
Min	0.274	-0.597	0.086	-0.266
Average	0.274	0.000	0.274	-0.021
Max	0.274	0.534	0.421	0.103
UL	2.000	2.000	2.000	2.000

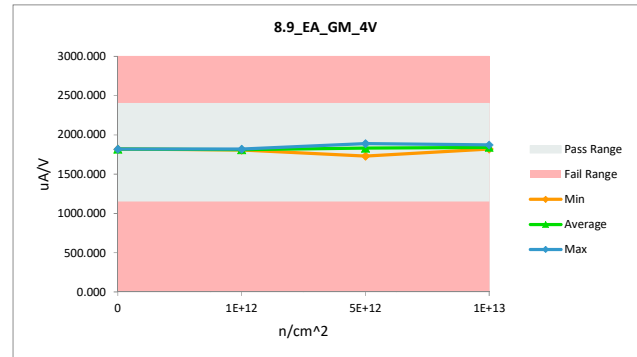


NDD Characterization Report TPS7H5005-SEP

8.9_EA_GM_4V				
Test Site				
Tester				
Test Number				
Unit		uA/V	uA/V	
Max Limit		2400	2400	
Min Limit		1150	1150	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1823.640	1818.008	-5.632
1E+12	1	1829.307	1818.008	-11.299
1E+12	2	1834.047	1812.421	-21.626
1E+12	3	1799.503	1804.846	5.343
5E+12	4	1721.314	1730.939	9.625
5E+12	5	1865.731	1887.934	22.203
5E+12	6	1840.737	1872.927	32.190
1E+13	7	1806.867	1821.087	14.220
1E+13	8	1829.307	1834.999	5.692
1E+13	9	1869.963	1870.693	0.730
Max		1869.963	1887.934	32.190
Average		1822.042	1827.186	5.145
Min		1721.314	1730.939	-21.626
Std Dev		41.755	44.625	15.804

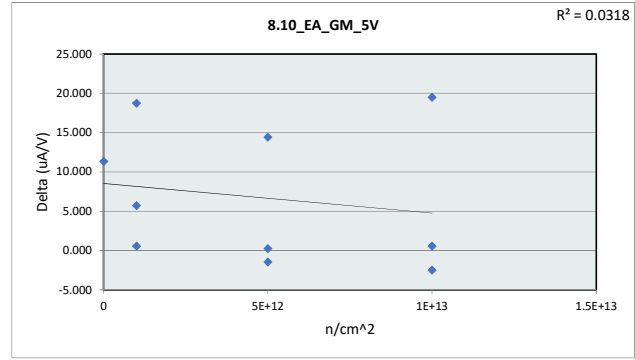


8.9_EA_GM_4V				
Test Site				
Tester				
Test Number				
Max Limit	2400	uA/V		
Min Limit	1150	uA/V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	1150.000	1150.000	1150.000	1150.000
Min	1818.008	1804.846	1730.939	1821.087
Average	1818.008	1811.758	1830.600	1842.260
Max	1818.008	1818.008	1887.934	1870.693
UL	2400.000	2400.000	2400.000	2400.000

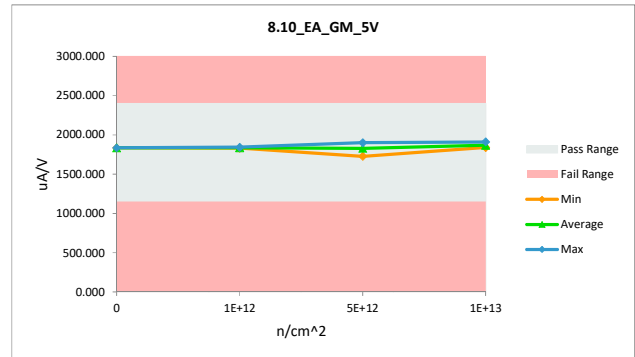


NDD Characterization Report TPS7H5005-SEP

8.10_EA_GM_5V				
Test Site				
Tester				
Test Number				
Unit		uA/V	uA/V	
Max Limit		2400	2400	
Min Limit		1150	1150	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1823.650	1834.999	11.349
1E+12	1	1841.313	1841.879	0.566
1E+12	2	1835.019	1840.737	5.718
1E+12	3	1812.421	1831.174	18.753
5E+12	4	1726.353	1726.602	0.249
5E+12	5	1903.625	1902.157	-1.468
5E+12	6	1844.400	1858.807	14.407
1E+13	7	1835.009	1854.502	19.493
1E+13	8	1840.162	1840.727	0.565
1E+13	9	1912.467	1909.974	-2.493
Max		1912.467	1909.974	19.493
Average		1837.442	1844.156	6.714
Min		1726.353	1726.602	-2.493
Std Dev		50.825	49.573	8.557

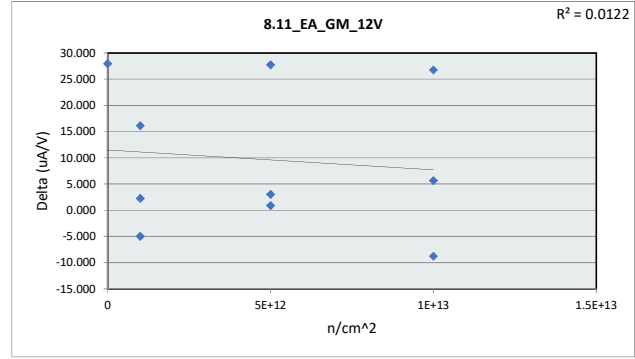


8.10_EA_GM_5V				
Test Site				
Tester				
Test Number				
Max Limit	2400	uA/V		
Min Limit	1150	uA/V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	1150.000	1150.000	1150.000	1150.000
Min	1834.999	1831.174	1726.602	1840.727
Average	1834.999	1837.930	1829.189	1868.401
Max	1834.999	1841.879	1902.157	1909.974
UL	2400.000	2400.000	2400.000	2400.000

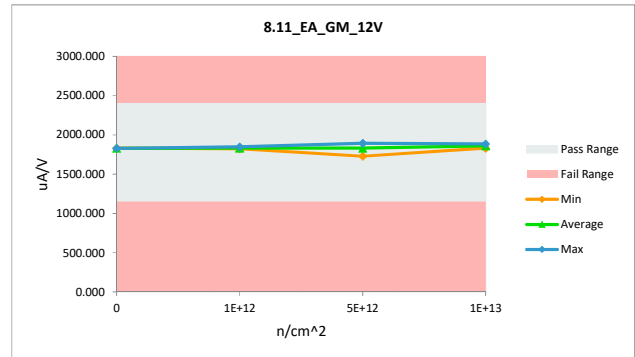


NDD Characterization Report TPS7H5005-SEP

8.11_EA_GM_12V				
Test Site				
Tester				
Test Number				
Unit		uA/V	uA/V	
Max Limit		2400	2400	
Min Limit		1150	1150	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1801.338	1829.297	27.959
1E+12	1	1830.345	1846.501	16.156
1E+12	2	1828.609	1823.640	-4.969
1E+12	3	1829.307	1831.574	2.267
5E+12	4	1727.384	1728.291	0.907
5E+12	5	1890.966	1893.997	3.031
5E+12	6	1838.659	1866.406	27.747
1E+13	7	1825.069	1830.724	5.655
1E+13	8	1843.205	1869.953	26.748
1E+13	9	1894.008	1885.250	-8.758
Max		1894.008	1893.997	27.959
Average		1830.889	1840.563	9.674
Min		1727.384	1728.291	-8.758
Std Dev		46.468	46.684	13.907

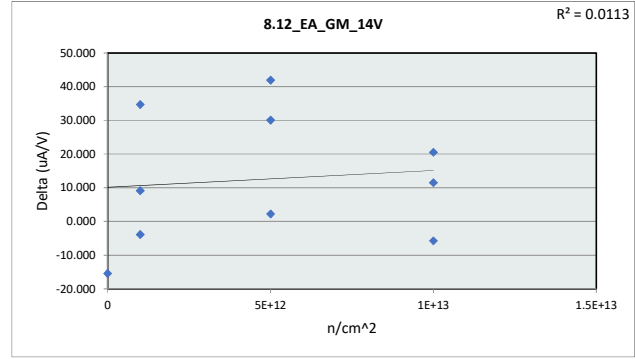


8.11_EA_GM_12V				
Test Site				
Tester				
Test Number				
Max Limit		2400	uA/V	
Min Limit		1150	uA/V	
n/cm^2	0	1E+12	5E+12	1E+13
LL	1150.000	1150.000	1150.000	1150.000
Min	1829.297	1823.640	1728.291	1830.724
Average	1829.297	1833.905	1829.565	1861.976
Max	1829.297	1846.501	1893.997	1885.250
UL	2400.000	2400.000	2400.000	2400.000

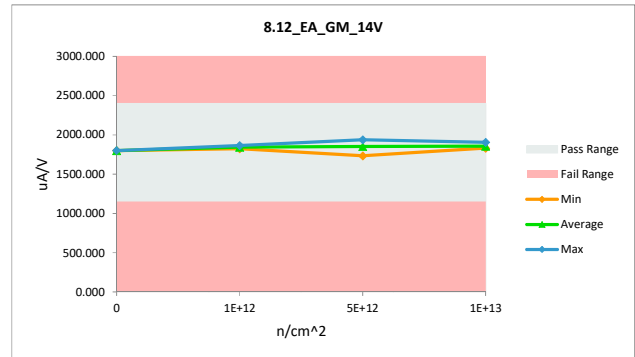


NDD Characterization Report TPS7H5005-SEP

8.12_EA_GM_14V				
Test Site				
Tester				
Test Number				
Unit		uA/V	uA/V	
Max Limit		2400	2400	
Min Limit		1150	1150	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1816.768	1801.329	-15.439
1E+12	1	1831.584	1840.737	9.153
1E+12	2	1829.307	1864.032	34.725
1E+12	3	1826.877	1823.036	-3.841
5E+12	4	1731.082	1733.300	2.218
5E+12	5	1907.499	1937.614	30.115
5E+12	6	1845.546	1887.519	41.973
1E+13	7	1809.752	1830.255	20.503
1E+13	8	1840.737	1834.999	-5.738
1E+13	9	1894.008	1905.506	11.498
Max		1907.499	1937.614	41.973
Average		1833.316	1845.833	12.517
Min		1731.082	1733.300	-15.439
Std Dev		47.996	57.352	18.959

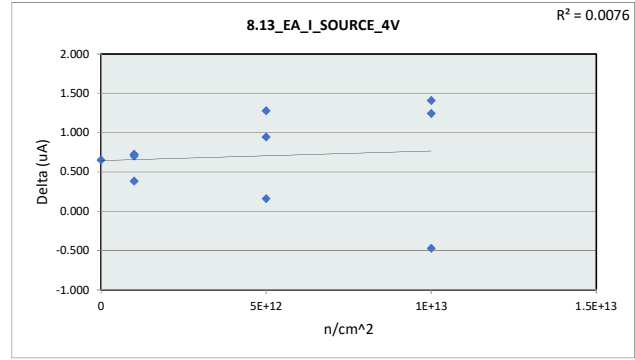


8.12_EA_GM_14V				
Test Site				
Tester				
Test Number				
Max Limit	2400	uA/V		
Min Limit	1150	uA/V		
n/cm^2	0	1E+12	5E+12	1E+13
LL	1150.000	1150.000	1150.000	1150.000
Min	1801.329	1823.036	1733.300	1830.255
Average	1801.329	1842.602	1852.811	1856.920
Max	1801.329	1864.032	1937.614	1905.506
UL	2400.000	2400.000	2400.000	2400.000

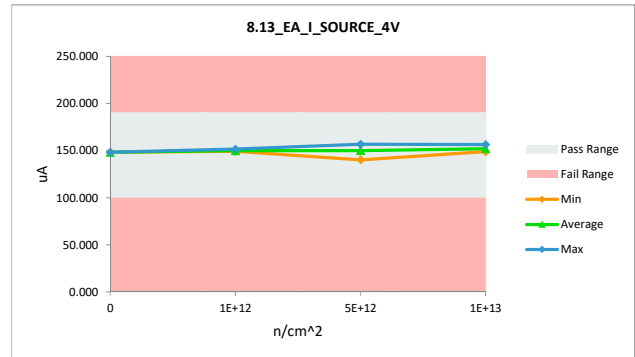


NDD Characterization Report TPS7H5005-SEP

8.13_EA_I_SOURCE_4V				
Test Site				
Tester				
Test Number				
Unit		uA	uA	
Max Limit		190	190	
Min Limit		100	100	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	147.658	148.308	0.650
1E+12	1	148.744	149.468	0.724
1E+12	2	150.719	151.421	0.702
1E+12	3	148.745	149.128	0.383
5E+12	4	140.094	140.255	0.161
5E+12	5	155.944	156.888	0.944
5E+12	6	151.693	152.973	1.280
1E+13	7	147.535	148.943	1.408
1E+13	8	150.653	150.181	-0.472
1E+13	9	155.148	156.393	1.245
Max		155.944	156.888	1.408
Average		149.693	150.396	0.703
Min		140.094	140.255	-0.472
Std Dev		4.442	4.686	0.574

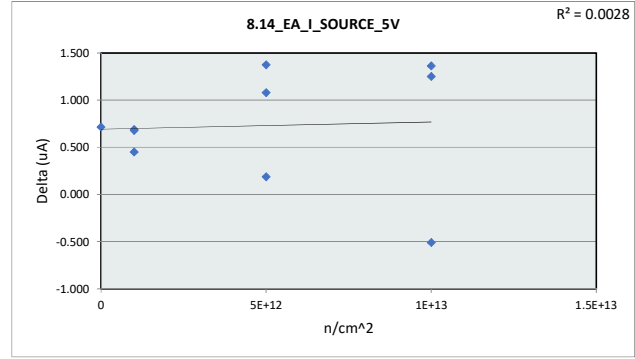


8.13_EA_I_SOURCE_4V				
Test Site				
Tester				
Test Number				
Max Limit	190	uA		
Min Limit	100	uA		
n/cm ²	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	148.308	149.128	140.255	148.943
Average	148.308	150.006	150.039	151.839
Max	148.308	151.421	156.888	156.393
UL	190.000	190.000	190.000	190.000

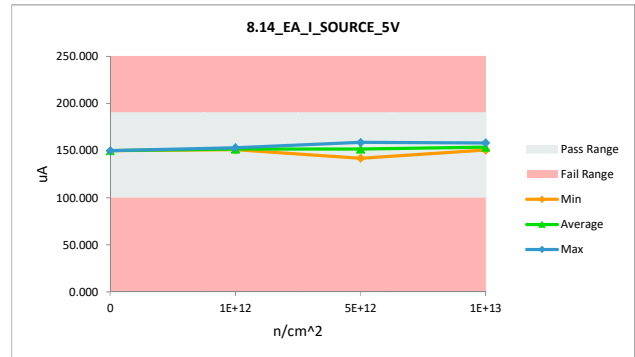


NDD Characterization Report TPS7H5005-SEP

8.14_EA_I_SOURCE_5V				
Test Site				
Tester				
Test Number				
Unit		uA	uA	
Max Limit		190	190	
Min Limit		100	100	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	149.243	149.958	0.715
1E+12	1	150.498	151.188	0.690
1E+12	2	152.432	153.111	0.679
1E+12	3	150.372	150.824	0.452
5E+12	4	141.697	141.885	0.188
5E+12	5	157.552	158.633	1.081
5E+12	6	153.443	154.819	1.376
1E+13	7	149.391	150.755	1.364
1E+13	8	152.203	151.693	-0.510
1E+13	9	156.910	158.162	1.252
Max		157.552	158.633	1.376
Average		151.374	152.103	0.729
Min		141.697	141.885	-0.510
Std Dev		4.457	4.728	0.590

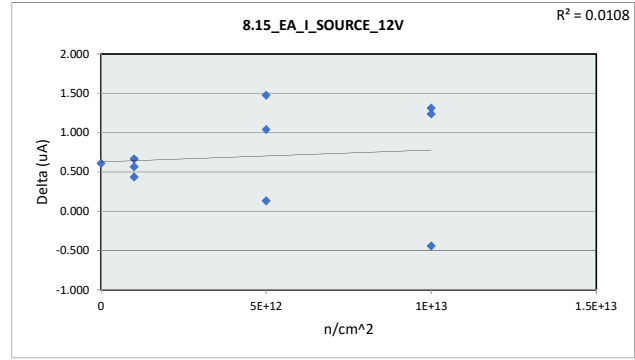


8.14_EA_I_SOURCE_5V				
Test Site				
Tester				
Test Number				
Max Limit	190	uA		
Min Limit	100	uA		
n/cm^2	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	149.958	150.824	141.885	150.755
Average	149.958	151.708	151.779	153.537
Max	149.958	153.111	158.633	158.162
UL	190.000	190.000	190.000	190.000

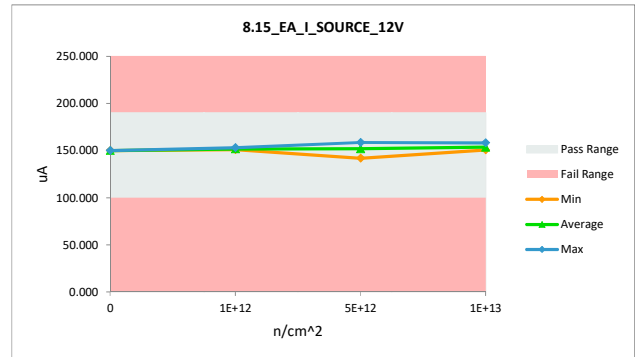


NDD Characterization Report TPS7H5005-SEP

8.15_EA_I_SOURCE_12V				
Test Site				
Tester				
Test Number				
Unit		uA	uA	
Max Limit		190	190	
Min Limit		100	100	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	149.421	150.029	0.608
1E+12	1	150.692	151.255	0.563
1E+12	2	152.478	153.142	0.664
1E+12	3	150.442	150.876	0.434
5E+12	4	141.826	141.958	0.132
5E+12	5	157.593	158.630	1.037
5E+12	6	153.428	154.901	1.473
1E+13	7	149.399	150.709	1.310
1E+13	8	152.223	151.780	-0.443
1E+13	9	156.997	158.231	1.234
Max		157.593	158.630	1.473
Average		151.450	152.151	0.701
Min		141.826	141.958	-0.443
Std Dev		4.430	4.720	0.587

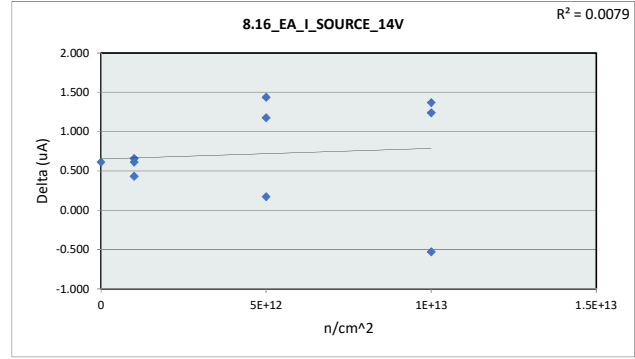


8.15_EA_I_SOURCE_12V				
Test Site				
Tester				
Test Number				
Max Limit		190	uA	
Min Limit		100	uA	
n/cm^2	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	150.029	150.876	141.958	150.709
Average	150.029	151.758	151.830	153.573
Max	150.029	153.142	158.630	158.231
UL	190.000	190.000	190.000	190.000

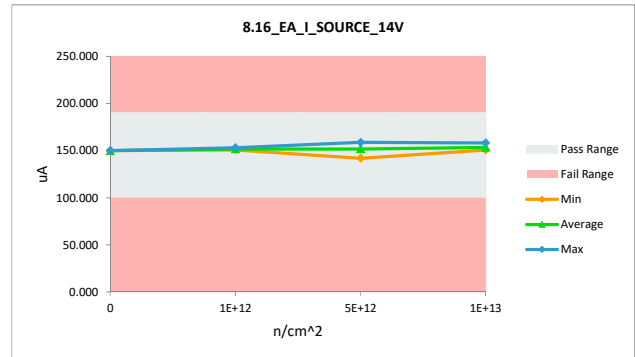


NDD Characterization Report TPS7H5005-SEP

8.16_EA_I_SOURCE_14V				
Test Site				
Tester				
Test Number				
Unit		uA	uA	
Max Limit		190	190	
Min Limit		100	100	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	149.327	149.937	0.610
1E+12	1	150.501	151.156	0.655
1E+12	2	152.406	153.015	0.609
1E+12	3	150.382	150.810	0.428
5E+12	4	141.757	141.926	0.169
5E+12	5	157.476	158.649	1.173
5E+12	6	153.358	154.794	1.436
1E+13	7	149.338	150.704	1.366
1E+13	8	152.147	151.617	-0.530
1E+13	9	156.889	158.127	1.238
Max		157.476	158.649	1.436
Average		151.358	152.074	0.715
Min		141.757	141.926	-0.530
Std Dev		4.420	4.717	0.613

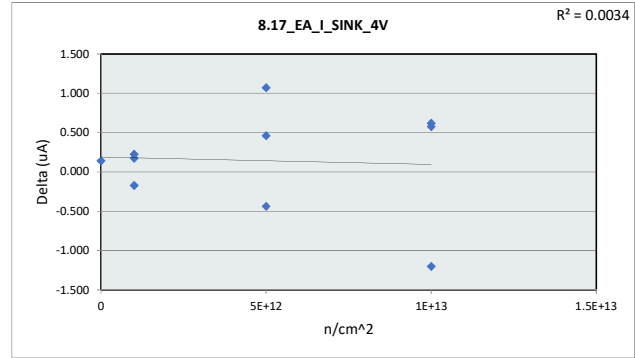


8.16_EA_I_SOURCE_14V				
Test Site				
Tester				
Test Number				
Max Limit		190	uA	
Min Limit		100	uA	
n/cm ²	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	149.937	150.810	141.926	150.704
Average	149.937	151.660	151.790	153.483
Max	149.937	153.015	158.649	158.127
UL	190.000	190.000	190.000	190.000

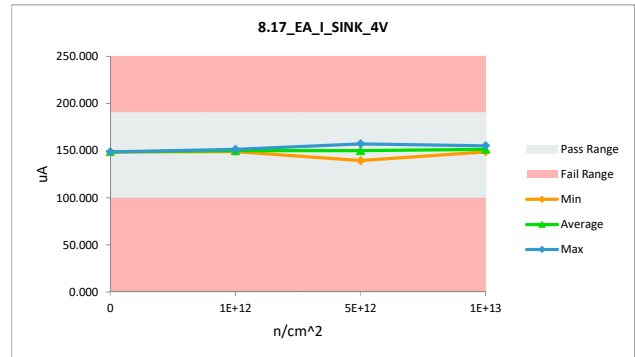


NDD Characterization Report TPS7H5005-SEP

8.17_EA_I_SINK_4V				
Test Site				
Tester				
Test Number				
Unit		uA	uA	
Max Limit		190	190	
Min Limit		100	100	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	148.495	148.635	0.140
1E+12	1	151.167	151.390	0.223
1E+12	2	148.815	148.985	0.170
1E+12	3	149.405	149.231	-0.174
5E+12	4	139.736	139.297	-0.439
5E+12	5	156.667	157.126	0.459
5E+12	6	152.138	153.207	1.069
1E+13	7	148.067	148.685	0.618
1E+13	8	151.630	150.425	-1.205
1E+13	9	154.666	155.240	0.574
Max		156.667	157.126	1.069
Average		150.079	150.222	0.143
Min		139.736	139.297	-1.205
Std Dev		4.569	4.829	0.635

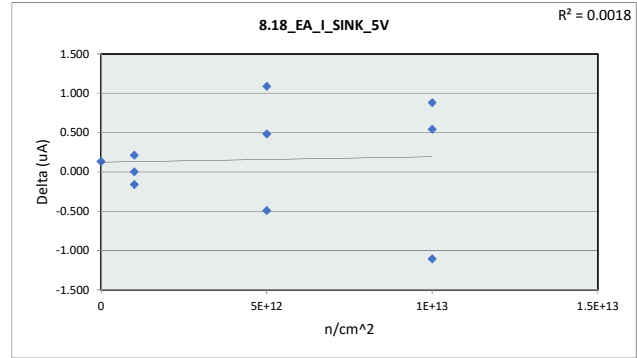


8.17_EA_I_SINK_4V				
Test Site				
Tester				
Test Number				
Max Limit	190	uA		
Min Limit	100	uA		
n/cm ²	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	148.635	148.985	139.297	148.685
Average	148.635	149.869	149.877	151.450
Max	148.635	151.390	157.126	155.240
UL	190.000	190.000	190.000	190.000

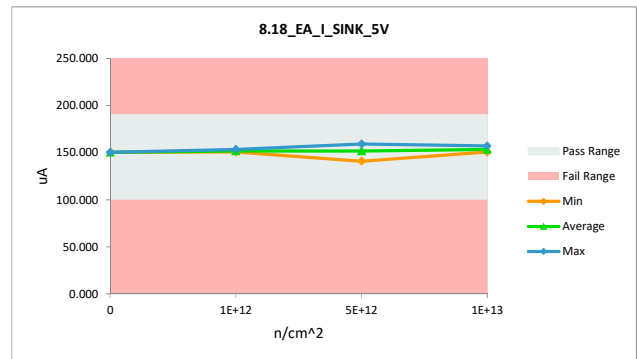


NDD Characterization Report TPS7H5005-SEP

8.18_EA_I_SINK_5V				
Test Site				
Tester				
Test Number				
Unit		uA	uA	
Max Limit		190	190	
Min Limit		100	100	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	150.196	150.328	0.132
1E+12	1	153.080	153.291	0.211
1E+12	2	150.736	150.735	-0.001
1E+12	3	151.198	151.037	-0.161
5E+12	4	141.398	140.905	-0.493
5E+12	5	158.562	159.043	0.481
5E+12	6	153.929	155.015	1.086
1E+13	7	149.697	150.576	0.879
1E+13	8	153.313	152.204	-1.109
1E+13	9	156.520	157.059	0.539
Max		158.562	159.043	1.086
Average		151.863	152.019	0.156
Min		141.398	140.905	-1.109
Std Dev		4.632	4.904	0.649

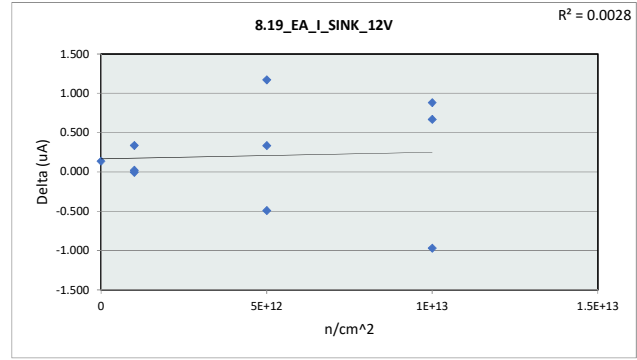


8.18_EA_I_SINK_5V				
Test Site				
Tester				
Test Number				
Max Limit		190	uA	
Min Limit		100	uA	
n/cm ²	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	150.328	150.735	140.905	150.576
Average	150.328	151.688	151.654	153.280
Max	150.328	153.291	159.043	157.059
UL	190.000	190.000	190.000	190.000

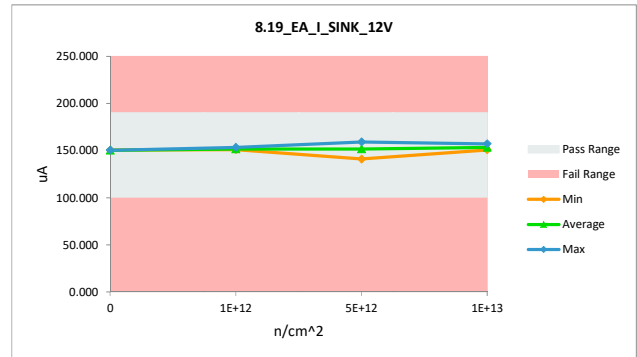


NDD Characterization Report TPS7H5005-SEP

8.19_EA_I_SINK_12V				
Test Site				
Tester				
Test Number				
Unit		uA	uA	
Max Limit		190	190	
Min Limit		100	100	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	150.302	150.437	0.135
1E+12	1	153.260	153.252	-0.008
1E+12	2	150.548	150.882	0.334
1E+12	3	151.166	151.185	0.019
5E+12	4	141.493	141.000	-0.493
5E+12	5	158.672	159.005	0.333
5E+12	6	153.957	155.127	1.170
1E+13	7	149.846	150.726	0.880
1E+13	8	153.356	152.384	-0.972
1E+13	9	156.638	157.304	0.666
Max		158.672	159.005	1.170
Average		151.924	152.130	0.206
Min		141.493	141.000	-0.972
Std Dev		4.642	4.893	0.632

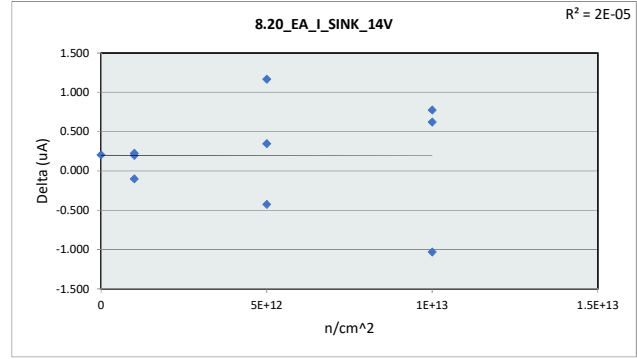


8.19_EA_I_SINK_12V				
Test Site				
Tester				
Test Number				
Max Limit		190	uA	
Min Limit		100	uA	
n/cm ²	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	150.437	150.882	141.000	150.726
Average	150.437	151.773	151.711	153.471
Max	150.437	153.252	159.005	157.304
UL	190.000	190.000	190.000	190.000

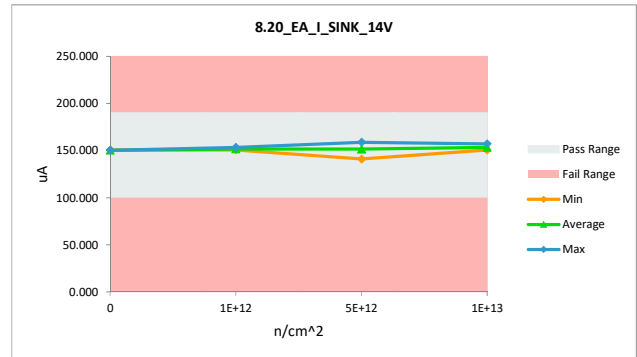


NDD Characterization Report TPS7H5005-SEP

8.20_EA_I_SINK_14V				
Test Site				
Tester				
Test Number				
Unit		uA	uA	
Max Limit		190	190	
Min Limit		100	100	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	150.244	150.447	0.203
1E+12	1	153.066	153.262	0.196
1E+12	2	150.546	150.767	0.221
1E+12	3	151.099	150.997	-0.102
5E+12	4	141.427	141.000	-0.427
5E+12	5	158.484	158.828	0.344
5E+12	6	153.802	154.966	1.164
1E+13	7	149.788	150.560	0.772
1E+13	8	153.281	152.248	-1.033
1E+13	9	156.512	157.132	0.620
Max		158.484	158.828	1.164
Average		151.825	152.021	0.196
Min		141.427	141.000	-1.033
Std Dev		4.604	4.847	0.620

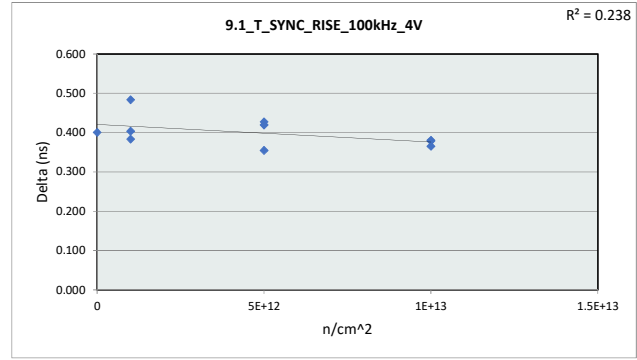


8.20_EA_I_SINK_14V				
Test Site				
Tester				
Test Number				
Max Limit	190	uA		
Min Limit	100	uA		
n/cm ²	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	150.447	150.767	141.000	150.560
Average	150.447	151.675	151.598	153.313
Max	150.447	153.262	158.828	157.132
UL	190.000	190.000	190.000	190.000

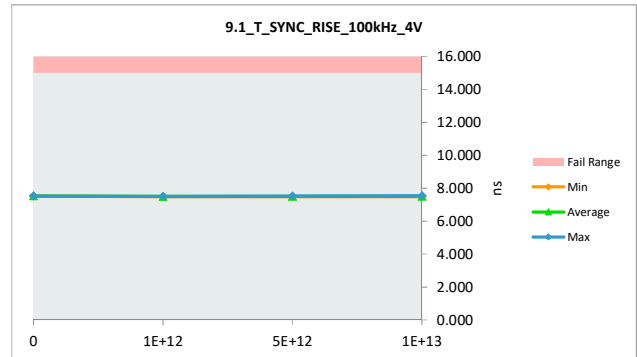


NDD Characterization Report TPS7H5005-SEP

9.1_T_SYNC_RISE_100kHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.121	7.521	0.400
1E+12	1	7.122	7.505	0.383
1E+12	2	7.092	7.495	0.403
1E+12	3	7.006	7.489	0.483
5E+12	4	7.058	7.477	0.419
5E+12	5	7.101	7.528	0.427
5E+12	6	7.139	7.493	0.354
1E+13	7	7.110	7.490	0.380
1E+13	8	7.177	7.542	0.365
1E+13	9	7.110	7.488	0.378
Max		7.177	7.542	0.483
Average		7.104	7.503	0.399
Min		7.006	7.477	0.354
Std Dev		0.046	0.021	0.037

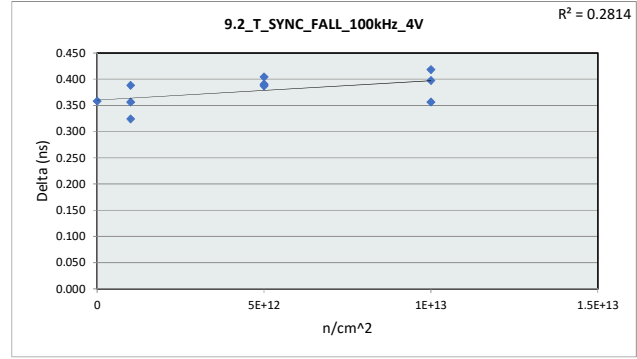


9.1_T_SYNC_RISE_100kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.521	7.489	7.477	7.488
Average	7.521	7.496	7.499	7.507
Max	7.521	7.505	7.528	7.542
UL	15.000	15.000	15.000	15.000

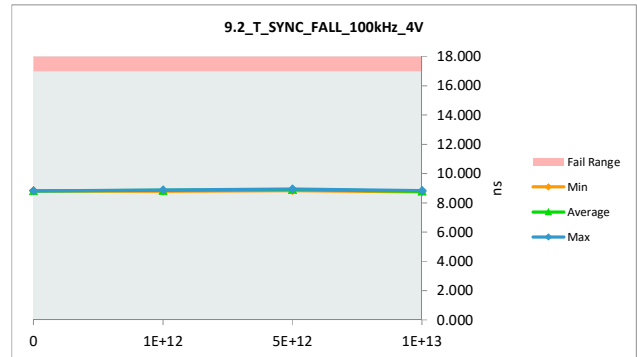


NDD Characterization Report TPS7H5005-SEP

9.2_T_SYNC_FALL_100kHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.465	8.823	0.358
1E+12	1	8.508	8.864	0.356
1E+12	2	8.482	8.870	0.388
1E+12	3	8.467	8.791	0.324
5E+12	4	8.539	8.926	0.387
5E+12	5	8.535	8.939	0.404
5E+12	6	8.453	8.843	0.390
1E+13	7	8.374	8.792	0.418
1E+13	8	8.438	8.835	0.397
1E+13	9	8.396	8.752	0.356
Max		8.539	8.939	0.418
Average		8.466	8.844	0.378
Min		8.374	8.752	0.324
Std Dev		0.054	0.059	0.028

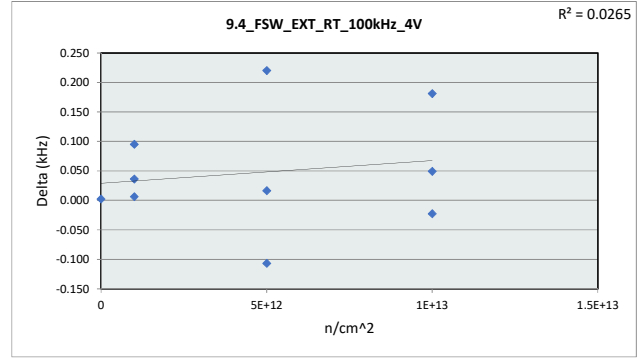


9.2_T_SYNC_FALL_100kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.823	8.791	8.843	8.752
Average	8.823	8.842	8.903	8.793
Max	8.823	8.870	8.939	8.835
UL	17.000	17.000	17.000	17.000

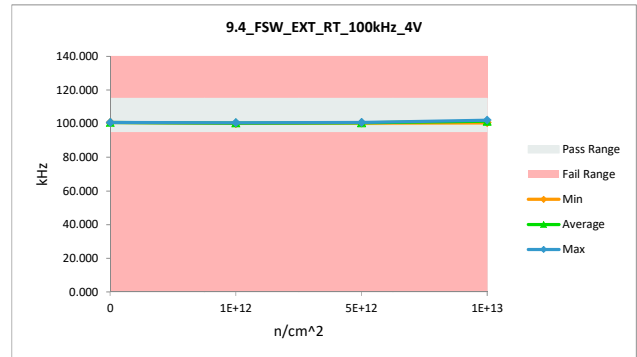


NDD Characterization Report TPS7H5005-SEP

9.4_FSW_EXT_RT_100kHz_4V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		115	115	
Min Limit		95	95	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	100.693	100.695	0.002
1E+12	1	100.044	100.080	0.036
1E+12	2	100.267	100.362	0.095
1E+12	3	100.579	100.585	0.006
5E+12	4	100.628	100.521	-0.107
5E+12	5	100.671	100.687	0.016
5E+12	6	100.098	100.318	0.220
1E+13	7	101.407	101.588	0.181
1E+13	8	100.670	100.647	-0.023
1E+13	9	102.061	102.110	0.049
Max		102.061	102.110	0.220
Average		100.712	100.759	0.048
Min		100.044	100.080	-0.107
Std Dev		0.610	0.618	0.096

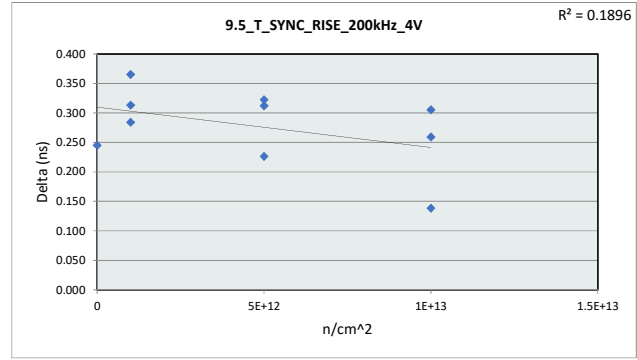


9.4_FSW_EXT_RT_100kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	115	kHz		
Min Limit	95	kHz		
n/cm ²	0	1E+12	5E+12	1E+13
LL	95.000	95.000	95.000	95.000
Min	100.695	100.080	100.318	100.647
Average	100.695	100.342	100.509	101.448
Max	100.695	100.585	100.687	102.110
UL	115.000	115.000	115.000	115.000

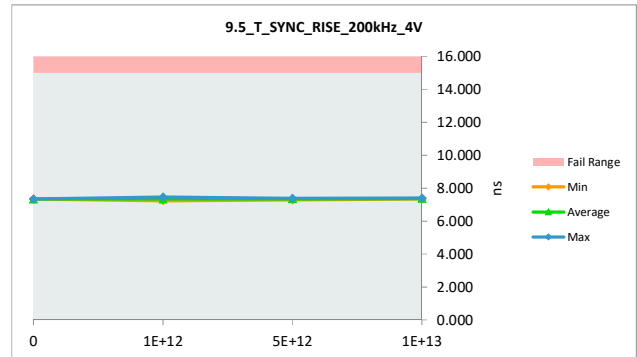


NDD Characterization Report TPS7H5005-SEP

9.5_T_SYNC_RISE_200kHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.099	7.344	0.245
1E+12	1	7.104	7.469	0.365
1E+12	2	7.012	7.325	0.313
1E+12	3	6.947	7.231	0.284
5E+12	4	7.068	7.390	0.322
5E+12	5	7.057	7.283	0.226
5E+12	6	7.077	7.389	0.312
1E+13	7	7.090	7.395	0.305
1E+13	8	7.245	7.383	0.138
1E+13	9	7.081	7.340	0.259
Max		7.245	7.469	0.365
Average		7.078	7.355	0.277
Min		6.947	7.231	0.138
Std Dev		0.075	0.066	0.064

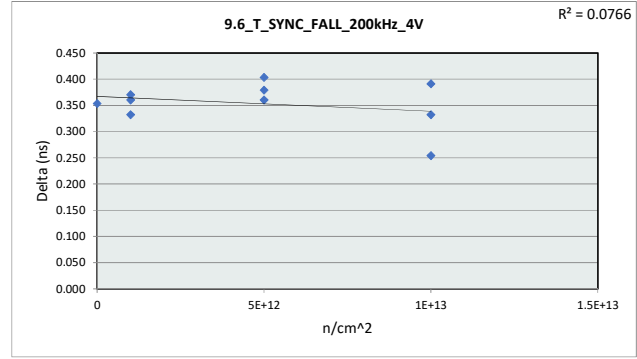


9.5_T_SYNC_RISE_200kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	7.344	7.231	7.283	7.340
Average	7.344	7.342	7.354	7.373
Max	7.344	7.469	7.390	7.395
UL	15.000	15.000	15.000	15.000

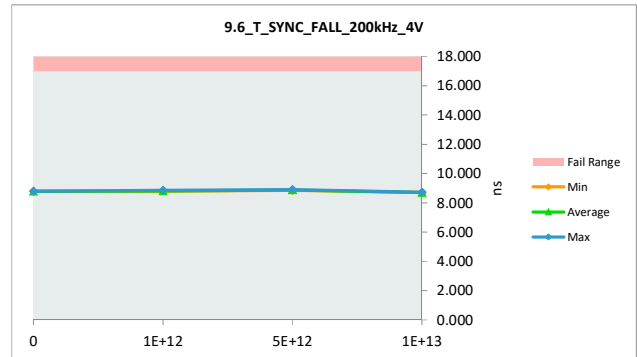


NDD Characterization Report TPS7H5005-SEP

9.6_T_SYNC_FALL_200kHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.443	8.796	0.353
1E+12	1	8.485	8.855	0.370
1E+12	2	8.440	8.800	0.360
1E+12	3	8.463	8.795	0.332
5E+12	4	8.523	8.883	0.360
5E+12	5	8.531	8.910	0.379
5E+12	6	8.451	8.854	0.403
1E+13	7	8.333	8.724	0.391
1E+13	8	8.442	8.696	0.254
1E+13	9	8.376	8.708	0.332
Max		8.531	8.910	0.403
Average		8.449	8.802	0.353
Min		8.333	8.696	0.254
Std Dev		0.060	0.075	0.042

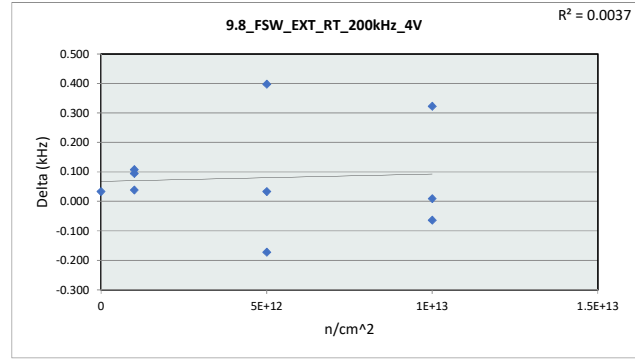


9.6_T_SYNC_FALL_200kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit		17	ns	
Min Limit			ns	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.796	8.795	8.854	8.696
Average	8.796	8.817	8.882	8.709
Max	8.796	8.855	8.910	8.724
UL	17.000	17.000	17.000	17.000

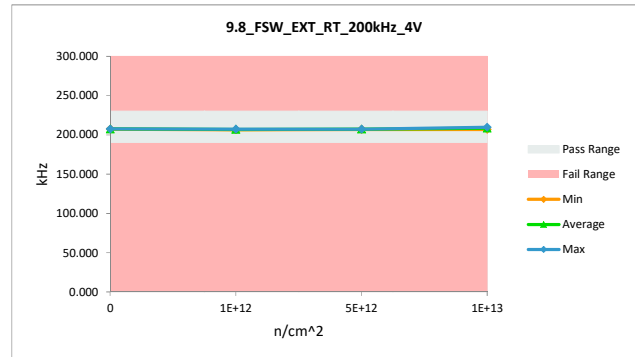


NDD Characterization Report TPS7H5005-SEP

9.8_FSW_EXT_RT_200kHz_4V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		230	230	
Min Limit		190	190	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	207.423	207.456	0.033
1E+12	1	206.399	206.493	0.094
1E+12	2	206.865	206.972	0.107
1E+12	3	207.222	207.260	0.038
5E+12	4	207.311	207.138	-0.173
5E+12	5	206.956	206.989	0.033
5E+12	6	206.887	207.284	0.397
1E+13	7	208.743	209.065	0.322
1E+13	8	206.933	206.869	-0.064
1E+13	9	209.656	209.665	0.009
Max		209.656	209.665	0.397
Average		207.440	207.519	0.080
Min		206.399	206.493	-0.173
Std Dev		0.994	1.018	0.169

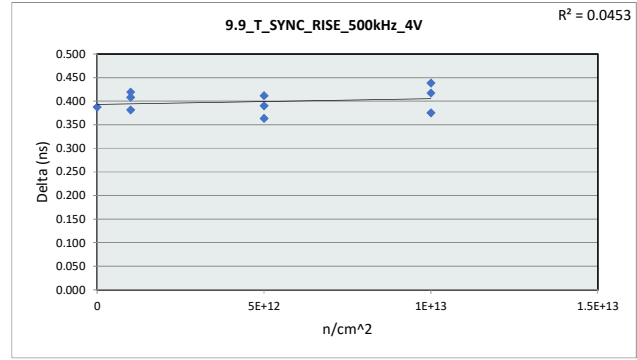


9.8_FSW_EXT_RT_200kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	230	kHz		
Min Limit	190	kHz		
n/cm ²	0	1E+12	5E+12	1E+13
LL	190.000	190.000	190.000	190.000
Min	207.456	206.493	206.989	206.869
Average	207.456	206.908	207.137	208.533
Max	207.456	207.260	207.284	209.665
UL	230.000	230.000	230.000	230.000

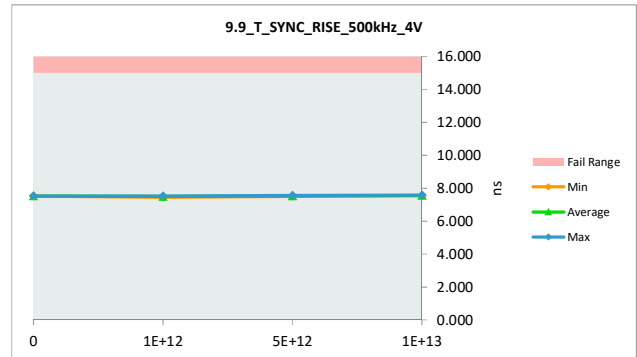


NDD Characterization Report TPS7H5005-SEP

9.9_T_SYNC_RISE_500kHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.141	7.528	0.387
1E+12	1	7.124	7.532	0.408
1E+12	2	7.127	7.508	0.381
1E+12	3	7.031	7.450	0.419
5E+12	4	7.122	7.512	0.390
5E+12	5	7.135	7.498	0.363
5E+12	6	7.155	7.566	0.411
1E+13	7	7.174	7.549	0.375
1E+13	8	7.149	7.587	0.438
1E+13	9	7.126	7.543	0.417
Max		7.174	7.587	0.438
Average		7.128	7.527	0.399
Min		7.031	7.450	0.363
Std Dev		0.038	0.038	0.023

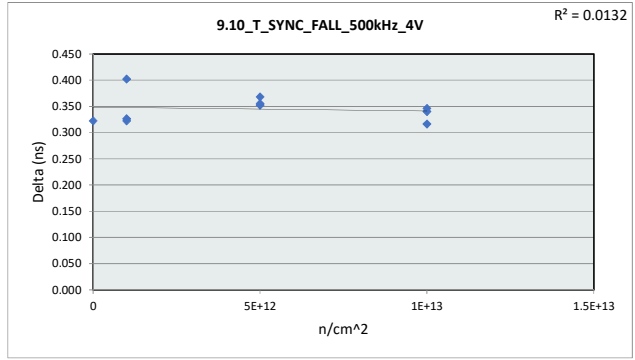


9.9_T_SYNC_RISE_500kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit		15	ns	
Min Limit			ns	
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	7.528	7.450	7.498	7.543
Average	7.528	7.497	7.525	7.560
Max	7.528	7.532	7.566	7.587
UL	15.000	15.000	15.000	15.000

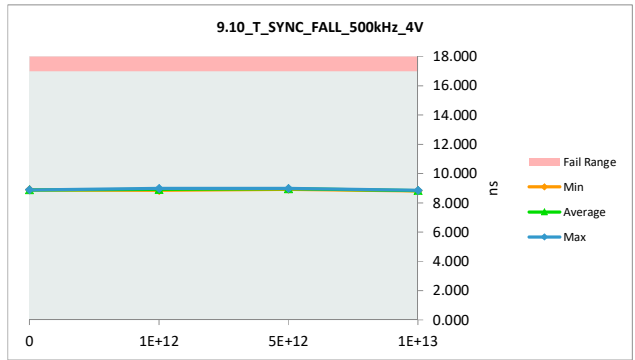


NDD Characterization Report TPS7H5005-SEP

9.10_T_SYNC_FALL_500kHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.561	8.883	0.322
1E+12	1	8.581	8.983	0.402
1E+12	2	8.578	8.900	0.322
1E+12	3	8.523	8.849	0.326
5E+12	4	8.612	8.980	0.368
5E+12	5	8.619	8.971	0.352
5E+12	6	8.565	8.920	0.355
1E+13	7	8.475	8.821	0.346
1E+13	8	8.538	8.854	0.316
1E+13	9	8.479	8.819	0.340
Max		8.619	8.983	0.402
Average		8.553	8.898	0.345
Min		8.475	8.819	0.316
Std Dev		0.050	0.064	0.026

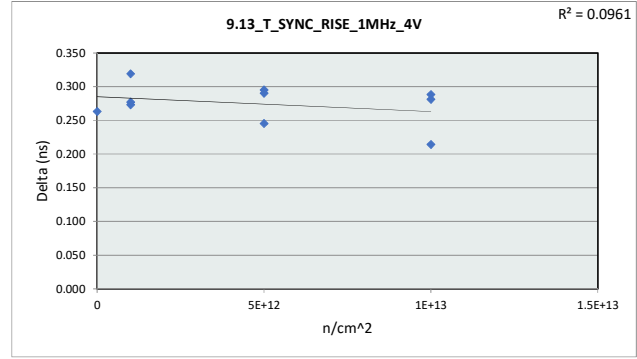


9.10_T_SYNC_FALL_500kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.883	8.849	8.920	8.819
Average	8.883	8.911	8.957	8.831
Max	8.883	8.983	8.980	8.854
UL	17.000	17.000	17.000	17.000

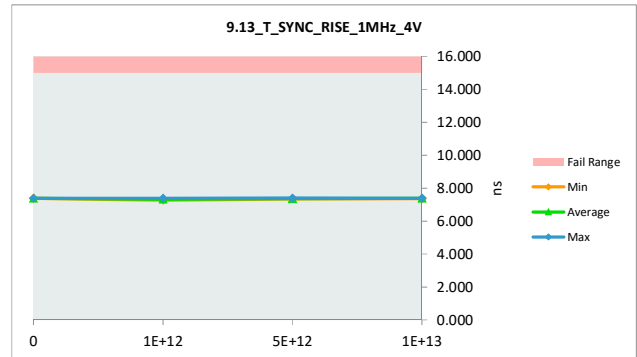


NDD Characterization Report TPS7H5005-SEP

9.13_T_SYNC_RISE_1MHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.120	7.383	0.263
1E+12	1	7.072	7.391	0.319
1E+12	2	7.084	7.361	0.277
1E+12	3	6.992	7.265	0.273
5E+12	4	7.066	7.361	0.295
5E+12	5	7.103	7.348	0.245
5E+12	6	7.103	7.393	0.290
1E+13	7	7.114	7.395	0.281
1E+13	8	7.176	7.390	0.214
1E+13	9	7.070	7.358	0.288
Max		7.176	7.395	0.319
Average		7.090	7.364	0.274
Min		6.992	7.265	0.214
Std Dev		0.047	0.039	0.029

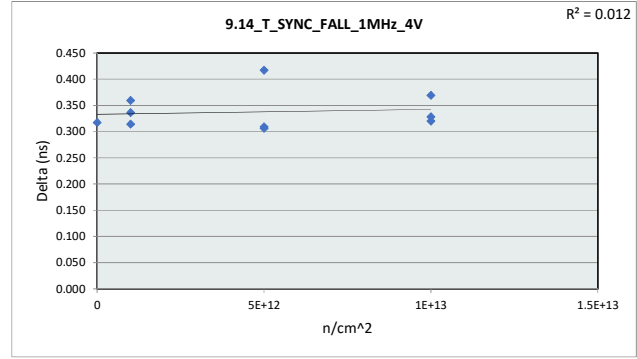


9.13_T_SYNC_RISE_1MHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	7.383	7.265	7.348	7.358
Average	7.383	7.339	7.367	7.381
Max	7.383	7.391	7.393	7.395
UL	15.000	15.000	15.000	15.000

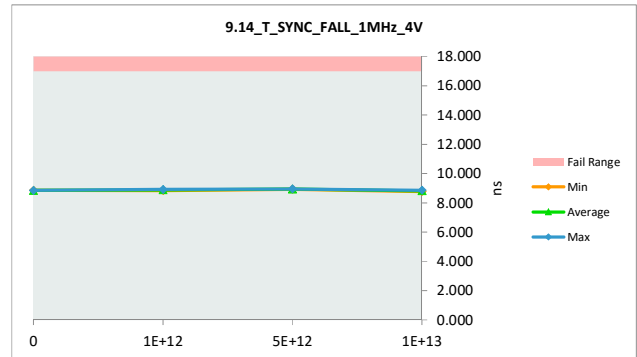


NDD Characterization Report TPS7H5005-SEP

9.14_T_SYNC_FALL_1MHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.534	8.851	0.317
1E+12	1	8.600	8.914	0.314
1E+12	2	8.550	8.909	0.359
1E+12	3	8.501	8.837	0.336
5E+12	4	8.639	8.948	0.309
5E+12	5	8.635	8.941	0.306
5E+12	6	8.506	8.923	0.417
1E+13	7	8.435	8.804	0.369
1E+13	8	8.546	8.866	0.320
1E+13	9	8.450	8.778	0.328
Max		8.639	8.948	0.417
Average		8.540	8.877	0.337
Min		8.435	8.778	0.306
Std Dev		0.070	0.059	0.035

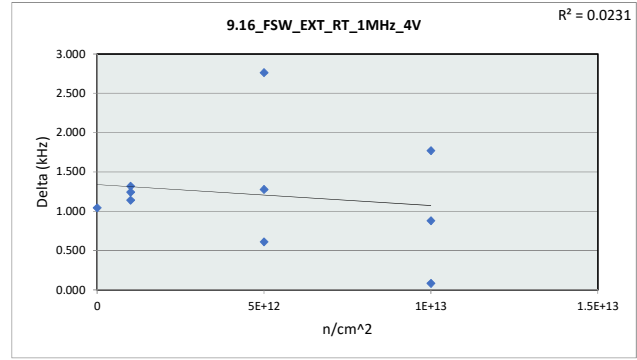


9.14_T_SYNC_FALL_1MHz_4V				
Test Site				
Tester				
Test Number				
Max Limit		17	ns	
Min Limit			ns	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.851	8.837	8.923	8.778
Average	8.851	8.887	8.937	8.816
Max	8.851	8.914	8.948	8.866
UL	17.000	17.000	17.000	17.000

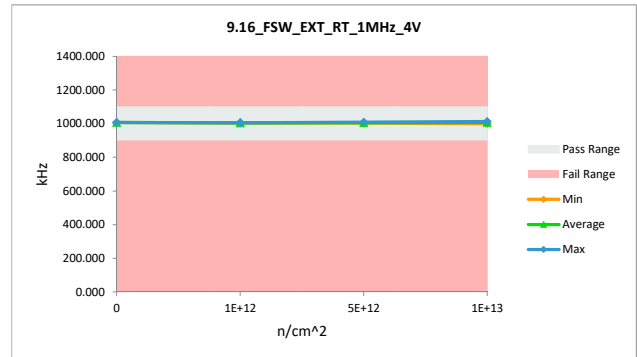


NDD Characterization Report TPS7H5005-SEP

9.16_FSW_EXT_RT_1MHz_4V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		1100	1100	
Min Limit		900	900	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1006.099	1007.139	1.040
1E+12	1	1002.035	1003.351	1.316
1E+12	2	1004.278	1005.519	1.241
1E+12	3	1004.706	1005.844	1.138
5E+12	4	1003.819	1004.427	0.608
5E+12	5	1001.761	1003.035	1.274
5E+12	6	1005.940	1008.700	2.760
1E+13	7	1007.972	1009.740	1.768
1E+13	8	998.702	998.784	0.082
1E+13	9	1012.073	1012.950	0.877
Max		1012.073	1012.950	2.760
Average		1004.738	1005.949	1.210
Min		998.702	998.784	0.082
Std Dev		3.670	3.965	0.708

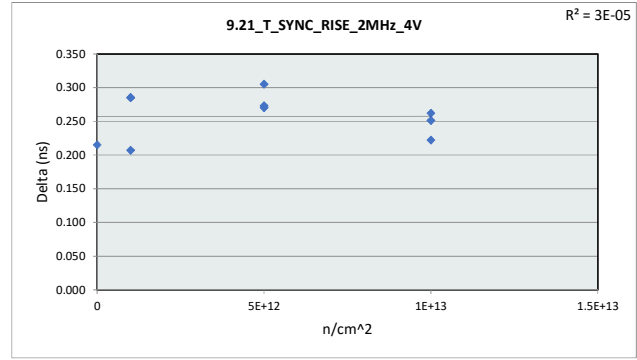


9.16_FSW_EXT_RT_1MHz_4V				
Test Site				
Tester				
Test Number				
Max Limit		1100	kHz	
Min Limit		900	kHz	
n/cm ²	0	1E+12	5E+12	1E+13
LL	900.000	900.000	900.000	900.000
Min	1007.139	1003.351	1003.035	998.784
Average	1007.139	1004.905	1005.387	1007.158
Max	1007.139	1005.844	1008.700	1012.950
UL	1100.000	1100.000	1100.000	1100.000

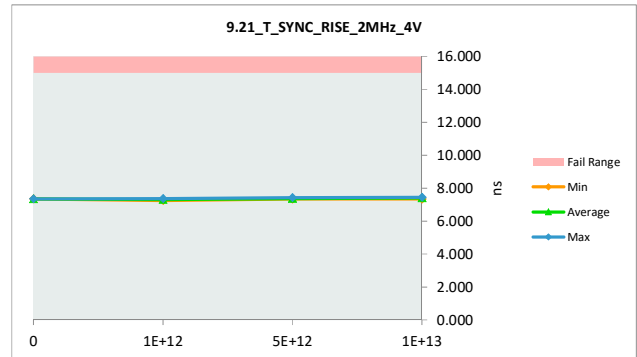


NDD Characterization Report TPS7H5005-SEP

9.21_T_SYNC_RISE_2MHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.133	7.348	0.215
1E+12	1	7.076	7.361	0.285
1E+12	2	7.067	7.352	0.285
1E+12	3	7.038	7.245	0.207
5E+12	4	7.086	7.356	0.270
5E+12	5	7.064	7.337	0.273
5E+12	6	7.114	7.419	0.305
1E+13	7	7.177	7.428	0.251
1E+13	8	7.188	7.450	0.262
1E+13	9	7.118	7.340	0.222
Max		7.188	7.450	0.305
Average		7.106	7.364	0.257
Min		7.038	7.245	0.207
Std Dev		0.049	0.058	0.033

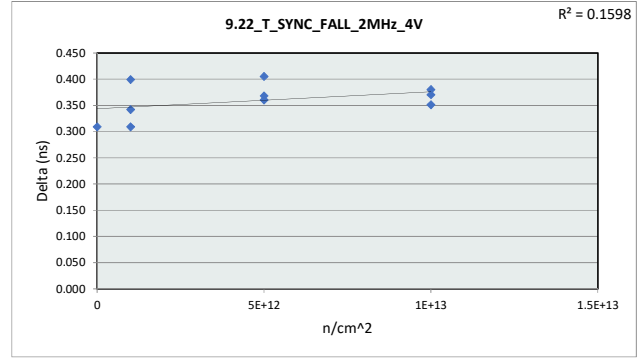


9.21_T_SYNC_RISE_2MHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.348	7.245	7.337	7.340
Average	7.348	7.319	7.371	7.406
Max	7.348	7.361	7.419	7.450
UL	15.000	15.000	15.000	15.000

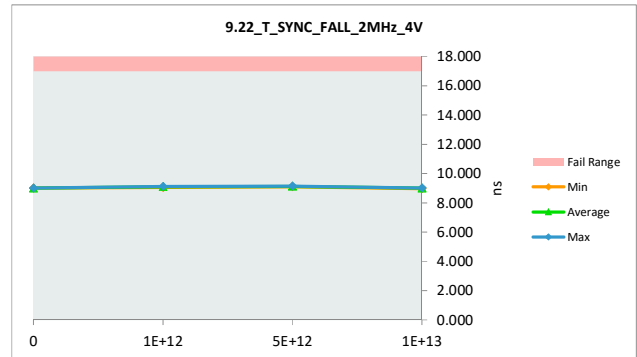


NDD Characterization Report TPS7H5005-SEP

9.22_T_SYNC_FALL_2MHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.701	9.010	0.309
1E+12	1	8.782	9.124	0.342
1E+12	2	8.728	9.127	0.399
1E+12	3	8.731	9.040	0.309
5E+12	4	8.768	9.136	0.368
5E+12	5	8.791	9.151	0.360
5E+12	6	8.698	9.103	0.405
1E+13	7	8.594	8.974	0.380
1E+13	8	8.673	9.024	0.351
1E+13	9	8.645	9.015	0.370
Max		8.791	9.151	0.405
Average		8.711	9.070	0.359
Min		8.594	8.974	0.309
Std Dev		0.062	0.064	0.033

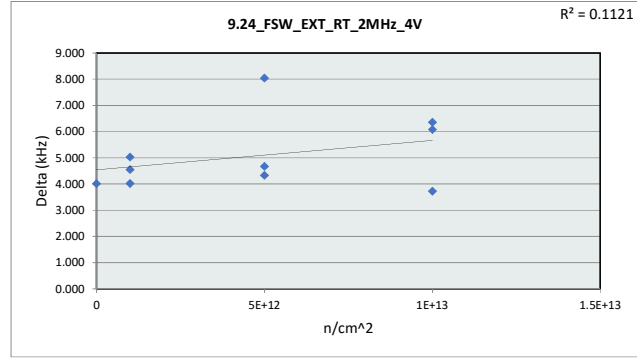


9.22_T_SYNC_FALL_2MHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	9.010	9.040	9.103	8.974
Average	9.010	9.097	9.130	9.004
Max	9.010	9.127	9.151	9.024
UL	17.000	17.000	17.000	17.000

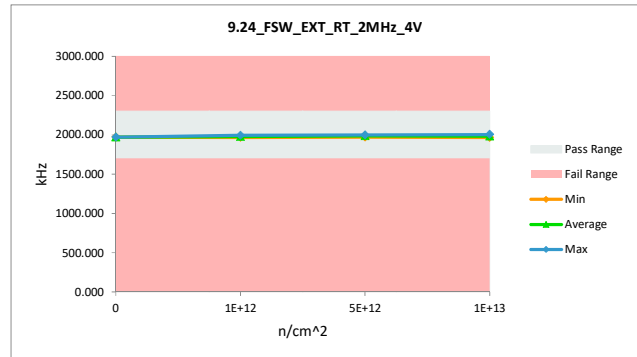


NDD Characterization Report TPS7H5005-SEP

9.24_FSW_EXT_RT_2MHz_4V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		2300	2300	
Min Limit		1700	1700	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1968.715	1972.725	4.010
1E+12	1	1964.443	1968.462	4.019
1E+12	2	1973.996	1978.542	4.546
1E+12	3	1989.729	1994.751	5.022
5E+12	4	1994.521	1999.186	4.665
5E+12	5	1968.239	1972.563	4.324
5E+12	6	1979.475	1987.514	8.039
1E+13	7	1999.176	2005.250	6.074
1E+13	8	1961.210	1967.564	6.354
1E+13	9	1977.064	1980.790	3.726
Max		1999.176	2005.250	8.039
Average		1977.657	1982.735	5.078
Min		1961.210	1967.564	3.726
Std Dev		13.013	13.349	1.354

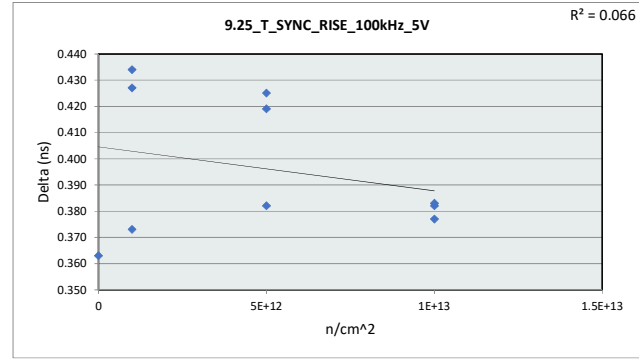


9.24_FSW_EXT_RT_2MHz_4V				
Test Site				
Tester				
Test Number				
Max Limit		2300	kHz	
Min Limit		1700	kHz	
n/cm^2	0	1E+12	5E+12	1E+13
LL	1700.000	1700.000	1700.000	1700.000
Min	1972.725	1968.462	1972.563	1967.564
Average	1972.725	1980.585	1986.421	1984.535
Max	1972.725	1994.751	1999.186	2005.250
UL	2300.000	2300.000	2300.000	2300.000

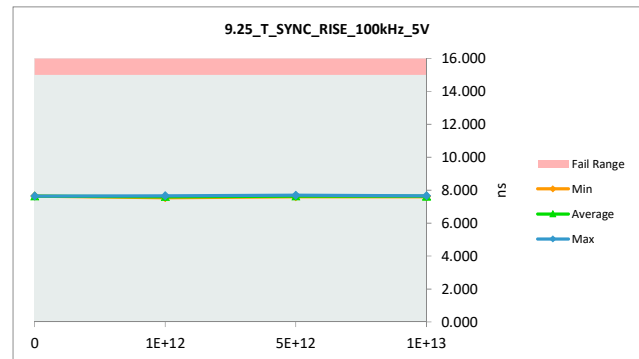


NDD Characterization Report TPS7H5005-SEP

9.25_T_SYNC_RISE_100kHz_5V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	15	15		
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.284	7.647	0.363
1E+12	1	7.227	7.654	0.427
1E+12	2	7.242	7.615	0.373
1E+12	3	7.112	7.546	0.434
5E+12	4	7.201	7.626	0.425
5E+12	5	7.219	7.601	0.382
5E+12	6	7.271	7.690	0.419
1E+13	7	7.254	7.637	0.383
1E+13	8	7.279	7.656	0.377
1E+13	9	7.224	7.606	0.382
Max		7.284	7.690	0.434
Average		7.231	7.628	0.396
Min		7.112	7.546	0.363
Std Dev		0.050	0.039	0.026

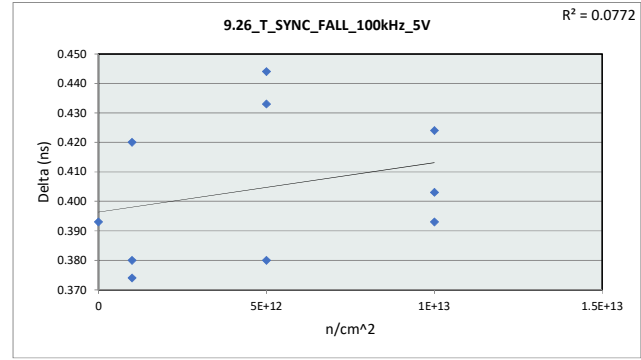


9.25_T_SYNC_RISE_100kHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.647	7.546	7.601	7.606
Average	7.647	7.605	7.639	7.633
Max	7.647	7.654	7.690	7.656
UL	15.000	15.000	15.000	15.000

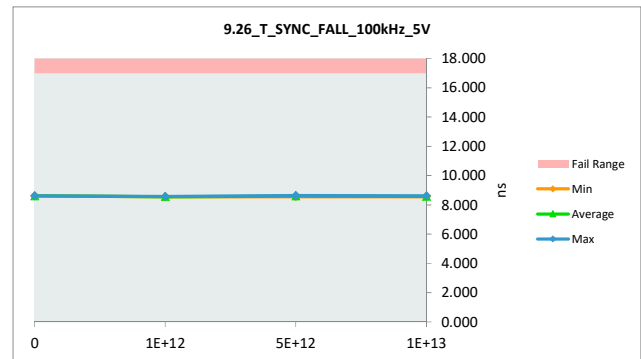


NDD Characterization Report TPS7H5005-SEP

9.26_T_SYNC_FALL_100kHz_5V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	17	17		
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.216	8.609	0.393
1E+12	1	8.175	8.549	0.374
1E+12	2	8.154	8.574	0.420
1E+12	3	8.185	8.565	0.380
5E+12	4	8.194	8.638	0.444
5E+12	5	8.163	8.596	0.433
5E+12	6	8.173	8.553	0.380
1E+13	7	8.148	8.572	0.424
1E+13	8	8.215	8.608	0.393
1E+13	9	8.143	8.546	0.403
Max		8.216	8.638	0.444
Average		8.177	8.581	0.404
Min		8.143	8.546	0.374
Std Dev		0.026	0.031	0.024

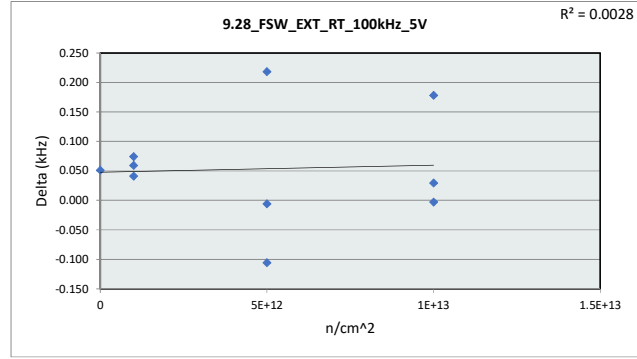


9.26_T_SYNC_FALL_100kHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.609	8.549	8.553	8.546
Average	8.609	8.563	8.596	8.575
Max	8.609	8.574	8.638	8.608
UL	17.000	17.000	17.000	17.000

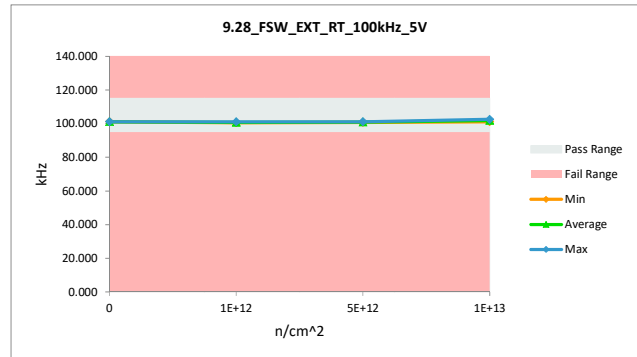


NDD Characterization Report TPS7H5005-SEP

9.28_FSW_EXT_RT_100kHz_5V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		115	115	
Min Limit		95	95	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	101.135	101.186	0.051
1E+12	1	100.507	100.566	0.059
1E+12	2	100.721	100.795	0.074
1E+12	3	100.974	101.015	0.041
5E+12	4	101.064	100.958	-0.106
5E+12	5	101.131	101.125	-0.006
5E+12	6	100.523	100.741	0.218
1E+13	7	101.874	102.052	0.178
1E+13	8	101.134	101.131	-0.003
1E+13	9	102.533	102.562	0.029
Max		102.533	102.562	0.218
Average		101.160	101.213	0.053
Min		100.507	100.566	-0.106
Std Dev		0.621	0.620	0.092

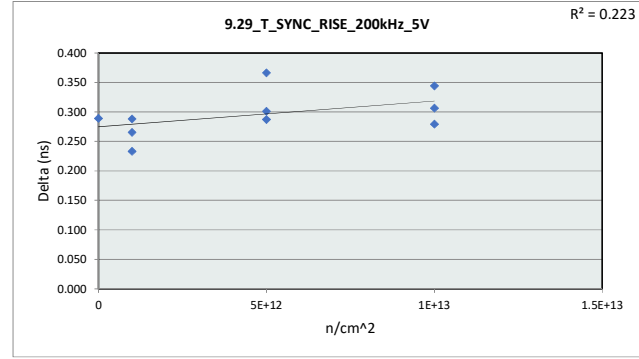


9.28_FSW_EXT_RT_100kHz_5				
Test Site				
Tester				
Test Number				
Max Limit	115	kHz		
Min Limit	95	kHz		
n/cm ²	0	1E+12	5E+12	1E+13
LL	95.000	95.000	95.000	95.000
Min	101.186	100.566	100.741	101.131
Average	101.186	100.792	100.941	101.915
Max	101.186	101.015	101.125	102.562
UL	115.000	115.000	115.000	115.000

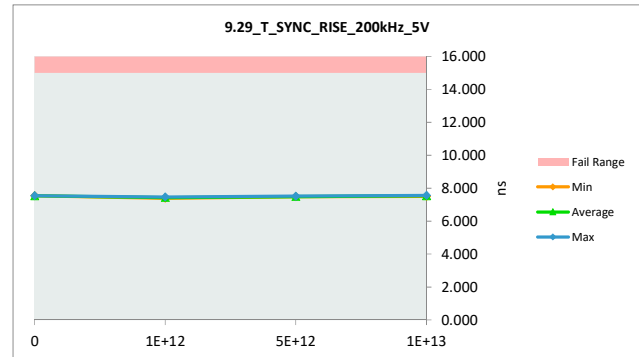


NDD Characterization Report TPS7H5005-SEP

9.29_T_SYNC_RISE_200kHz_5V				
Test Site				
Tester				
Test Number				
Unit		ns		ns
Max Limit		15		15
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.246	7.535	0.289
1E+12	1	7.180	7.468	0.288
1E+12	2	7.184	7.449	0.265
1E+12	3	7.152	7.385	0.233
5E+12	4	7.196	7.483	0.287
5E+12	5	7.124	7.490	0.366
5E+12	6	7.217	7.518	0.301
1E+13	7	7.227	7.533	0.306
1E+13	8	7.284	7.563	0.279
1E+13	9	7.162	7.506	0.344
Max		7.284	7.563	0.366
Average		7.197	7.493	0.296
Min		7.124	7.385	0.233
Std Dev		0.048	0.051	0.038

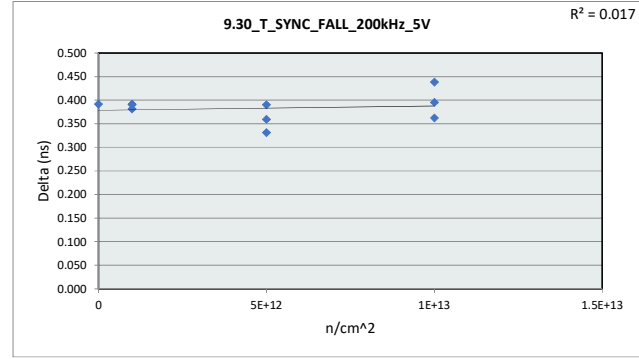


9.29_T_SYNC_RISE_200kHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	15			ns
Min Limit				ns
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.535	7.385	7.483	7.506
Average	7.535	7.434	7.497	7.534
Max	7.535	7.468	7.518	7.563
UL	15.000	15.000	15.000	15.000

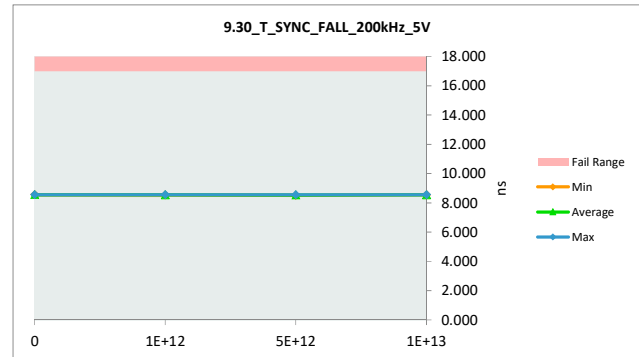


NDD Characterization Report TPS7H5005-SEP

9.30_T_SYNC_FALL_200kHz_5V				
Test Site				
Tester				
Test Number				
Unit		ns		ns
Max Limit		17		17
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.162	8.553	0.391
1E+12	1	8.172	8.553	0.381
1E+12	2	8.153	8.544	0.391
1E+12	3	8.145	8.536	0.391
5E+12	4	8.171	8.502	0.331
5E+12	5	8.193	8.552	0.359
5E+12	6	8.147	8.537	0.390
1E+13	7	8.179	8.541	0.362
1E+13	8	8.162	8.557	0.395
1E+13	9	8.109	8.547	0.438
Max		8.193	8.557	0.438
Average		8.159	8.542	0.383
Min		8.109	8.502	0.331
Std Dev		0.023	0.016	0.028

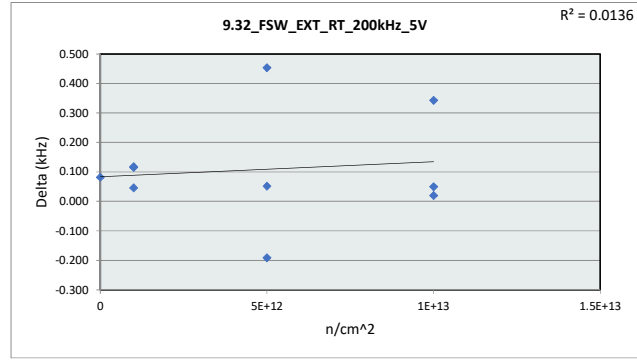


9.30_T_SYNC_FALL_200kHz_5V				
Test Site				
Tester				
Test Number				
Max Limit		17		ns
Min Limit				ns
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.553	8.536	8.502	8.541
Average	8.553	8.544	8.530	8.548
Max	8.553	8.553	8.552	8.557
UL	17.000	17.000	17.000	17.000

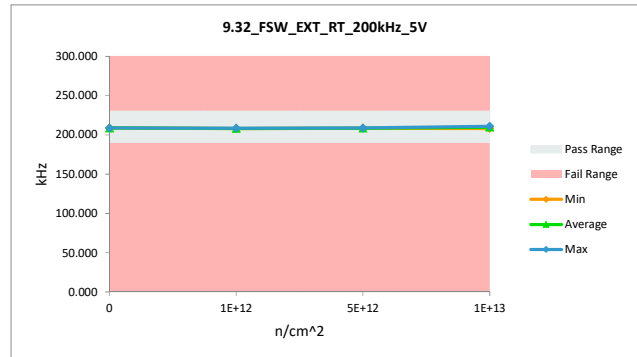


NDD Characterization Report TPS7H5005-SEP

9.32_FSW_EXT_RT_200kHz_5V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		230	230	
Min Limit		190	190	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	208.718	208.799	0.081
1E+12	1	207.782	207.897	0.115
1E+12	2	208.152	208.269	0.117
1E+12	3	208.406	208.451	0.045
5E+12	4	208.570	208.378	-0.192
5E+12	5	208.340	208.391	0.051
5E+12	6	208.139	208.592	0.453
1E+13	7	210.024	210.366	0.342
1E+13	8	208.212	208.231	0.019
1E+13	9	210.854	210.903	0.049
Max		210.854	210.903	0.453
Average		208.720	208.828	0.108
Min		207.782	207.897	-0.192
Std Dev		0.961	0.989	0.177

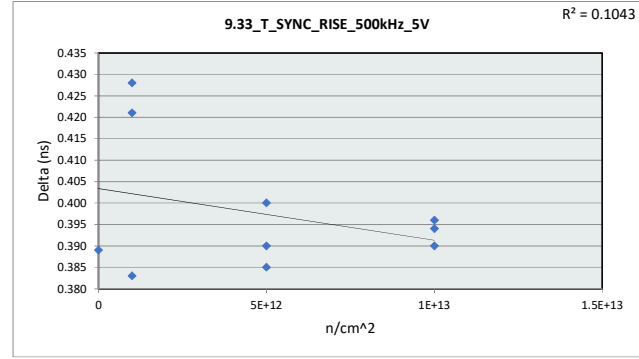


9.32_FSW_EXT_RT_200kHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	230	kHz		
Min Limit	190	kHz		
n/cm ²	0	1E+12	5E+12	1E+13
LL	190.000	190.000	190.000	190.000
Min	208.799	207.897	208.378	208.231
Average	208.799	208.206	208.454	209.833
Max	208.799	208.451	208.592	210.903
UL	230.000	230.000	230.000	230.000

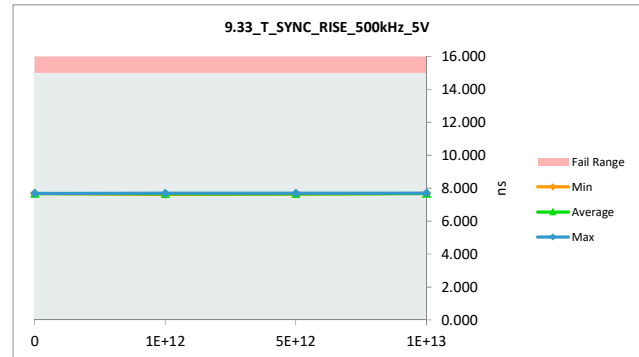


NDD Characterization Report TPS7H5005-SEP

9.33_T_SYNC_RISE_500kHz_5V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.299	7.688	0.389
1E+12	1	7.293	7.676	0.383
1E+12	2	7.268	7.689	0.421
1E+12	3	7.200	7.628	0.428
5E+12	4	7.255	7.655	0.400
5E+12	5	7.262	7.647	0.385
5E+12	6	7.299	7.689	0.390
1E+13	7	7.280	7.674	0.394
1E+13	8	7.306	7.696	0.390
1E+13	9	7.277	7.673	0.396
Max		7.306	7.696	0.428
Average		7.274	7.672	0.398
Min		7.200	7.628	0.383
Std Dev		0.031	0.022	0.015

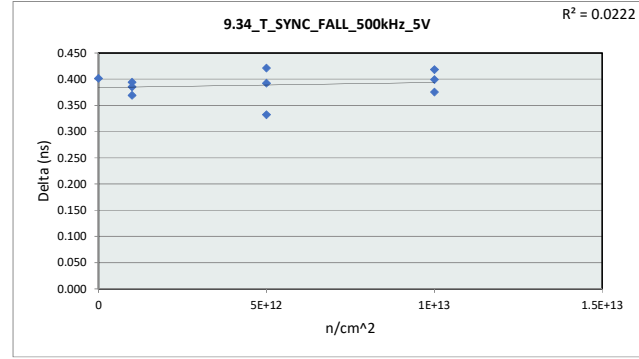


9.33_T_SYNC_RISE_500kHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.688	7.628	7.647	7.673
Average	7.688	7.664	7.664	7.681
Max	7.688	7.689	7.689	7.696
UL	15.000	15.000	15.000	15.000

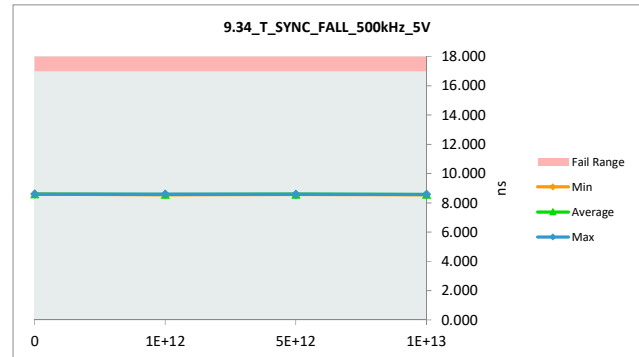


NDD Characterization Report TPS7H5005-SEP

9.34_T_SYNC_FALL_500kHz_5V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.194	8.595	0.401
1E+12	1	8.198	8.592	0.394
1E+12	2	8.203	8.572	0.369
1E+12	3	8.168	8.553	0.385
5E+12	4	8.254	8.586	0.332
5E+12	5	8.181	8.573	0.392
5E+12	6	8.166	8.587	0.421
1E+13	7	8.183	8.558	0.375
1E+13	8	8.182	8.581	0.399
1E+13	9	8.162	8.580	0.418
Max		8.254	8.595	0.421
Average		8.189	8.578	0.389
Min		8.162	8.553	0.332
Std Dev		0.027	0.014	0.026

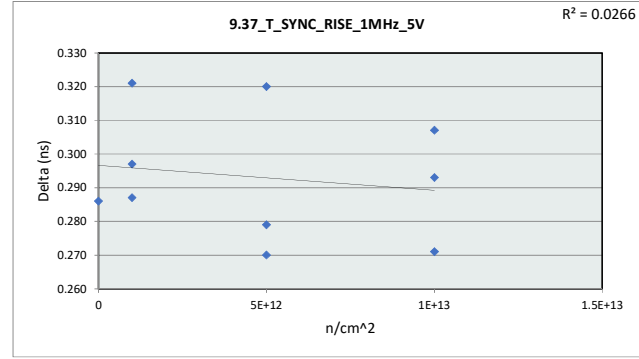


9.34_T_SYNC_FALL_500kHz_5V				
Test Site				
Tester				
Test Number				
Max Limit		17	ns	
Min Limit			ns	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.595	8.553	8.573	8.558
Average	8.595	8.572	8.582	8.573
Max	8.595	8.592	8.587	8.581
UL	17.000	17.000	17.000	17.000

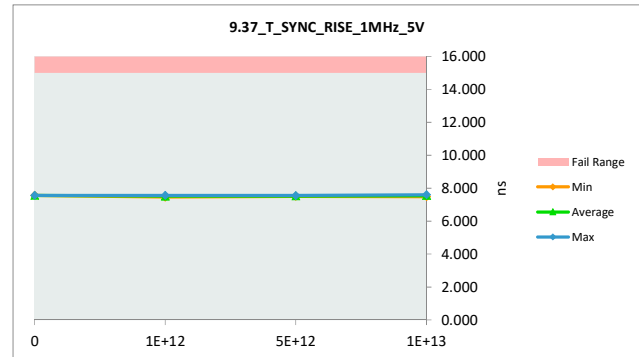


NDD Characterization Report TPS7H5005-SEP

9.37_T_SYNC_RISE_1MHz_5V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.276	7.562	0.286
1E+12	1	7.239	7.526	0.287
1E+12	2	7.241	7.562	0.321
1E+12	3	7.160	7.457	0.297
5E+12	4	7.234	7.554	0.320
5E+12	5	7.238	7.517	0.279
5E+12	6	7.232	7.502	0.270
1E+13	7	7.285	7.592	0.307
1E+13	8	7.266	7.559	0.293
1E+13	9	7.214	7.485	0.271
Max		7.285	7.592	0.321
Average		7.238	7.532	0.293
Min		7.160	7.457	0.270
Std Dev		0.035	0.042	0.018

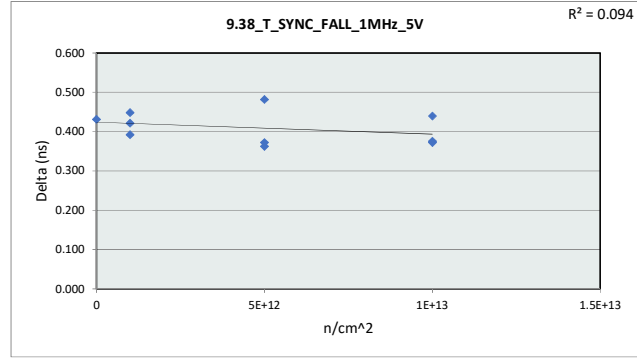


9.37_T_SYNC_RISE_1MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.562	7.457	7.502	7.485
Average	7.562	7.515	7.524	7.545
Max	7.562	7.562	7.554	7.592
UL	15.000	15.000	15.000	15.000

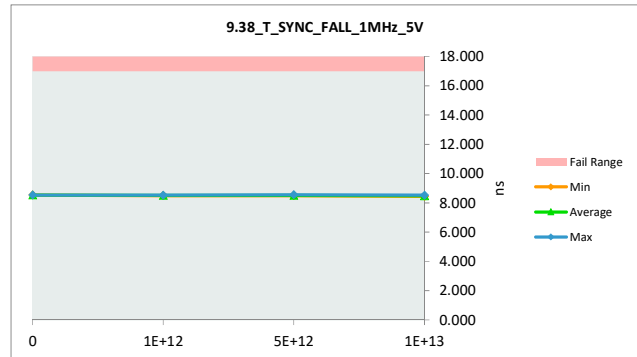


NDD Characterization Report TPS7H5005-SEP

9.38_T_SYNC_FALL_1MHz_5V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.097	8.528	0.431
1E+12	1	8.069	8.517	0.448
1E+12	2	8.099	8.520	0.421
1E+12	3	8.101	8.493	0.392
5E+12	4	8.135	8.497	0.362
5E+12	5	8.118	8.490	0.372
5E+12	6	8.065	8.546	0.481
1E+13	7	8.082	8.521	0.439
1E+13	8	8.105	8.477	0.372
1E+13	9	8.061	8.436	0.375
Max		8.135	8.546	0.481
Average		8.093	8.502	0.409
Min		8.061	8.436	0.362
Std Dev		0.024	0.031	0.040

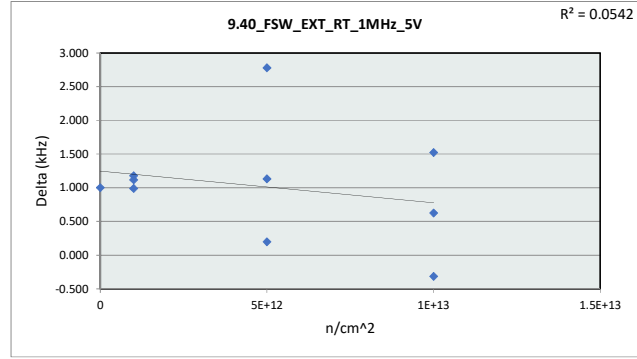


9.38_T_SYNC_FALL_1MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.528	8.493	8.490	8.436
Average	8.528	8.510	8.511	8.478
Max	8.528	8.520	8.546	8.521
UL	17.000	17.000	17.000	17.000

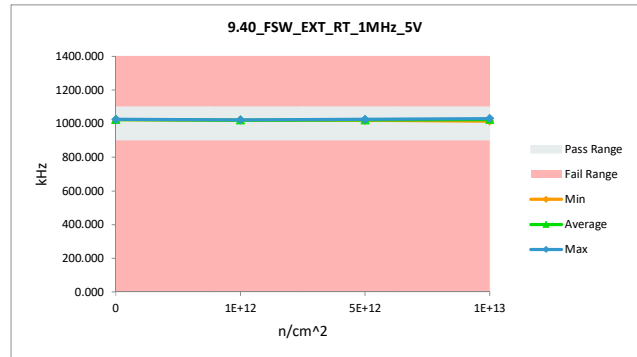


NDD Characterization Report TPS7H5005-SEP

9.40_FSW_EXT_RT_1MHz_5V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		1100	1100	
Min Limit		900	900	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1023.810	1024.808	0.998
1E+12	1	1019.145	1020.322	1.177
1E+12	2	1021.598	1022.715	1.117
1E+12	3	1020.074	1021.061	0.987
5E+12	4	1019.381	1019.577	0.196
5E+12	5	1018.968	1020.097	1.129
5E+12	6	1022.652	1025.428	2.776
1E+13	7	1023.720	1025.241	1.521
1E+13	8	1015.302	1014.985	-0.317
1E+13	9	1030.093	1030.717	0.624
	Max	1030.093	1030.717	2.776
	Average	1021.474	1022.495	1.021
	Min	1015.302	1014.985	-0.317
	Std Dev	3.977	4.302	0.817

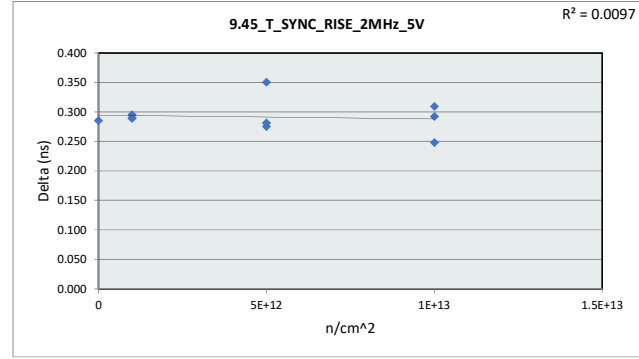


9.40_FSW_EXT_RT_1MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit		1100	kHz	
Min Limit		900	kHz	
n/cm ²	0	1E+12	5E+12	1E+13
LL	900.000	900.000	900.000	900.000
Min	1024.808	1020.322	1019.577	1014.985
Average	1024.808	1021.366	1021.701	1023.648
Max	1024.808	1022.715	1025.428	1030.717
UL	1100.000	1100.000	1100.000	1100.000

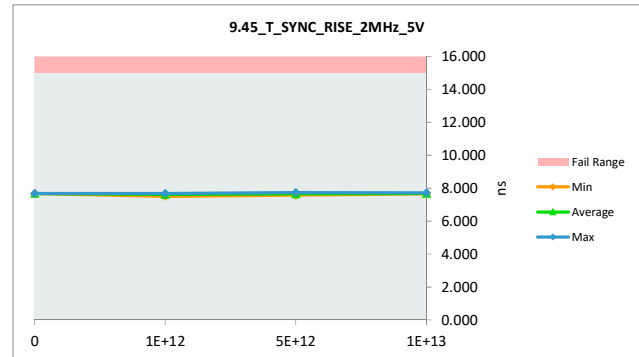


NDD Characterization Report TPS7H5005-SEP

9.45_T_SYNC_RISE_2MHz_5V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.398	7.683	0.285
1E+12	1	7.379	7.668	0.289
1E+12	2	7.386	7.681	0.295
1E+12	3	7.221	7.511	0.290
5E+12	4	7.294	7.569	0.275
5E+12	5	7.387	7.668	0.281
5E+12	6	7.382	7.732	0.350
1E+13	7	7.380	7.672	0.292
1E+13	8	7.405	7.714	0.309
1E+13	9	7.411	7.659	0.248
Max		7.411	7.732	0.350
Average		7.364	7.656	0.291
Min		7.221	7.511	0.248
Std Dev		0.060	0.066	0.026

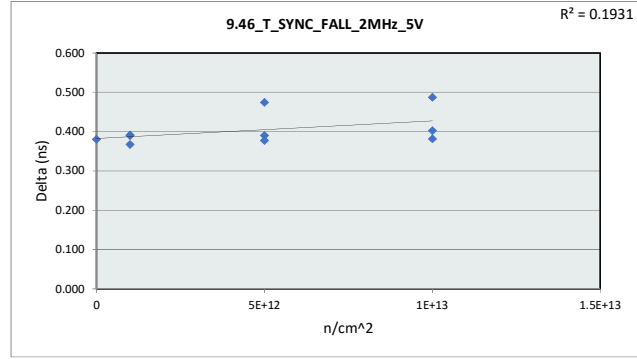


9.45_T_SYNC_RISE_2MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.683	7.511	7.569	7.659
Average	7.683	7.620	7.656	7.682
Max	7.683	7.681	7.732	7.714
UL	15.000	15.000	15.000	15.000

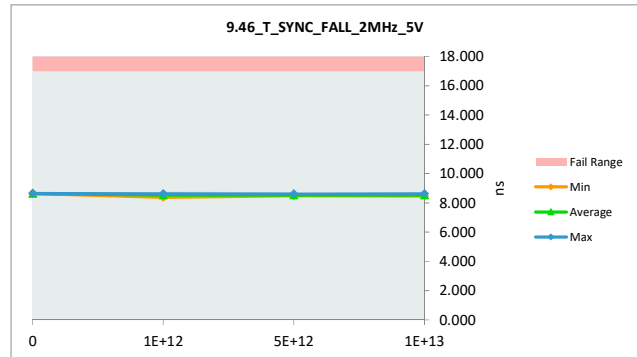


NDD Characterization Report TPS7H5005-SEP

9.46_T_SYNC_FALL_2MHz_5V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.267	8.647	0.380
1E+12	1	8.236	8.626	0.390
1E+12	2	8.197	8.588	0.391
1E+12	3	8.020	8.387	0.367
5E+12	4	8.093	8.483	0.390
5E+12	5	8.229	8.606	0.377
5E+12	6	8.053	8.527	0.474
1E+13	7	8.007	8.494	0.487
1E+13	8	8.091	8.472	0.381
1E+13	9	8.228	8.630	0.402
Max		8.267	8.647	0.487
Average		8.142	8.546	0.404
Min		8.007	8.387	0.367
Std Dev		0.099	0.086	0.042

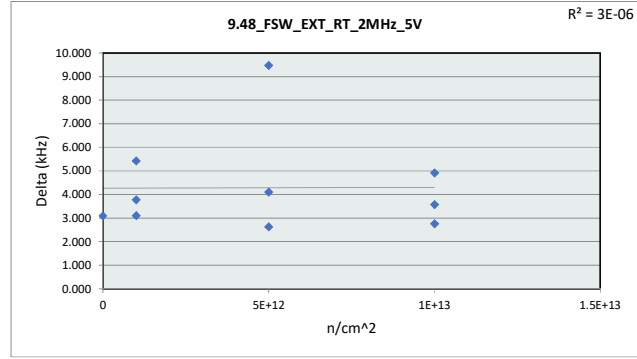


9.46_T_SYNC_FALL_2MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.647	8.387	8.483	8.472
Average	8.647	8.534	8.539	8.532
Max	8.647	8.626	8.606	8.630
UL	17.000	17.000	17.000	17.000

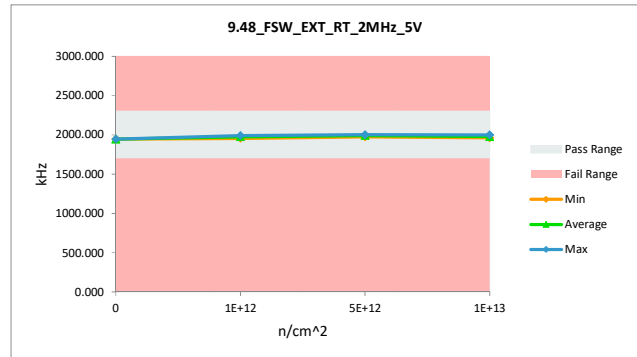


NDD Characterization Report TPS7H5005-SEP

9.48_FSW_EXT_RT_2MHz_5V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		2300	2300	
Min Limit		1700	1700	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1942.645	1945.731	3.086
1E+12	1	1953.163	1956.259	3.096
1E+12	2	1973.671	1979.084	5.413
1E+12	3	1987.549	1991.321	3.772
5E+12	4	1994.683	1997.309	2.626
5E+12	5	1970.293	1974.385	4.092
5E+12	6	1993.000	2002.465	9.465
1E+13	7	1994.736	1998.305	3.569
1E+13	8	1967.317	1970.068	2.751
1E+13	9	1956.380	1961.286	4.906
Max		1994.736	2002.465	9.465
Average		1973.344	1977.621	4.278
Min		1942.645	1945.731	2.626
Std Dev		18.810	19.523	2.035

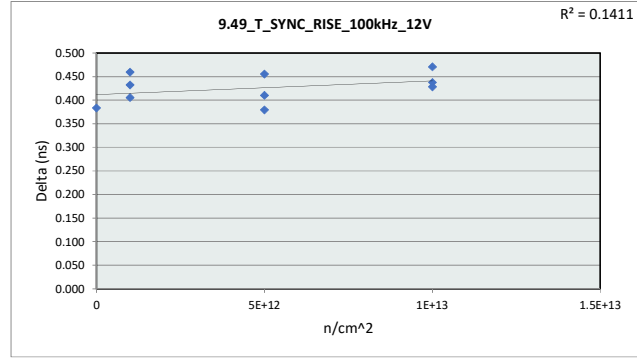


9.48_FSW_EXT_RT_2MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit		2300	kHz	
Min Limit		1700	kHz	
n/cm ²	0	1E+12	5E+12	1E+13
LL	1700.000	1700.000	1700.000	1700.000
Min	1945.731	1956.259	1974.385	1961.286
Average	1945.731	1975.555	1991.386	1976.553
Max	1945.731	1991.321	2002.465	1998.305
UL	2300.000	2300.000	2300.000	2300.000

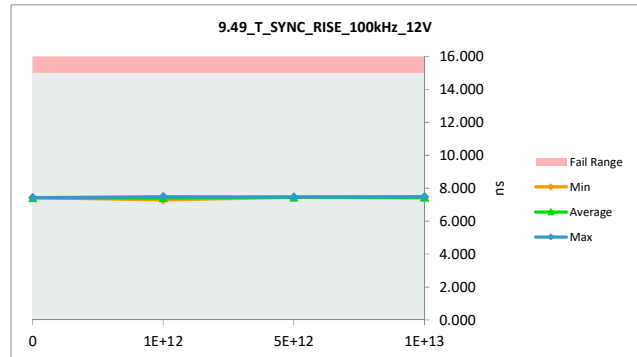


NDD Characterization Report TPS7H5005-SEP

9.49_T_SYNC_RISE_100kHz_12V				
Test Site				
Tester				
Test Number				
Unit		ns		ns
Max Limit		15		15
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.042	7.425	0.383
1E+12	1	7.002	7.461	0.459
1E+12	2	7.085	7.490	0.405
1E+12	3	6.849	7.281	0.432
5E+12	4	7.060	7.439	0.379
5E+12	5	7.010	7.465	0.455
5E+12	6	7.043	7.453	0.410
1E+13	7	7.056	7.484	0.428
1E+13	8	7.031	7.468	0.437
1E+13	9	6.937	7.407	0.470
Max		7.085	7.490	0.470
Average		7.012	7.437	0.426
Min		6.849	7.281	0.379
Std Dev		0.070	0.061	0.031

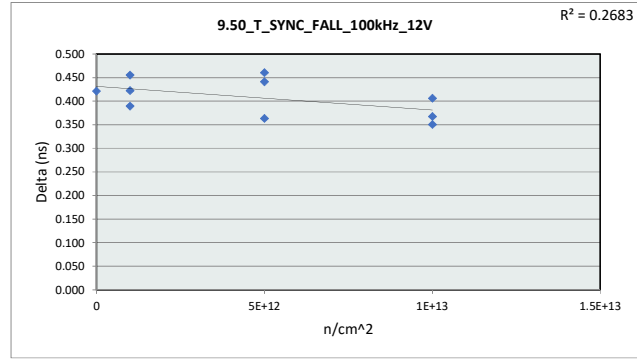


9.49_T_SYNC_RISE_100kHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	15		ns	
Min Limit			ns	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.425	7.281	7.439	7.407
Average	7.425	7.411	7.452	7.453
Max	7.425	7.490	7.465	7.484
UL	15.000	15.000	15.000	15.000

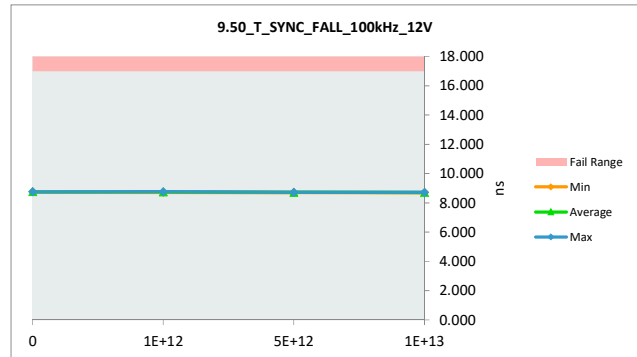


NDD Characterization Report TPS7H5005-SEP

9.50_T_SYNC_FALL_100kHz_12V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.338	8.759	0.421
1E+12	1	8.307	8.762	0.455
1E+12	2	8.325	8.714	0.389
1E+12	3	8.317	8.739	0.422
5E+12	4	8.338	8.701	0.363
5E+12	5	8.281	8.722	0.441
5E+12	6	8.259	8.719	0.460
1E+13	7	8.343	8.693	0.350
1E+13	8	8.312	8.718	0.406
1E+13	9	8.335	8.702	0.367
Max		8.343	8.762	0.460
Average		8.316	8.723	0.407
Min		8.259	8.693	0.350
Std Dev		0.027	0.024	0.039

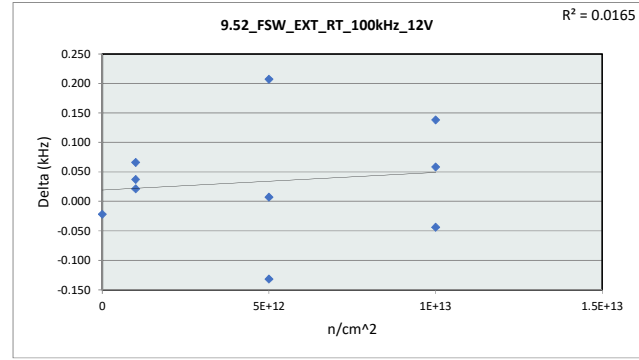


9.50_T_SYNC_FALL_100kHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.759	8.714	8.701	8.693
Average	8.759	8.738	8.714	8.704
Max	8.759	8.762	8.722	8.718
UL	17.000	17.000	17.000	17.000

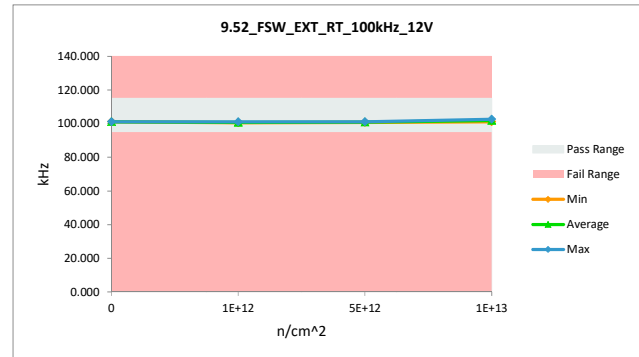


NDD Characterization Report TPS7H5005-SEP

9.52_FSW_EXT_RT_100kHz_12V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		115	115	
Min Limit		95	95	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	101.198	101.176	-0.022
1E+12	1	100.556	100.577	0.021
1E+12	2	100.748	100.814	0.066
1E+12	3	101.016	101.053	0.037
5E+12	4	101.076	100.944	-0.132
5E+12	5	101.160	101.167	0.007
5E+12	6	100.556	100.763	0.207
1E+13	7	101.909	102.047	0.138
1E+13	8	101.185	101.141	-0.044
1E+13	9	102.559	102.617	0.058
	Max	102.559	102.617	0.207
	Average	101.196	101.230	0.034
	Min	100.556	100.577	-0.132
	Std Dev	0.618	0.627	0.094

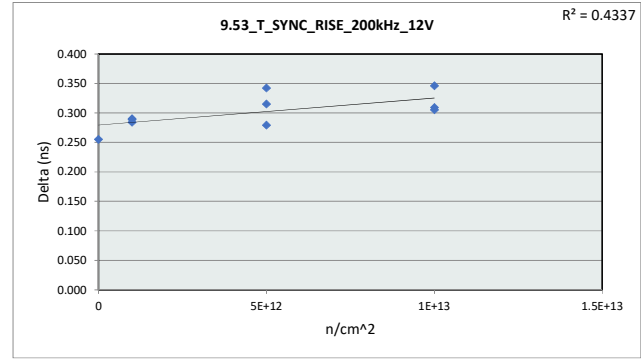


9.52_FSW_EXT_RT_100kHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	115	kHz		
Min Limit	95	kHz		
n/cm ²	0	1E+12	5E+12	1E+13
LL	95.000	95.000	95.000	95.000
Min	101.176	100.577	100.763	101.141
Average	101.176	100.815	100.958	101.935
Max	101.176	101.053	101.167	102.617
UL	115.000	115.000	115.000	115.000

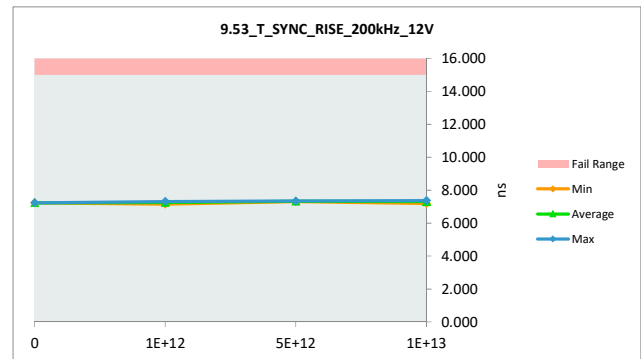


NDD Characterization Report TPS7H5005-SEP

9.53_T_SYNC_RISE_200kHz_12V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.981	7.236	0.255
1E+12	1	7.023	7.313	0.290
1E+12	2	7.017	7.301	0.284
1E+12	3	6.863	7.152	0.289
5E+12	4	6.996	7.338	0.342
5E+12	5	7.008	7.323	0.315
5E+12	6	7.031	7.310	0.279
1E+13	7	7.068	7.373	0.305
1E+13	8	7.034	7.343	0.309
1E+13	9	6.838	7.184	0.346
Max		7.068	7.373	0.346
Average		6.986	7.287	0.301
Min		6.838	7.152	0.255
Std Dev		0.075	0.072	0.028

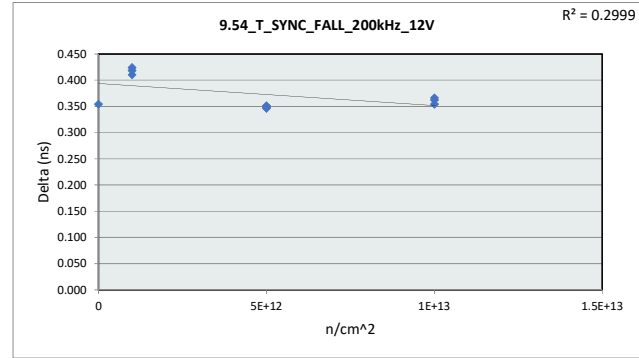


9.53_T_SYNC_RISE_200kHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.236	7.152	7.310	7.184
Average	7.236	7.255	7.324	7.300
Max	7.236	7.313	7.338	7.373
UL	15.000	15.000	15.000	15.000

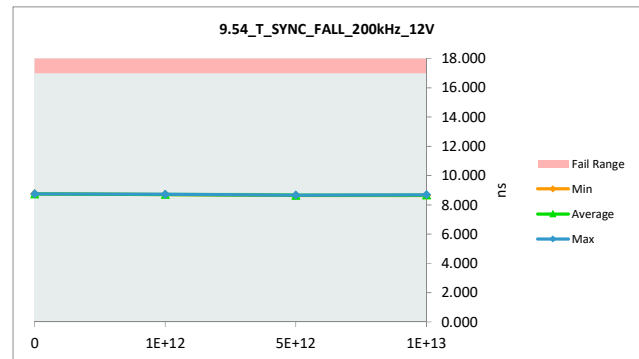


NDD Characterization Report TPS7H5005-SEP

9.54_T_SYNC_FALL_200kHz_12V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.388	8.742	0.354
1E+12	1	8.299	8.717	0.418
1E+12	2	8.280	8.704	0.424
1E+12	3	8.296	8.706	0.410
5E+12	4	8.319	8.667	0.348
5E+12	5	8.308	8.659	0.351
5E+12	6	8.286	8.632	0.346
1E+13	7	8.294	8.660	0.366
1E+13	8	8.283	8.637	0.354
1E+13	9	8.323	8.685	0.362
Max		8.388	8.742	0.424
Average		8.308	8.681	0.373
Min		8.280	8.632	0.346
Std Dev		0.032	0.036	0.031

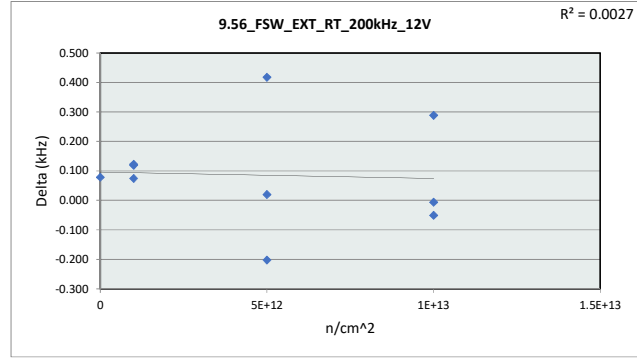


9.54_T_SYNC_FALL_200kHz_1				
Test Site				
Tester				
Test Number				
Max Limit		17	ns	
Min Limit			ns	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.742	8.704	8.632	8.637
Average	8.742	8.709	8.653	8.661
Max	8.742	8.717	8.667	8.685
UL	17.000	17.000	17.000	17.000

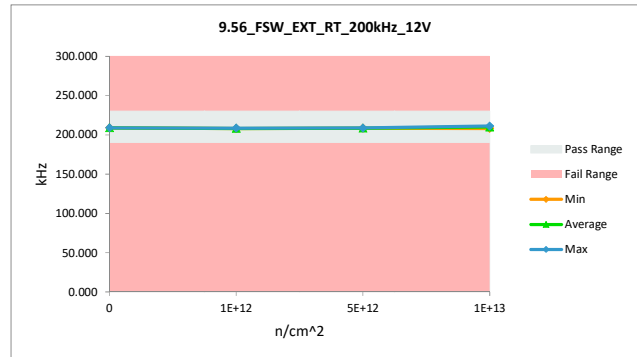


NDD Characterization Report TPS7H5005-SEP

9.56_FSW_EXT_RT_200kHz_12V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		230	230	
Min Limit		190	190	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	208.805	208.883	0.078
1E+12	1	207.845	207.919	0.074
1E+12	2	208.213	208.332	0.119
1E+12	3	208.475	208.597	-0.122
5E+12	4	208.628	208.425	-0.203
5E+12	5	208.476	208.495	0.019
5E+12	6	208.226	208.643	0.417
1E+13	7	210.123	210.411	0.288
1E+13	8	208.305	208.298	-0.007
1E+13	9	211.238	211.187	-0.051
Max		211.238	211.187	0.417
Average		208.833	208.919	0.086
Min		207.845	207.919	-0.203
Std Dev		1.041	1.038	0.173

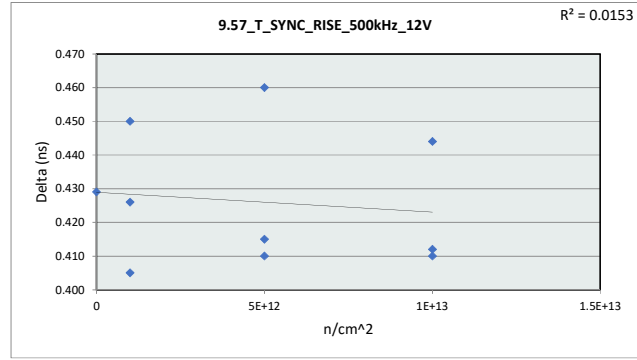


9.56_FSW_EXT_RT_200kHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	230	kHz		
Min Limit	190	kHz		
n/cm ²	0	1E+12	5E+12	1E+13
LL	190.000	190.000	190.000	190.000
Min	208.883	207.919	208.425	208.298
Average	208.883	208.283	208.521	209.965
Max	208.883	208.597	208.643	211.187
UL	230.000	230.000	230.000	230.000

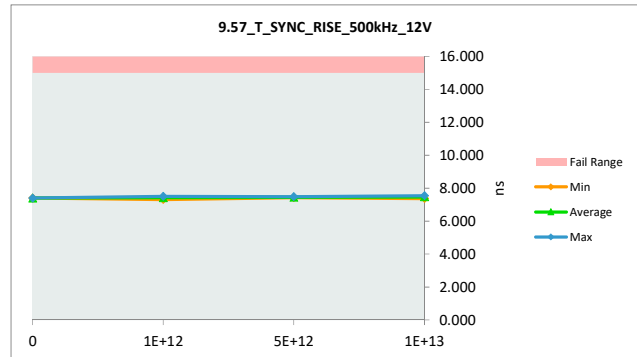


NDD Characterization Report TPS7H5005-SEP

9.57_T_SYNC_RISE_500kHz_12V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.973	7.402	0.429
1E+12	1	7.008	7.434	0.426
1E+12	2	7.053	7.503	0.450
1E+12	3	6.913	7.318	0.405
5E+12	4	7.012	7.422	0.410
5E+12	5	7.020	7.435	0.415
5E+12	6	7.022	7.482	0.460
1E+13	7	7.123	7.535	0.412
1E+13	8	7.072	7.516	0.444
1E+13	9	6.963	7.373	0.410
Max		7.123	7.535	0.460
Average		7.016	7.442	0.426
Min		6.913	7.318	0.405
Std Dev		0.059	0.068	0.019

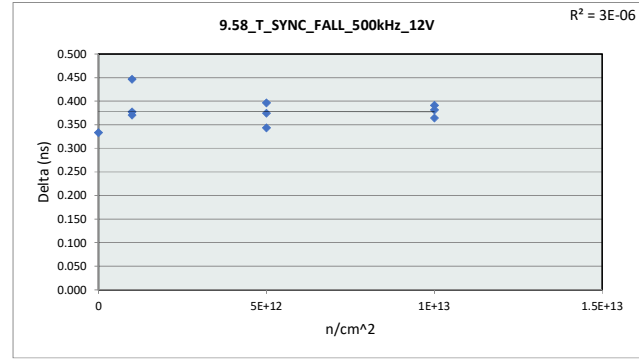


9.57_T_SYNC_RISE_500kHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.402	7.318	7.422	7.373
Average	7.402	7.418	7.446	7.475
Max	7.402	7.503	7.482	7.535
UL	15.000	15.000	15.000	15.000

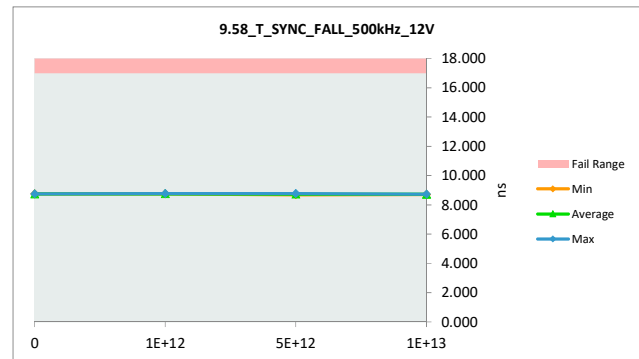


NDD Characterization Report TPS7H5005-SEP

9.58_T_SYNC_FALL_500kHz_12V				
Test Site				
Tester				
Test Number				
Unit		ns		ns
Max Limit		17		17
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.416	8.749	0.333
1E+12	1	8.371	8.741	0.370
1E+12	2	8.324	8.770	0.446
1E+12	3	8.369	8.746	0.377
5E+12	4	8.377	8.773	0.396
5E+12	5	8.374	8.717	0.343
5E+12	6	8.317	8.691	0.374
1E+13	7	8.318	8.709	0.391
1E+13	8	8.337	8.718	0.381
1E+13	9	8.368	8.732	0.364
Max		8.416	8.773	0.446
Average		8.357	8.735	0.377
Min		8.317	8.691	0.333
Std Dev		0.032	0.026	0.031

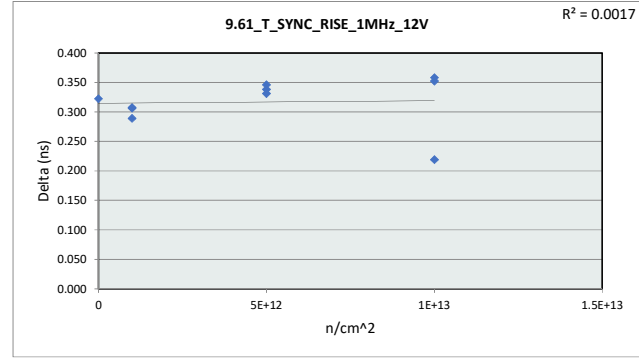


9.58_T_SYNC_FALL_500kHz_1				
Test Site				
Tester				
Test Number				
Max Limit		17		ns
Min Limit				ns
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.749	8.741	8.691	8.709
Average	8.749	8.752	8.727	8.720
Max	8.749	8.770	8.773	8.732
UL	17.000	17.000	17.000	17.000

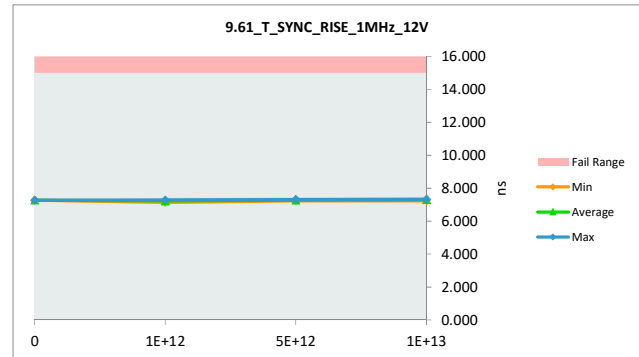


NDD Characterization Report TPS7H5005-SEP

9.61_T_SYNC_RISE_1MHz_12V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.949	7.271	0.322
1E+12	1	6.939	7.245	0.306
1E+12	2	6.994	7.283	0.289
1E+12	3	6.836	7.143	0.307
5E+12	4	6.945	7.276	0.331
5E+12	5	6.894	7.232	0.338
5E+12	6	6.971	7.317	0.346
1E+13	7	7.075	7.294	0.219
1E+13	8	6.979	7.331	0.352
1E+13	9	6.880	7.238	0.358
Max		7.075	7.331	0.358
Average		6.946	7.263	0.317
Min		6.836	7.143	0.219
Std Dev		0.067	0.053	0.041

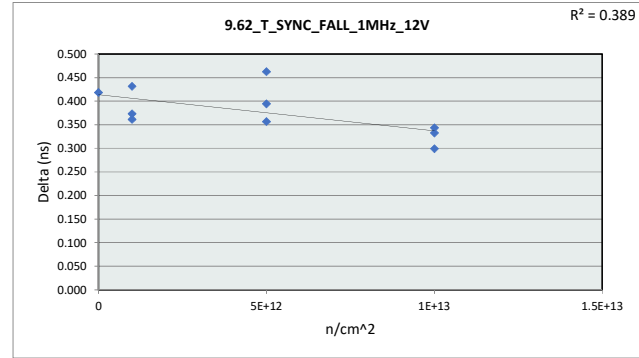


9.61_T_SYNC_RISE_1MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.271	7.143	7.232	7.238
Average	7.271	7.224	7.275	7.288
Max	7.271	7.283	7.317	7.331
UL	15.000	15.000	15.000	15.000

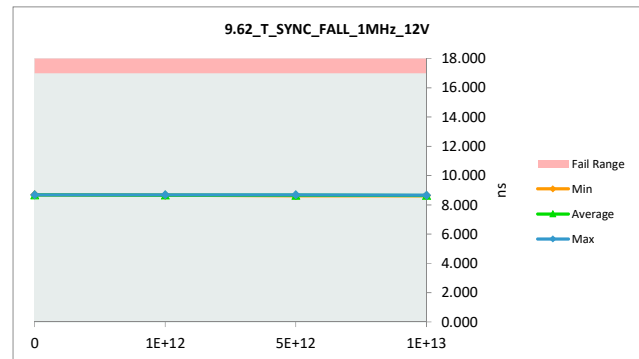


NDD Characterization Report TPS7H5005-SEP

9.62_T_SYNC_FALL_1MHz_12V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.259	8.677	0.418
1E+12	1	8.286	8.647	0.361
1E+12	2	8.251	8.682	0.431
1E+12	3	8.301	8.674	0.373
5E+12	4	8.262	8.656	0.394
5E+12	5	8.269	8.625	0.356
5E+12	6	8.215	8.677	0.462
1E+13	7	8.322	8.621	0.299
1E+13	8	8.308	8.651	0.343
1E+13	9	8.292	8.624	0.332
Max		8.322	8.682	0.462
Average		8.276	8.653	0.377
Min		8.215	8.621	0.299
Std Dev		0.032	0.024	0.050

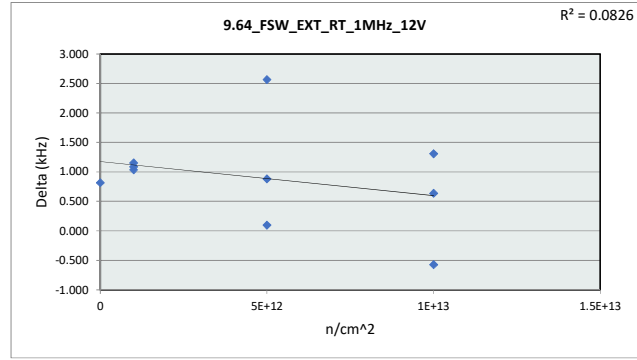


9.62_T_SYNC_FALL_1MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.677	8.647	8.625	8.621
Average	8.677	8.668	8.653	8.632
Max	8.677	8.682	8.677	8.651
UL	17.000	17.000	17.000	17.000

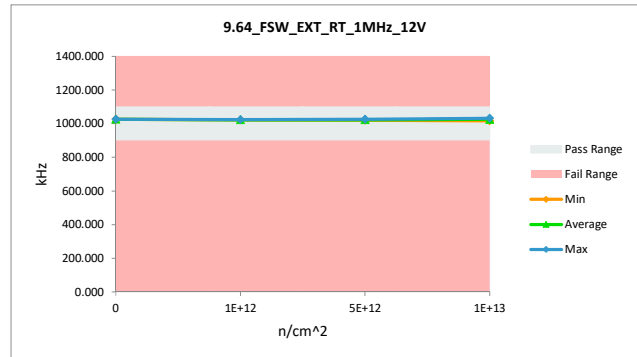


NDD Characterization Report TPS7H5005-SEP

9.64_FSW_EXT_RT_1MHz_12V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		1100	1100	
Min Limit		900	900	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1025.604	1026.418	0.814
1E+12	1	1020.594	1021.679	1.085
1E+12	2	1022.845	1023.993	1.148
1E+12	3	1021.454	1022.487	1.033
5E+12	4	1020.502	1020.595	0.093
5E+12	5	1020.426	1021.305	0.879
5E+12	6	1024.074	1026.638	2.564
1E+13	7	1024.936	1026.242	1.306
1E+13	8	1016.722	1016.145	-0.577
1E+13	9	1031.876	1032.510	0.634
Max		1031.876	1032.510	2.564
Average		1022.903	1023.801	0.898
Min		1016.722	1016.145	-0.577
Std Dev		4.094	4.448	0.814

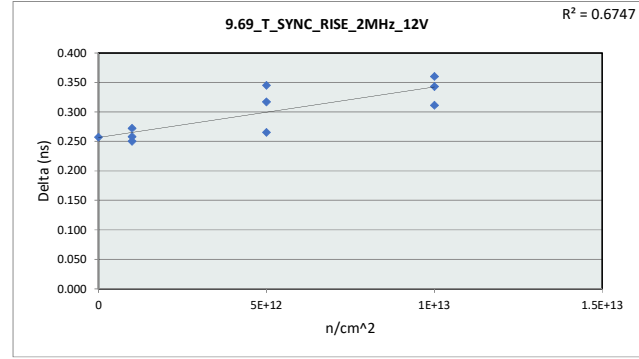


9.64_FSW_EXT_RT_1MHz_12V					
Test Site					
Tester					
Test Number					
Max Limit		1100	kHz		
Min Limit		900	kHz		
n/cm^2	0	1E+12	5E+12	1E+13	
LL	900.000	900.000	900.000	900.000	
Min	1026.418	1021.679	1020.595	1016.145	
Average	1026.418	1022.720	1022.846	1024.966	
Max	1026.418	1023.993	1026.638	1032.510	
UL	1100.000	1100.000	1100.000	1100.000	

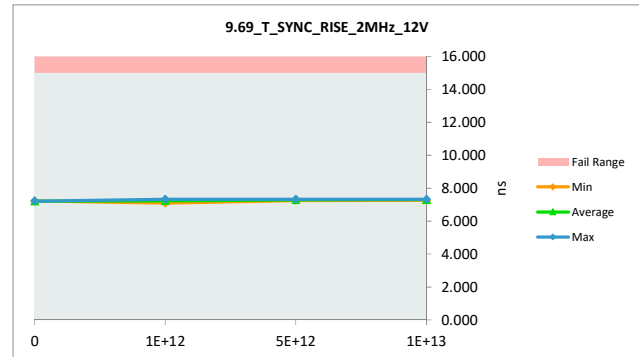


NDD Characterization Report TPS7H5005-SEP

9.69_T_SYNC_RISE_2MHz_12V				
Test Site				
Tester				
Test Number				
Unit		ns		ns
Max Limit		15		15
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.963	7.220	0.257
1E+12	1	7.075	7.333	0.258
1E+12	2	7.031	7.281	0.250
1E+12	3	6.826	7.098	0.272
5E+12	4	6.936	7.253	0.317
5E+12	5	7.011	7.276	0.265
5E+12	6	6.988	7.333	0.345
1E+13	7	6.981	7.324	0.343
1E+13	8	7.016	7.327	0.311
1E+13	9	6.904	7.264	0.360
Max		7.075	7.333	0.360
Average		6.973	7.271	0.298
Min		6.826	7.098	0.250
Std Dev		0.071	0.072	0.042

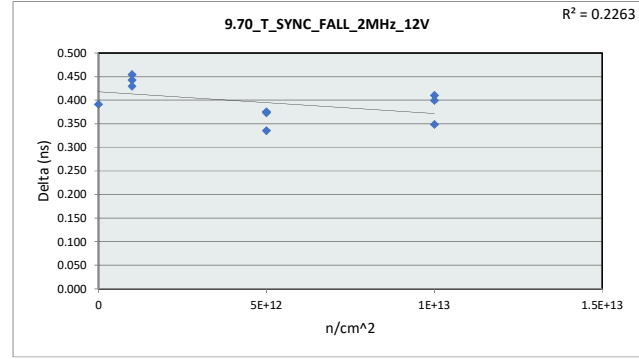


9.69_T_SYNC_RISE_2MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit		15		ns
Min Limit				ns
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.220	7.098	7.253	7.264
Average	7.220	7.237	7.287	7.305
Max	7.220	7.333	7.333	7.327
UL	15.000	15.000	15.000	15.000

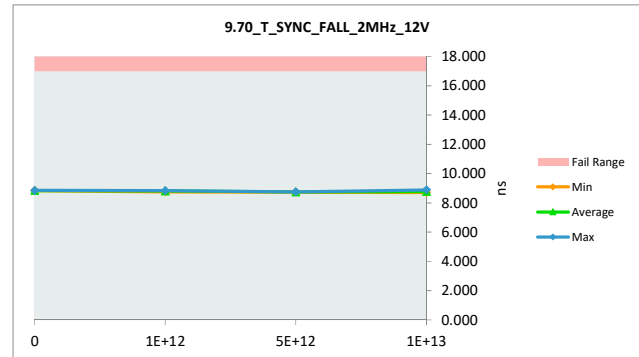


NDD Characterization Report TPS7H5005-SEP

9.70_T_SYNC_FALL_2MHz_12V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.456	8.847	0.391
1E+12	1	8.396	8.838	0.442
1E+12	2	8.324	8.753	0.429
1E+12	3	8.362	8.816	0.454
5E+12	4	8.398	8.733	0.335
5E+12	5	8.385	8.758	0.373
5E+12	6	8.372	8.747	0.375
1E+13	7	8.362	8.710	0.348
1E+13	8	8.320	8.719	0.399
1E+13	9	8.471	8.881	0.410
Max		8.471	8.881	0.454
Average		8.385	8.780	0.396
Min		8.320	8.710	0.335
Std Dev		0.049	0.060	0.039

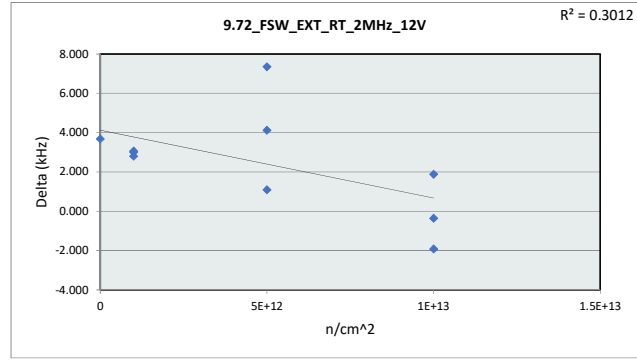


9.70_T_SYNC_FALL_2MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.847	8.753	8.733	8.710
Average	8.847	8.802	8.746	8.770
Max	8.847	8.838	8.758	8.881
UL	17.000	17.000	17.000	17.000

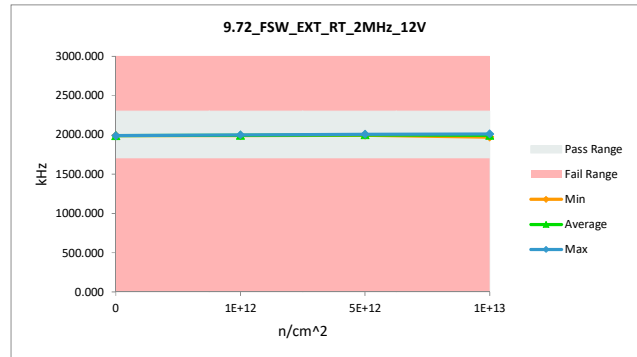


NDD Characterization Report TPS7H5005-SEP

9.72_FSW_EXT_RT_2MHz_12V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		2300	2300	
Min Limit		1700	1700	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1986.278	1989.950	3.672
1E+12	1	1985.796	1988.796	3.000
1E+12	2	1997.290	2000.080	2.790
1E+12	3	1990.749	1993.803	3.054
5E+12	4	1995.206	1996.290	1.084
5E+12	5	1991.538	1995.647	4.109
5E+12	6	1998.501	2005.847	7.346
1E+13	7	1995.963	1997.839	1.876
1E+13	8	1973.646	1971.718	-1.928
1E+13	9	2012.097	2011.729	-0.368
	Max	2012.097	2011.729	7.346
	Average	1992.706	1995.170	2.463
	Min	1973.646	1971.718	-1.928
	Std Dev	10.028	10.753	2.545

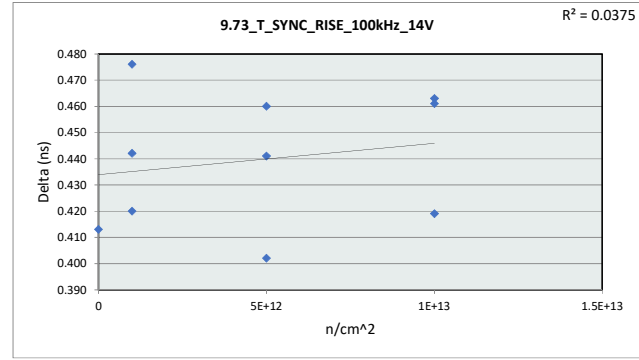


9.72_FSW_EXT_RT_2MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit		2300	kHz	
Min Limit		1700	kHz	
n/cm^2	0	1E+12	5E+12	1E+13
LL	1700.000	1700.000	1700.000	1700.000
Min	1989.950	1988.796	1995.647	1971.718
Average	1989.950	1994.226	1999.261	1993.762
Max	1989.950	2000.080	2005.847	2011.729
UL	2300.000	2300.000	2300.000	2300.000

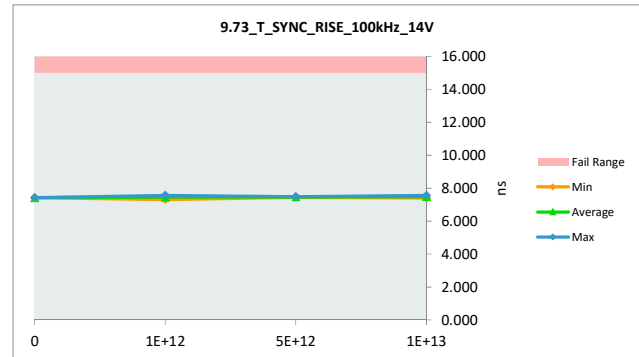


NDD Characterization Report TPS7H5005-SEP

9.73_T_SYNC_RISE_100kHz_14V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.013	7.426	0.413
1E+12	1	7.025	7.467	0.442
1E+12	2	7.095	7.571	0.476
1E+12	3	6.897	7.317	0.420
5E+12	4	7.008	7.468	0.460
5E+12	5	7.010	7.451	0.441
5E+12	6	7.084	7.486	0.402
1E+13	7	7.045	7.508	0.463
1E+13	8	7.101	7.562	0.461
1E+13	9	6.976	7.395	0.419
Max		7.101	7.571	0.476
Average		7.025	7.465	0.440
Min		6.897	7.317	0.402
Std Dev		0.061	0.076	0.025

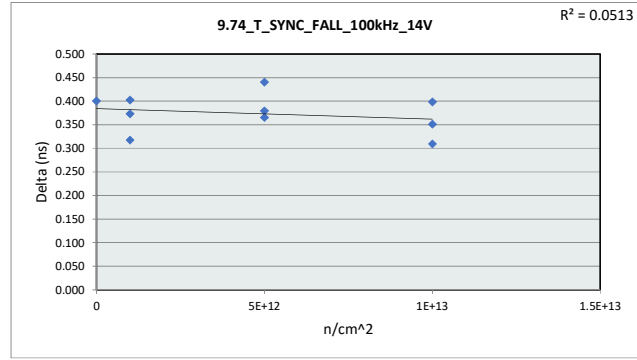


9.73_T_SYNC_RISE_100kHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.426	7.317	7.451	7.395
Average	7.426	7.452	7.468	7.488
Max	7.426	7.571	7.486	7.562
UL	15.000	15.000	15.000	15.000

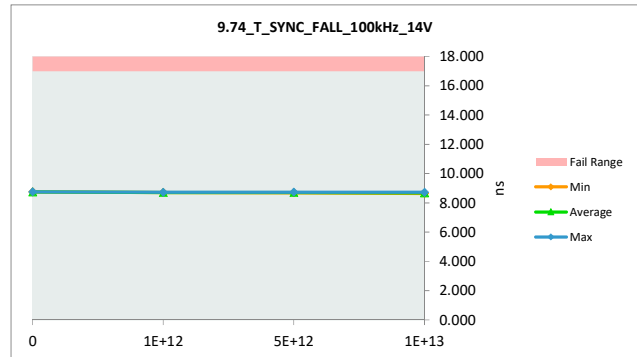


NDD Characterization Report TPS7H5005-SEP

9.74_T_SYNC_FALL_100kHz_14V				
Test Site				
Tester				
Test Number				
Unit		ns		ns
Max Limit		17		17
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.343	8.743	0.400
1E+12	1	8.327	8.700	0.373
1E+12	2	8.320	8.722	0.402
1E+12	3	8.388	8.705	0.317
5E+12	4	8.322	8.701	0.379
5E+12	5	8.359	8.724	0.365
5E+12	6	8.254	8.694	0.440
1E+13	7	8.285	8.636	0.351
1E+13	8	8.362	8.671	0.309
1E+13	9	8.322	8.720	0.398
Max		8.388	8.743	0.440
Average		8.328	8.702	0.373
Min		8.254	8.636	0.309
Std Dev		0.039	0.030	0.040

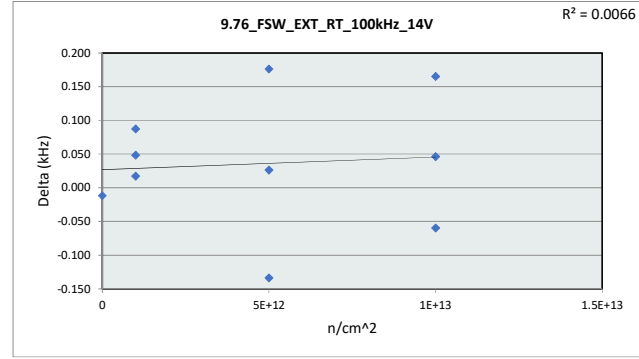


9.74_T_SYNC_FALL_100kHz_14V				
Test Site				
Tester				
Test Number				
Max Limit		17		ns
Min Limit				ns
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.743	8.700	8.694	8.636
Average	8.743	8.709	8.706	8.676
Max	8.743	8.722	8.724	8.720
UL	17.000	17.000	17.000	17.000

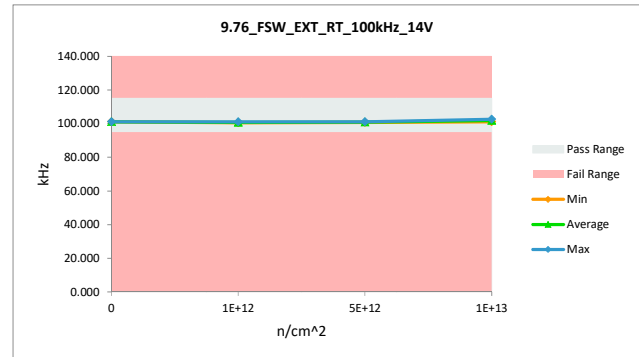


NDD Characterization Report TPS7H5005-SEP

9.76_FSW_EXT_RT_100kHz_14V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		115	115	
Min Limit		95	95	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	101.200	101.188	-0.012
1E+12	1	100.530	100.578	0.048
1E+12	2	100.712	100.799	0.087
1E+12	3	100.993	101.010	0.017
5E+12	4	101.076	100.942	-0.134
5E+12	5	101.139	101.165	0.026
5E+12	6	100.572	100.748	0.176
1E+13	7	101.897	102.062	0.165
1E+13	8	101.191	101.131	-0.060
1E+13	9	102.581	102.627	0.046
Max		102.581	102.627	0.176
Average		101.189	101.225	0.036
Min		100.530	100.578	-0.134
Std Dev		0.627	0.635	0.094

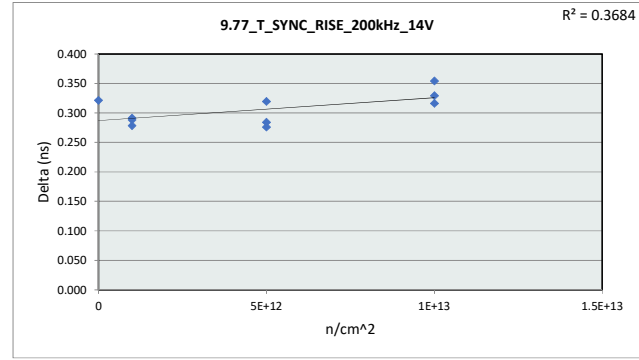


9.76_FSW_EXT_RT_100kHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	115	kHz		
Min Limit	95	kHz		
n/cm ²	0	1E+12	5E+12	1E+13
LL	95.000	95.000	95.000	95.000
Min	101.188	100.578	100.748	101.131
Average	101.188	100.796	100.952	101.940
Max	101.188	101.010	101.165	102.627
UL	115.000	115.000	115.000	115.000

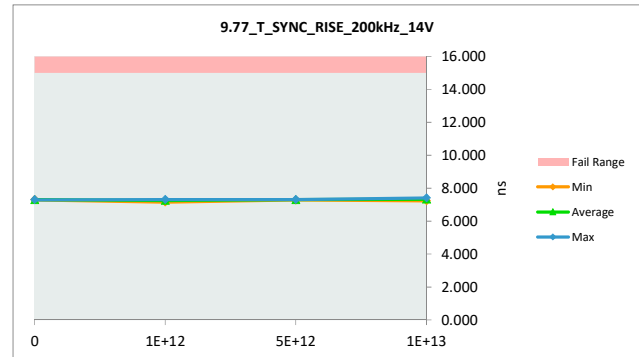


NDD Characterization Report TPS7H5005-SEP

9.77_T_SYNC_RISE_200kHz_14V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.978	7.299	0.321
1E+12	1	6.999	7.290	0.291
1E+12	2	7.025	7.313	0.288
1E+12	3	6.885	7.163	0.278
5E+12	4	7.002	7.321	0.319
5E+12	5	7.003	7.279	0.276
5E+12	6	7.021	7.305	0.284
1E+13	7	7.081	7.410	0.329
1E+13	8	7.043	7.359	0.316
1E+13	9	6.878	7.232	0.354
Max		7.081	7.410	0.354
Average		6.991	7.297	0.306
Min		6.878	7.163	0.276
Std Dev		0.064	0.067	0.026

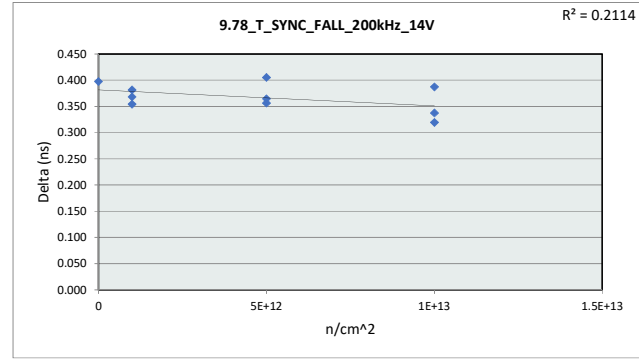


9.77_T_SYNC_RISE_200kHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.299	7.163	7.279	7.232
Average	7.299	7.255	7.302	7.334
Max	7.299	7.313	7.321	7.410
UL	15.000	15.000	15.000	15.000

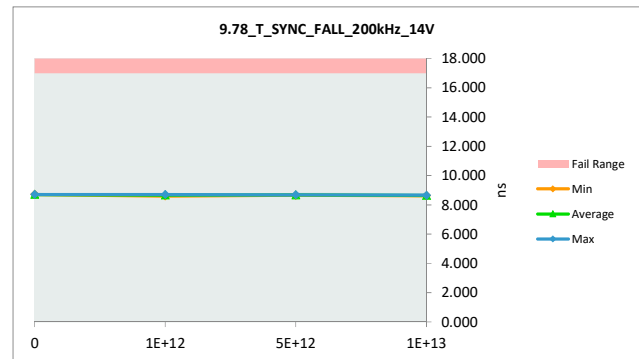


NDD Characterization Report TPS7H5005-SEP

9.78_T_SYNC_FALL_200kHz_14V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.317	8.714	0.397
1E+12	1	8.319	8.673	0.354
1E+12	2	8.236	8.604	0.368
1E+12	3	8.323	8.704	0.381
5E+12	4	8.325	8.681	0.356
5E+12	5	8.281	8.686	0.405
5E+12	6	8.289	8.653	0.364
1E+13	7	8.306	8.625	0.319
1E+13	8	8.257	8.644	0.387
1E+13	9	8.319	8.656	0.337
Max		8.325	8.714	0.405
Average		8.297	8.664	0.367
Min		8.236	8.604	0.319
Std Dev		0.031	0.034	0.027

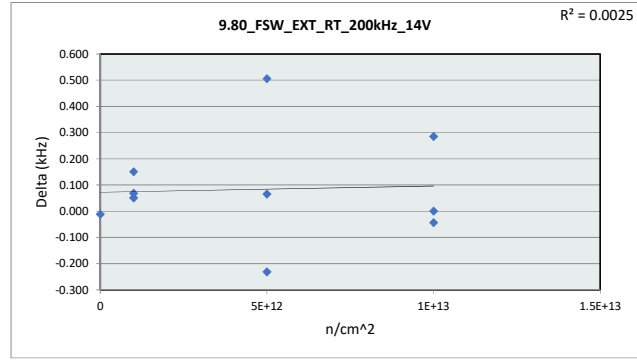


9.78_T_SYNC_FALL_200kHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.714	8.604	8.653	8.625
Average	8.714	8.660	8.673	8.642
Max	8.714	8.704	8.686	8.656
UL	17.000	17.000	17.000	17.000

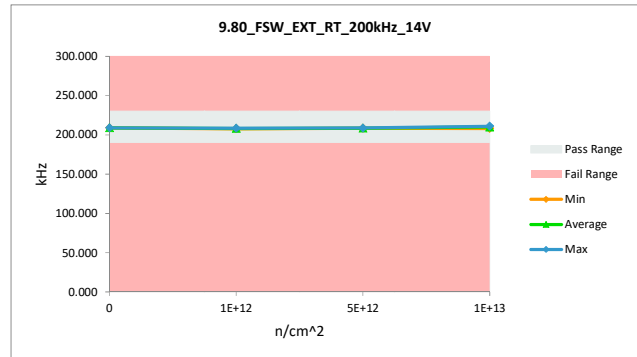


NDD Characterization Report TPS7H5005-SEP

9.80_FSW_EXT_RT_200kHz_14V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		230	230	
Min Limit		190	190	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	208.851	208.839	-0.012
1E+12	1	207.832	207.882	0.050
1E+12	2	208.190	208.340	0.150
1E+12	3	208.493	208.561	0.068
5E+12	4	208.615	208.383	-0.232
5E+12	5	208.431	208.496	0.065
5E+12	6	208.203	208.708	0.505
1E+13	7	210.109	210.394	0.285
1E+13	8	208.312	208.268	-0.044
1E+13	9	211.133	211.133	0.000
Max		211.133	211.133	0.505
Average		208.817	208.900	0.084
Min		207.832	207.882	-0.232
Std Dev		1.018	1.030	0.199

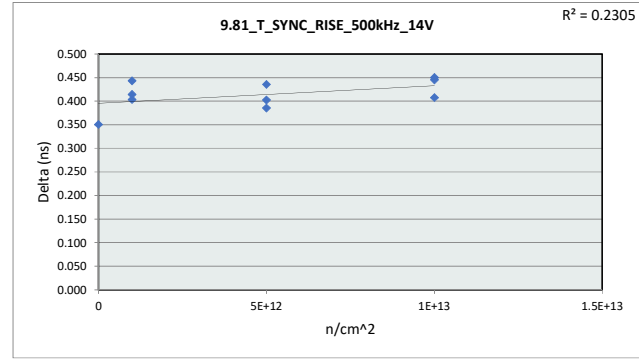


9.80_FSW_EXT_RT_200kHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	230	kHz		
Min Limit	190	kHz		
n/cm ²	0	1E+12	5E+12	1E+13
LL	190.000	190.000	190.000	190.000
Min	208.839	207.882	208.383	208.268
Average	208.839	208.261	208.529	209.932
Max	208.839	208.561	208.708	211.133
UL	230.000	230.000	230.000	230.000

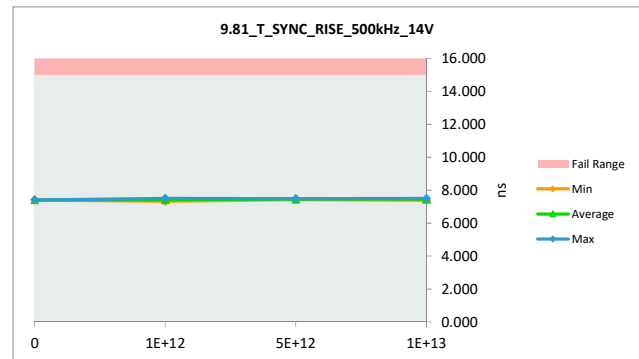


NDD Characterization Report TPS7H5005-SEP

9.81_T_SYNC_RISE_500kHz_14V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.057	7.407	0.350
1E+12	1	7.015	7.429	0.414
1E+12	2	7.060	7.503	0.443
1E+12	3	6.918	7.321	0.403
5E+12	4	7.051	7.436	0.385
5E+12	5	7.032	7.434	0.402
5E+12	6	7.054	7.489	0.435
1E+13	7	7.089	7.496	0.407
1E+13	8	7.053	7.498	0.445
1E+13	9	6.940	7.390	0.450
Max		7.089	7.503	0.450
Average		7.027	7.440	0.413
Min		6.918	7.321	0.350
Std Dev		0.055	0.058	0.031

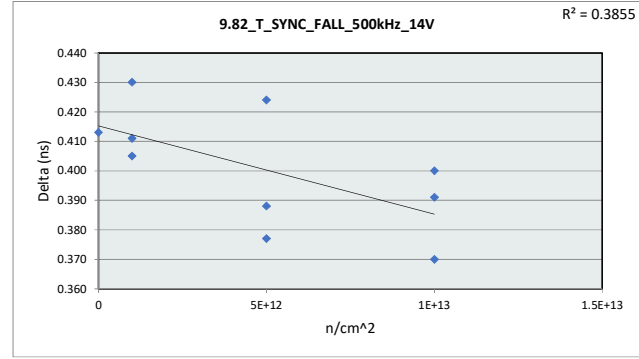


9.81_T_SYNC_RISE_500kHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.407	7.321	7.434	7.390
Average	7.407	7.418	7.453	7.461
Max	7.407	7.503	7.489	7.498
UL	15.000	15.000	15.000	15.000

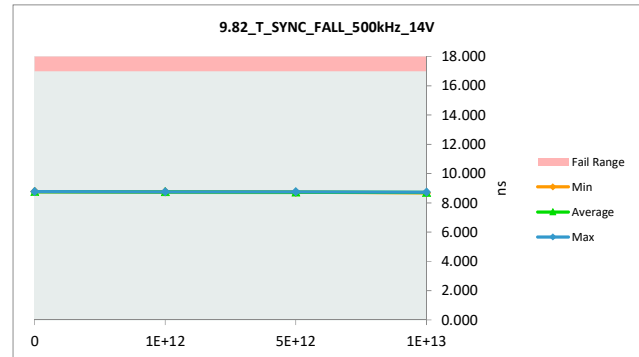


NDD Characterization Report TPS7H5005-SEP

9.82_T_SYNC_FALL_500kHz_14V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.362	8.775	0.413
1E+12	1	8.350	8.755	0.405
1E+12	2	8.318	8.748	0.430
1E+12	3	8.344	8.755	0.411
5E+12	4	8.348	8.736	0.388
5E+12	5	8.333	8.710	0.377
5E+12	6	8.326	8.750	0.424
1E+13	7	8.278	8.678	0.400
1E+13	8	8.317	8.708	0.391
1E+13	9	8.363	8.733	0.370
Max		8.363	8.775	0.430
Average		8.334	8.735	0.401
Min		8.278	8.678	0.370
Std Dev		0.026	0.029	0.020

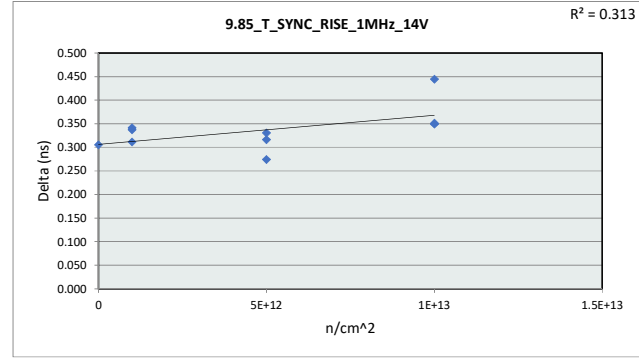


9.82_T_SYNC_FALL_500kHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.775	8.748	8.710	8.678
Average	8.775	8.753	8.732	8.706
Max	8.775	8.755	8.750	8.733
UL	17.000	17.000	17.000	17.000

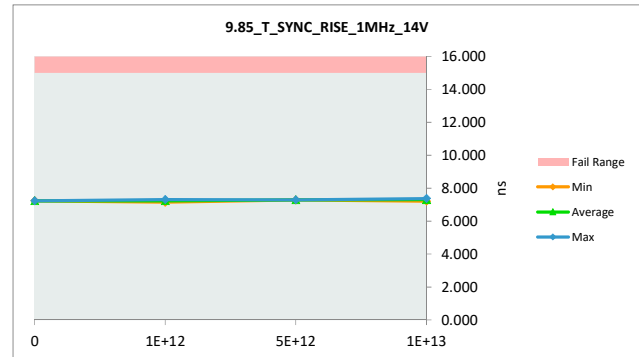


NDD Characterization Report TPS7H5005-SEP

9.85_T_SYNC_RISE_1MHz_14V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.928	7.233	0.305
1E+12	1	6.924	7.261	0.337
1E+12	2	6.998	7.309	0.311
1E+12	3	6.805	7.146	0.341
5E+12	4	6.971	7.287	0.316
5E+12	5	6.955	7.285	0.330
5E+12	6	7.024	7.298	0.274
1E+13	7	6.930	7.374	0.444
1E+13	8	6.970	7.319	0.349
1E+13	9	6.864	7.215	0.351
Max		7.024	7.374	0.444
Average		6.937	7.273	0.336
Min		6.805	7.146	0.274
Std Dev		0.064	0.063	0.045

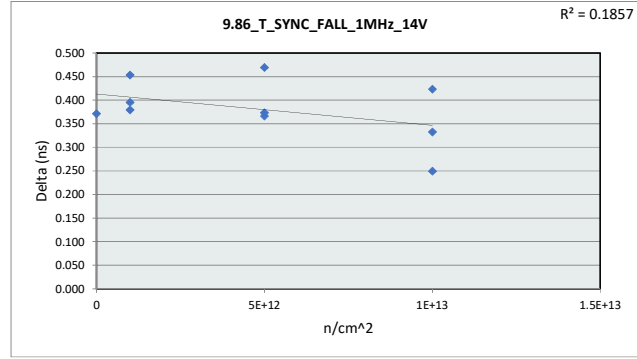


9.85_T_SYNC_RISE_1MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit		15	ns	
Min Limit			ns	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.233	7.146	7.285	7.215
Average	7.233	7.239	7.290	7.303
Max	7.233	7.309	7.298	7.374
UL	15.000	15.000	15.000	15.000

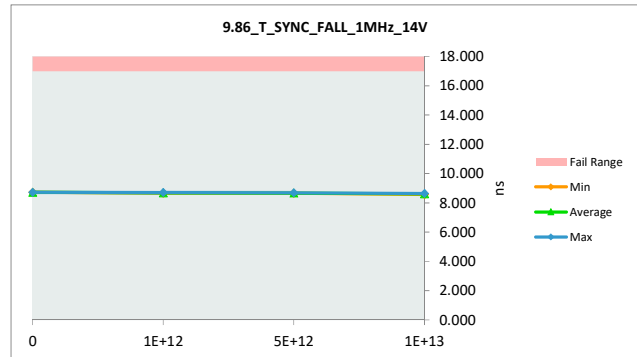


NDD Characterization Report TPS7H5005-SEP

9.86_T_SYNC_FALL_1MHz_14V				
Test Site				
Tester				
Test Number				
Unit		ns		ns
Max Limit		17		17
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.345	8.716	0.371
1E+12	1	8.286	8.665	0.379
1E+12	2	8.256	8.651	0.395
1E+12	3	8.249	8.702	0.453
5E+12	4	8.290	8.656	0.366
5E+12	5	8.275	8.648	0.373
5E+12	6	8.209	8.678	0.469
1E+13	7	8.316	8.565	0.249
1E+13	8	8.213	8.636	0.423
1E+13	9	8.305	8.637	0.332
Max		8.345	8.716	0.469
Average		8.274	8.655	0.381
Min		8.209	8.565	0.249
Std Dev		0.044	0.041	0.062

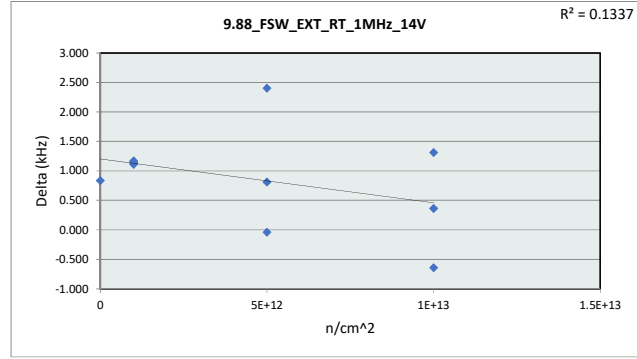


9.86_T_SYNC_FALL_1MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit		17		ns
Min Limit				ns
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	8.716	8.651	8.648	8.565
Average	8.716	8.673	8.661	8.613
Max	8.716	8.702	8.678	8.637
UL	17.000	17.000	17.000	17.000

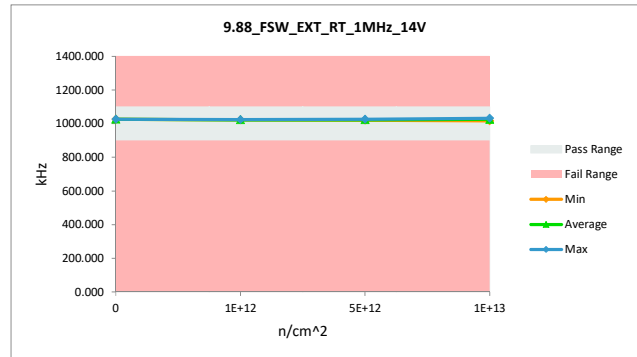


NDD Characterization Report TPS7H5005-SEP

9.88_FSW_EXT_RT_1MHz_14V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		1100	1100	
Min Limit		900	900	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1025.476	1026.308	0.832
1E+12	1	1020.542	1021.683	1.141
1E+12	2	1022.806	1023.971	1.165
1E+12	3	1021.340	1022.452	1.112
5E+12	4	1020.470	1020.429	-0.041
5E+12	5	1020.314	1021.122	0.808
5E+12	6	1024.073	1026.472	2.399
1E+13	7	1024.862	1026.172	1.310
1E+13	8	1016.713	1016.069	-0.644
1E+13	9	1031.939	1032.302	0.363
Max		1031.939	1032.302	2.399
Average		1022.854	1023.698	0.845
Min		1016.713	1016.069	-0.644
Std Dev		4.115	4.421	0.825

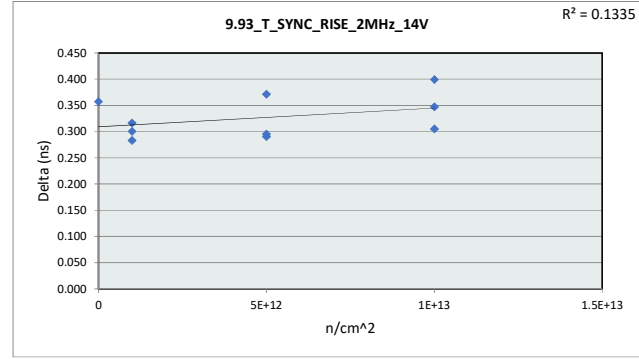


9.88_FSW_EXT_RT_1MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit		1100	kHz	
Min Limit		900	kHz	
n/cm ²	0	1E+12	5E+12	1E+13
LL	900.000	900.000	900.000	900.000
Min	1026.308	1021.683	1020.429	1016.069
Average	1026.308	1022.702	1022.674	1024.848
Max	1026.308	1023.971	1026.472	1032.302
UL	1100.000	1100.000	1100.000	1100.000

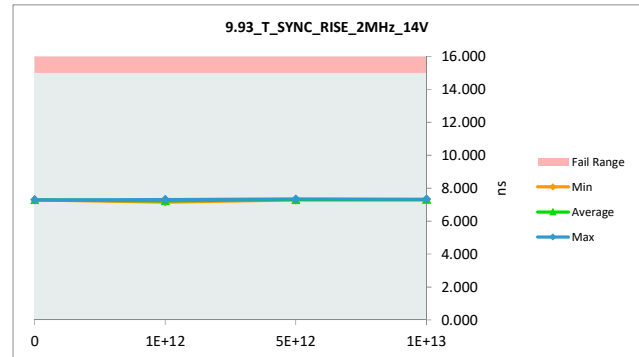


NDD Characterization Report TPS7H5005-SEP

9.93_T_SYNC_RISE_2MHz_14V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		15	15	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.936	7.293	0.357
1E+12	1	6.912	7.212	0.300
1E+12	2	7.039	7.322	0.283
1E+12	3	6.841	7.157	0.316
5E+12	4	6.991	7.281	0.290
5E+12	5	6.986	7.281	0.295
5E+12	6	6.966	7.337	0.371
1E+13	7	6.991	7.338	0.347
1E+13	8	7.010	7.315	0.305
1E+13	9	6.892	7.291	0.399
Max		7.039	7.338	0.399
Average		6.956	7.283	0.326
Min		6.841	7.157	0.283
Std Dev		0.060	0.057	0.040

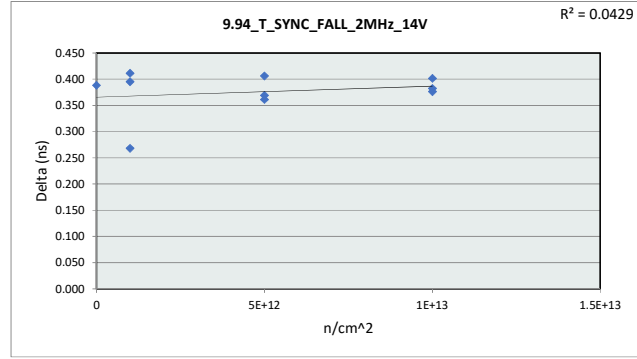


9.93_T_SYNC_RISE_2MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.293	7.157	7.281	7.291
Average	7.293	7.230	7.300	7.315
Max	7.293	7.322	7.337	7.338
UL	15.000	15.000	15.000	15.000

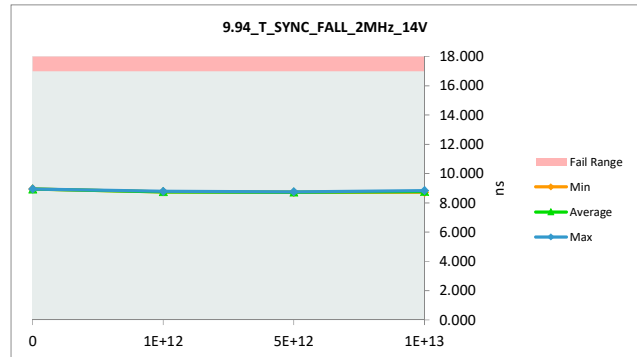


NDD Characterization Report TPS7H5005-SEP

9.94_T_SYNC_FALL_2MHz_14V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.558	8.946	0.388
1E+12	1	8.489	8.757	0.268
1E+12	2	8.366	8.777	0.411
1E+12	3	8.358	8.753	0.395
5E+12	4	8.362	8.723	0.361
5E+12	5	8.346	8.752	0.406
5E+12	6	8.349	8.718	0.369
1E+13	7	8.342	8.718	0.376
1E+13	8	8.355	8.756	0.401
1E+13	9	8.457	8.839	0.382
Max		8.558	8.946	0.411
Average		8.398	8.774	0.376
Min		8.342	8.718	0.268
Std Dev		0.076	0.070	0.041

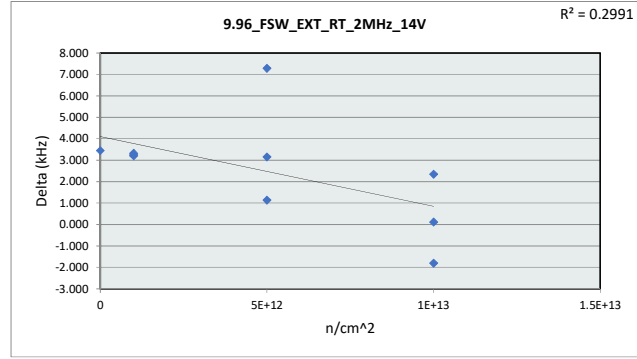


9.94_T_SYNC_FALL_2MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit		17	ns	
Min Limit			ns	
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	8.946	8.753	8.718	8.718
Average	8.946	8.762	8.731	8.771
Max	8.946	8.777	8.752	8.839
UL	17.000	17.000	17.000	17.000

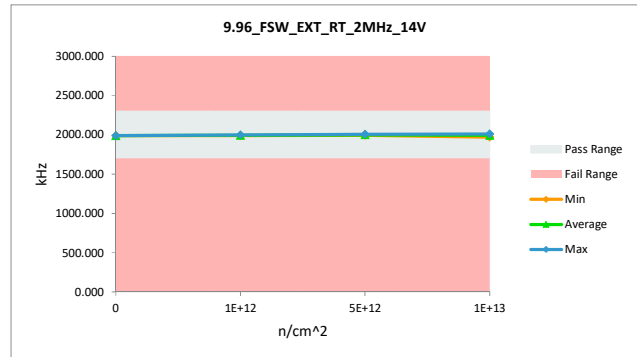


NDD Characterization Report TPS7H5005-SEP

9.96_FSW_EXT_RT_2MHz_14V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		2300	2300	
Min Limit		1700	1700	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1985.985	1989.420	3.435
1E+12	1	1985.412	1988.727	3.315
1E+12	2	1996.841	2000.079	3.238
1E+12	3	1990.506	1993.708	3.202
5E+12	4	1995.319	1996.451	1.132
5E+12	5	1991.453	1994.593	3.140
5E+12	6	1998.221	2005.504	7.283
1E+13	7	1995.578	1997.914	2.336
1E+13	8	1973.302	1971.497	-1.805
1E+13	9	2011.371	2011.482	0.111
	Max	2011.371	2011.482	7.283
	Average	1992.399	1994.938	2.539
	Min	1973.302	1971.497	-1.805
	Std Dev	9.952	10.765	2.403

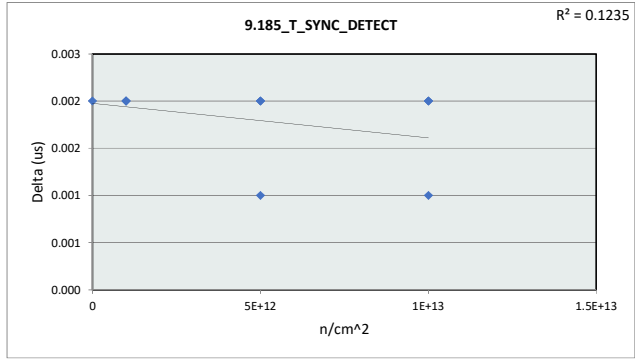


9.96_FSW_EXT_RT_2MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit		2300	kHz	
Min Limit		1700	kHz	
n/cm ²	0	1E+12	5E+12	1E+13
LL	1700.000	1700.000	1700.000	1700.000
Min	1989.420	1988.727	1994.593	1971.497
Average	1989.420	1994.171	1998.849	1993.631
Max	1989.420	2000.079	2005.504	2011.482
UL	2300.000	2300.000	2300.000	2300.000

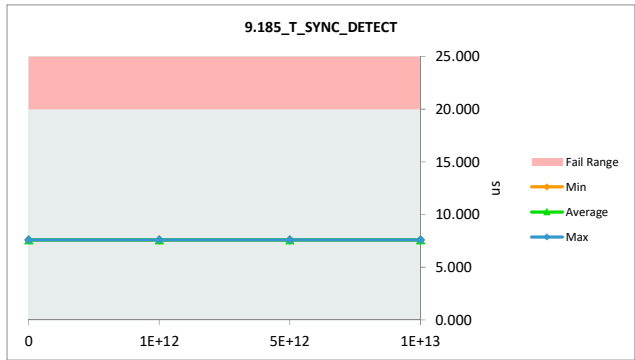


NDD Characterization Report TPS7H5005-SEP

9.185_T_SYNC_DETECT				
Test Site				
Tester				
Test Number				
Unit		us	us	
Max Limit		20	20	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.587	7.589	0.002
1E+12	1	7.587	7.589	0.002
1E+12	2	7.587	7.589	0.002
1E+12	3	7.585	7.587	0.002
5E+12	4	7.587	7.589	0.002
5E+12	5	7.587	7.589	0.002
5E+12	6	7.587	7.588	0.001
1E+13	7	7.587	7.588	0.001
1E+13	8	7.588	7.590	0.002
1E+13	9	7.585	7.587	0.002
Max		7.588	7.590	0.002
Average		7.587	7.589	0.002
Min		7.585	7.587	0.001
Std Dev		0.001	0.001	0.000

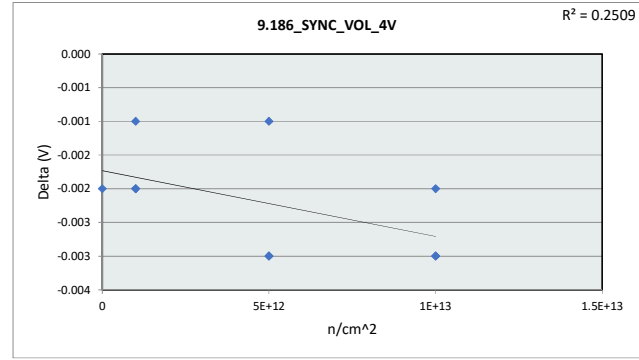


9.185_T_SYNC_DETECT				
Test Site				
Tester				
Test Number				
Max Limit	20	us		
Min Limit		us		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	7.589	7.587	7.588	7.587
Average	7.589	7.588	7.589	7.588
Max	7.589	7.589	7.589	7.590
UL	20.000	20.000	20.000	20.000

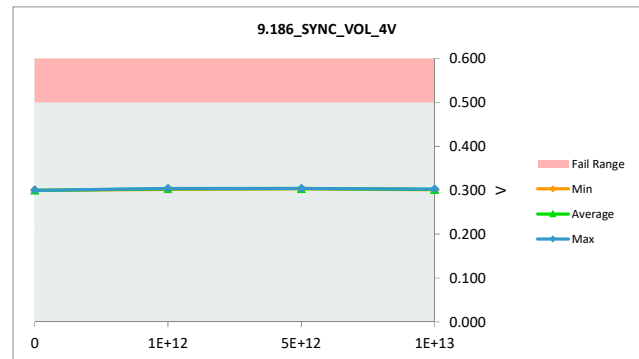


NDD Characterization Report TPS7H5005-SEP

9.186_SYNC_VOL_4V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	0.5	0.5	0.5	0.5
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.302	0.300	-0.002
1E+12	1	0.305	0.304	-0.001
1E+12	2	0.306	0.304	-0.002
1E+12	3	0.304	0.302	-0.002
5E+12	4	0.306	0.303	-0.003
5E+12	5	0.307	0.304	-0.003
5E+12	6	0.305	0.304	-0.001
1E+13	7	0.304	0.301	-0.003
1E+13	8	0.305	0.303	-0.002
1E+13	9	0.304	0.301	-0.003
Max		0.307	0.304	-0.001
Average		0.305	0.303	-0.002
Min		0.302	0.300	-0.003
Std Dev		0.001	0.002	0.001

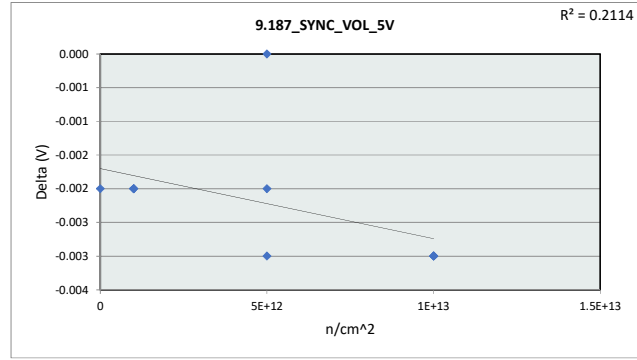


9.186_SYNC_VOL_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.5	V	V	V
Min Limit				
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	0.300	0.302	0.303	0.301
Average	0.300	0.303	0.304	0.302
Max	0.300	0.304	0.304	0.303
UL	0.500	0.500	0.500	0.500

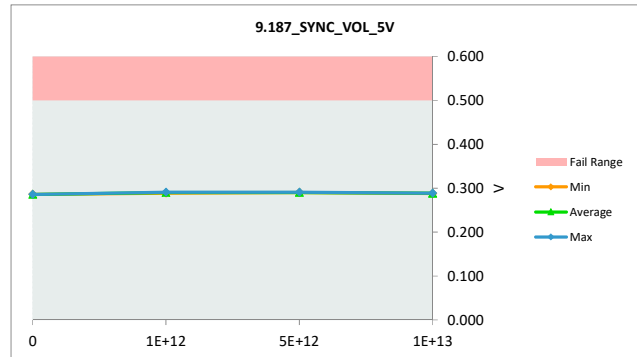


NDD Characterization Report TPS7H5005-SEP

9.187_SYNC_VOL_5V				
Test Site				
Tester				
Test Number				
Unit		V	V	
Max Limit		0.5	0.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.288	0.286	-0.002
1E+12	1	0.292	0.290	-0.002
1E+12	2	0.293	0.291	-0.002
1E+12	3	0.291	0.289	-0.002
5E+12	4	0.292	0.290	-0.002
5E+12	5	0.293	0.290	-0.003
5E+12	6	0.291	0.291	0.000
1E+13	7	0.291	0.288	-0.003
1E+13	8	0.292	0.289	-0.003
1E+13	9	0.291	0.288	-0.003
Max		0.293	0.291	0.000
Average		0.291	0.289	-0.002
Min		0.288	0.286	-0.003
Std Dev		0.001	0.002	0.001

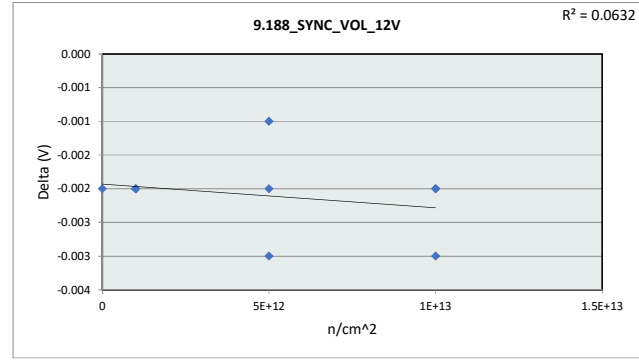


9.187_SYNC_VOL_5V				
Test Site				
Tester				
Test Number				
Max Limit	0.5	V		
Min Limit		V		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	0.286	0.289	0.290	0.288
Average	0.286	0.290	0.290	0.288
Max	0.286	0.291	0.291	0.289
UL	0.500	0.500	0.500	0.500

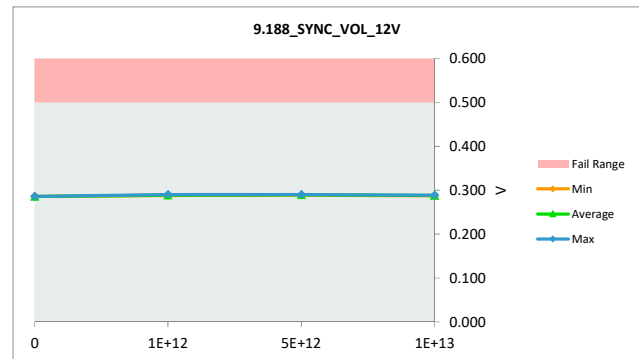


NDD Characterization Report TPS7H5005-SEP

9.188_SYNC_VOL_12V				
Test Site				
Tester				
Test Number				
Unit		V	V	
Max Limit		0.5	0.5	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.288	0.286	-0.002
1E+12	1	0.291	0.289	-0.002
1E+12	2	0.292	0.290	-0.002
1E+12	3	0.290	0.288	-0.002
5E+12	4	0.292	0.289	-0.003
5E+12	5	0.292	0.290	-0.002
5E+12	6	0.291	0.290	-0.001
1E+13	7	0.290	0.288	-0.002
1E+13	8	0.291	0.289	-0.002
1E+13	9	0.290	0.287	-0.003
Max		0.292	0.290	-0.001
Average		0.291	0.289	-0.002
Min		0.288	0.286	-0.003
Std Dev		0.001	0.001	0.001

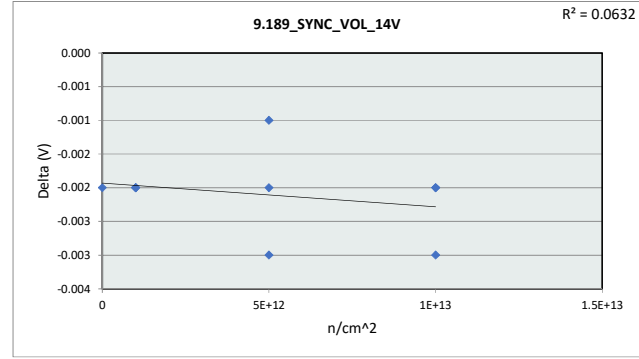


9.188_SYNC_VOL_12V				
Test Site				
Tester				
Test Number				
Max Limit	0.5	V		
Min Limit		V		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	0.286	0.288	0.289	0.287
Average	0.286	0.289	0.290	0.288
Max	0.286	0.290	0.290	0.289
UL	0.500	0.500	0.500	0.500

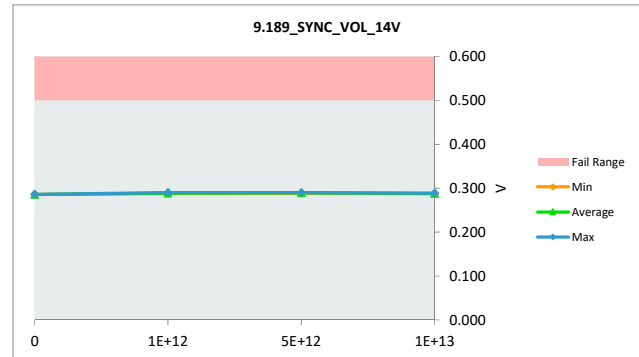


NDD Characterization Report TPS7H5005-SEP

9.189_SYNC_VOL_14V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	0.5	0.5	0.5	0.5
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.288	0.286	-0.002
1E+12	1	0.291	0.289	-0.002
1E+12	2	0.292	0.290	-0.002
1E+12	3	0.290	0.288	-0.002
5E+12	4	0.292	0.289	-0.003
5E+12	5	0.292	0.290	-0.002
5E+12	6	0.291	0.290	-0.001
1E+13	7	0.290	0.288	-0.002
1E+13	8	0.291	0.289	-0.002
1E+13	9	0.290	0.287	-0.003
Max		0.292	0.290	-0.001
Average		0.291	0.289	-0.002
Min		0.288	0.286	-0.003
Std Dev		0.001	0.001	0.001

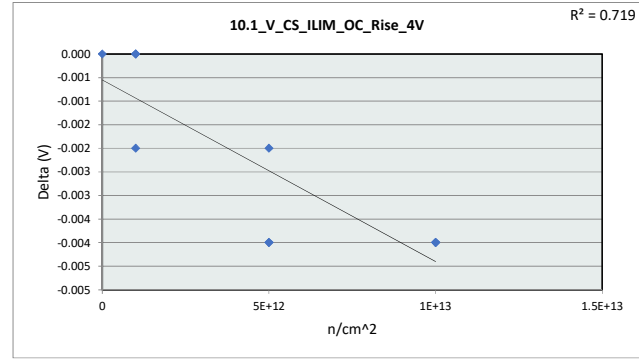


9.189_SYNC_VOL_14V				
Test Site				
Tester				
Test Number				
Max Limit	0.5	V	V	V
Min Limit				
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	0.286	0.288	0.289	0.287
Average	0.286	0.289	0.290	0.288
Max	0.286	0.290	0.290	0.289
UL	0.500	0.500	0.500	0.500

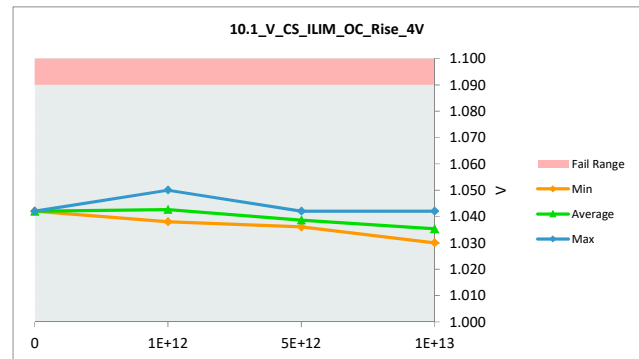


NDD Characterization Report TPS7H5005-SEP

10.1_V_CS_ILIM_OC_Rise_4V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	1.09		1.09	
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.042	1.042	0.000
1E+12	1	1.050	1.050	0.000
1E+12	2	1.040	1.038	-0.002
1E+12	3	1.040	1.040	0.000
5E+12	4	1.042	1.038	-0.004
5E+12	5	1.046	1.042	-0.004
5E+12	6	1.038	1.036	-0.002
1E+13	7	1.046	1.042	-0.004
1E+13	8	1.038	1.034	-0.004
1E+13	9	1.034	1.030	-0.004
Max		1.050	1.050	0.000
Average		1.042	1.039	-0.002
Min		1.034	1.030	-0.004
Std Dev		0.005	0.005	0.002

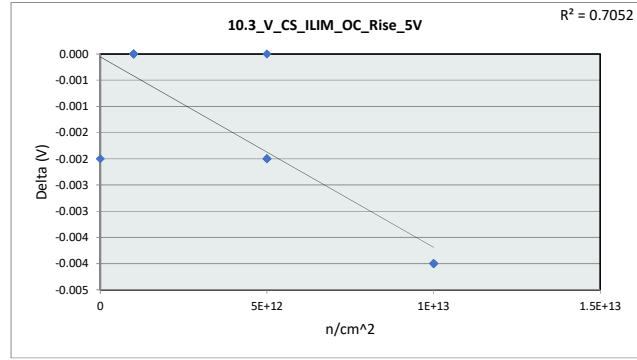


10.1_V_CS_ILIM_OC_Rise_4V				
Test Site				
Tester				
Test Number				
Max Limit	1.09	V		
Min Limit		V		
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	1.042	1.038	1.036	1.030
Average	1.042	1.043	1.039	1.035
Max	1.042	1.050	1.042	1.042
UL	1.090	1.090	1.090	1.090

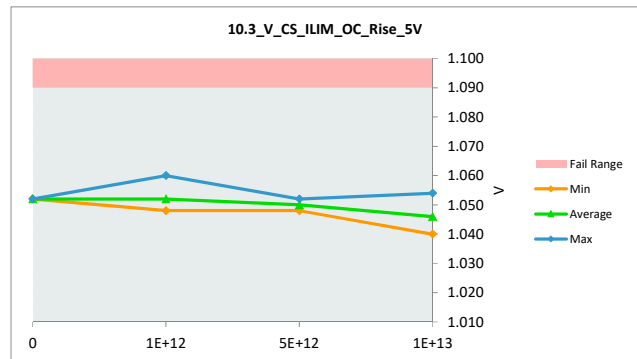


NDD Characterization Report TPS7H5005-SEP

10.3_V_CS_ILIM_OC_Rise_5V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.09	1.09	1.09	1.09
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.054	1.052	-0.002
1E+12	1	1.060	1.060	0.000
1E+12	2	1.048	1.048	0.000
1E+12	3	1.048	1.048	0.000
5E+12	4	1.052	1.050	-0.002
5E+12	5	1.054	1.052	-0.002
5E+12	6	1.048	1.048	0.000
1E+13	7	1.058	1.054	-0.004
1E+13	8	1.048	1.044	-0.004
1E+13	9	1.044	1.040	-0.004
Max		1.060	1.060	0.000
Average		1.051	1.050	-0.002
Min		1.044	1.040	-0.004
Std Dev		0.005	0.005	0.002

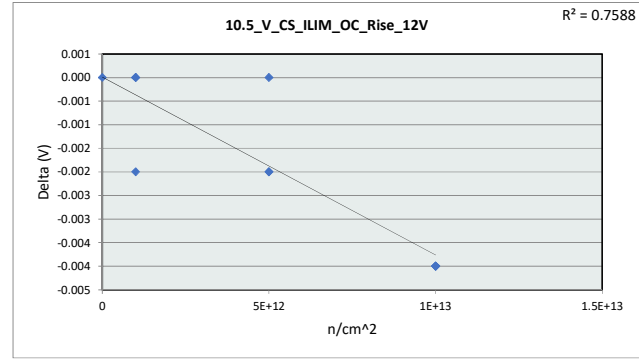


10.3_V_CS_ILIM_OC_Rise_5V				
Test Site				
Tester				
Test Number				
Max Limit	1.09	V	V	V
Min Limit		V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	1.052	1.048	1.048	1.040
Average	1.052	1.052	1.050	1.046
Max	1.052	1.060	1.052	1.054
UL	1.090	1.090	1.090	1.090

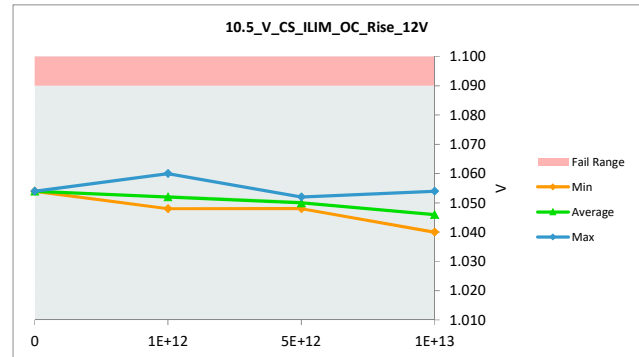


NDD Characterization Report TPS7H5005-SEP

10.5_V_CS_ILIM_OC_Rise_12V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.09	1.09	1.09	1.09
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.054	1.054	0.000
1E+12	1	1.062	1.060	-0.002
1E+12	2	1.048	1.048	0.000
1E+12	3	1.048	1.048	0.000
5E+12	4	1.052	1.050	-0.002
5E+12	5	1.054	1.052	-0.002
5E+12	6	1.048	1.048	0.000
1E+13	7	1.058	1.054	-0.004
1E+13	8	1.048	1.044	-0.004
1E+13	9	1.044	1.040	-0.004
Max		1.062	1.060	0.000
Average		1.052	1.050	-0.002
Min		1.044	1.040	-0.004
Std Dev		0.005	0.006	0.002

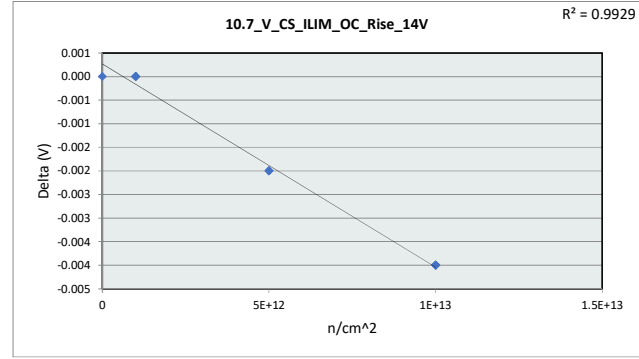


10.5_V_CS_ILIM_OC_Rise_12V				
Test Site				
Tester				
Test Number				
Max Limit	1.09	V	V	V
Min Limit		V	V	V
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	1.054	1.048	1.048	1.040
Average	1.054	1.052	1.050	1.046
Max	1.054	1.060	1.052	1.054
UL	1.090	1.090	1.090	1.090

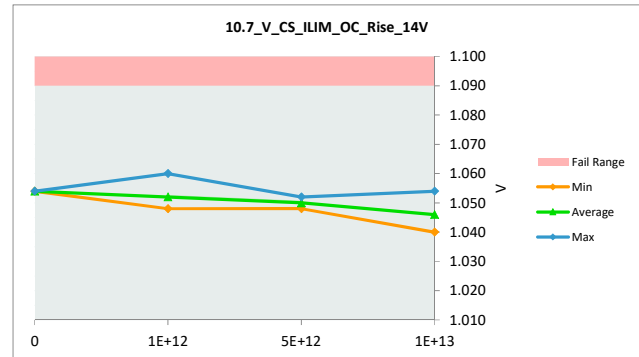


NDD Characterization Report TPS7H5005-SEP

10.7_V_CS_ILIM_OC_Rise_14V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	1.09	1.09	1.09	1.09
Min Limit				
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	1.054	1.054	0.000
1E+12	1	1.060	1.060	0.000
1E+12	2	1.048	1.048	0.000
1E+12	3	1.048	1.048	0.000
5E+12	4	1.052	1.050	-0.002
5E+12	5	1.054	1.052	-0.002
5E+12	6	1.050	1.048	-0.002
1E+13	7	1.058	1.054	-0.004
1E+13	8	1.048	1.044	-0.004
1E+13	9	1.044	1.040	-0.004
Max		1.060	1.060	0.000
Average		1.052	1.050	-0.002
Min		1.044	1.040	-0.004
Std Dev		0.005	0.006	0.002

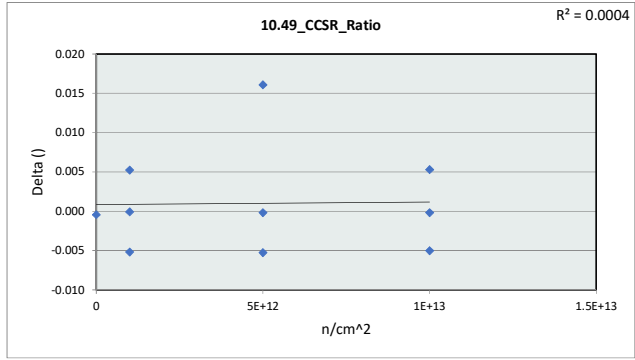


10.7_V_CS_ILIM_OC_Rise_14V				
Test Site				
Tester				
Test Number				
Max Limit	1.09	V	V	V
Min Limit				
n/cm ²	0	1E+12	5E+12	1E+13
LL				
Min	1.054	1.048	1.048	1.040
Average	1.054	1.052	1.050	1.046
Max	1.054	1.060	1.052	1.054
UL	1.090	1.090	1.090	1.090

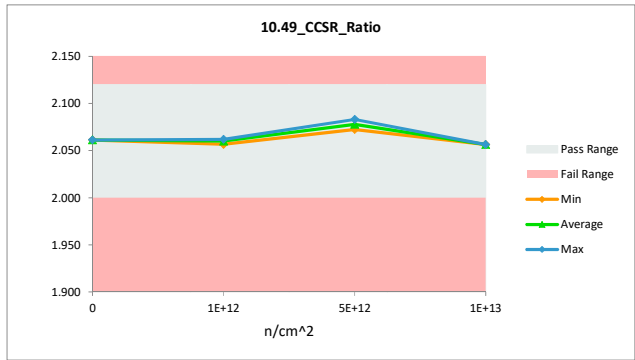


NDD Characterization Report TPS7H5005-SEP

10.49_CCSR_Ratio				
Test Site				
Tester				
Test Number				
Unit				
Max Limit		2.12	2.12	
Min Limit		2	2	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	2.062	2.061	0.000
1E+12	1	2.062	2.057	-0.005
1E+12	2	2.062	2.061	0.000
1E+12	3	2.057	2.062	0.005
5E+12	4	2.083	2.078	-0.005
5E+12	5	2.067	2.083	0.016
5E+12	6	2.073	2.072	0.000
1E+13	7	2.051	2.056	0.005
1E+13	8	2.057	2.056	0.000
1E+13	9	2.062	2.056	-0.005
Max		2.083	2.083	0.016
Average		2.063	2.064	0.001
Min		2.051	2.056	-0.005
Std Dev		0.009	0.010	0.007

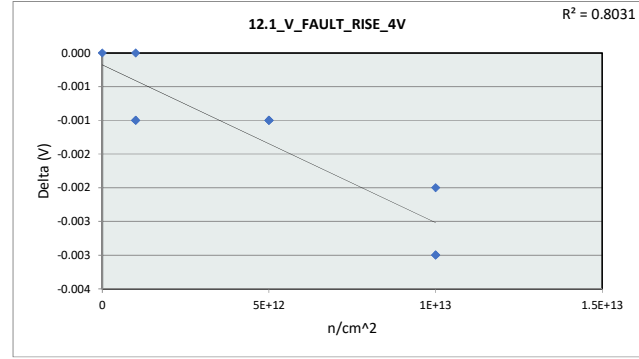


10.49_CCSR_Ratio				
Test Site				
Tester				
Test Number				
Max Limit		2.12		
Min Limit		2		
n/cm^2	0	1E+12	5E+12	1E+13
LL	2.000	2.000	2.000	2.000
Min	2.061	2.057	2.072	2.056
Average	2.061	2.060	2.078	2.056
Max	2.061	2.062	2.083	2.056
UL	2.120	2.120	2.120	2.120

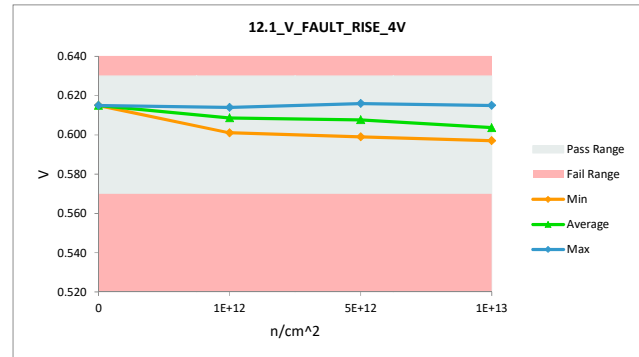


NDD Characterization Report TPS7H5005-SEP

12.1_V_FAULT_RISE_4V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.63		0.63	
Min Limit	0.57		0.57	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.615	0.615	0.000
1E+12	1	0.611	0.611	0.000
1E+12	2	0.602	0.601	-0.001
1E+12	3	0.615	0.614	-0.001
5E+12	4	0.609	0.608	-0.001
5E+12	5	0.617	0.616	-0.001
5E+12	6	0.600	0.599	-0.001
1E+13	7	0.618	0.615	-0.003
1E+13	8	0.600	0.597	-0.003
1E+13	9	0.601	0.599	-0.002
Max		0.618	0.616	0.000
Average		0.609	0.607	-0.001
Min		0.600	0.597	-0.003
Std Dev		0.007	0.008	0.001

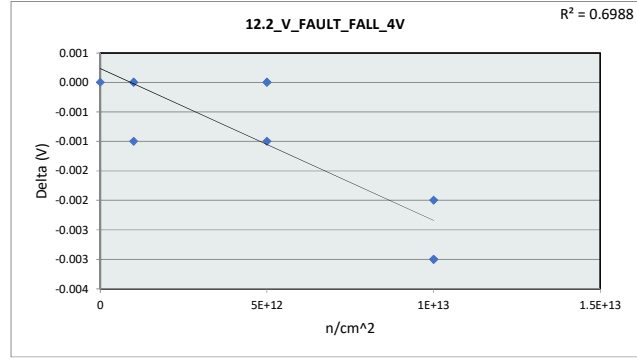


12.1_V_FAULT_RISE_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.63		V	
Min Limit	0.57		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.615	0.601	0.599	0.597
Average	0.615	0.609	0.608	0.604
Max	0.615	0.614	0.616	0.615
UL	0.630	0.630	0.630	0.630

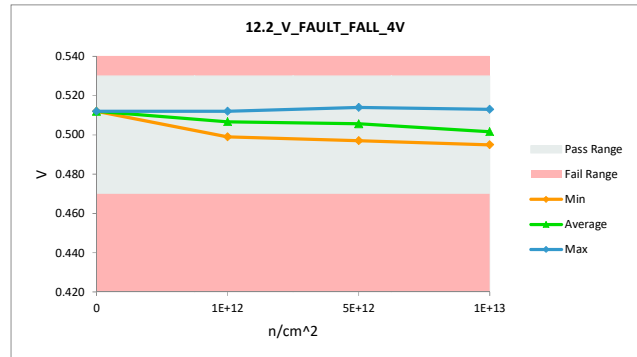


NDD Characterization Report TPS7H5005-SEP

12.2_V_FAULT_FALL_4V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.53		0.53	
Min Limit	0.47		0.47	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.512	0.512	0.000
1E+12	1	0.509	0.509	0.000
1E+12	2	0.499	0.499	0.000
1E+12	3	0.513	0.512	-0.001
5E+12	4	0.506	0.506	0.000
5E+12	5	0.515	0.514	-0.001
5E+12	6	0.497	0.497	0.000
1E+13	7	0.516	0.513	-0.003
1E+13	8	0.498	0.495	-0.003
1E+13	9	0.499	0.497	-0.002
Max		0.516	0.514	0.000
Average		0.506	0.505	-0.001
Min		0.497	0.495	-0.003
Std Dev		0.008	0.008	0.001

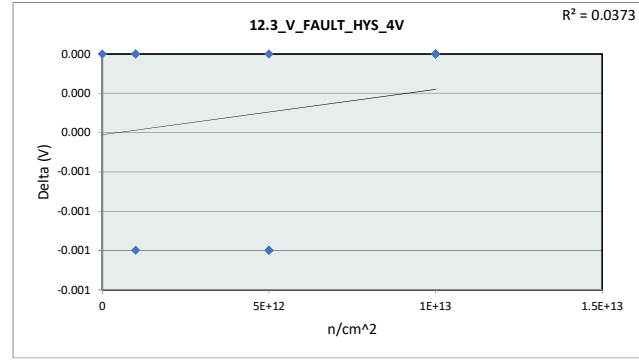


12.2_V_FAULT_FALL_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.53		V	
Min Limit	0.47		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.512	0.499	0.497	0.495
Average	0.512	0.507	0.506	0.502
Max	0.512	0.512	0.514	0.513
UL	0.530	0.530	0.530	0.530

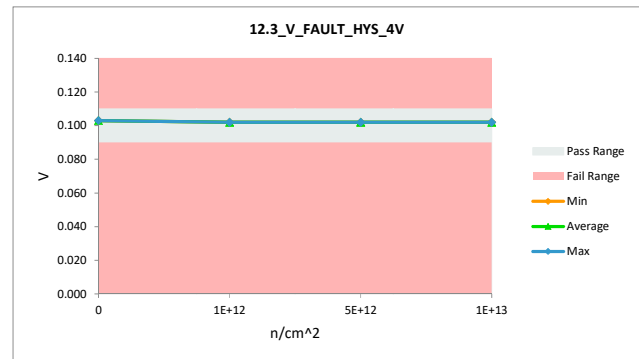


NDD Characterization Report TPS7H5005-SEP

12.3_V_FAULT_HYS_4V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	0.11	0.11	0.11	0.11
Min Limit	0.09	0.09	0.09	0.09
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.103	0.103	0.000
1E+12	1	0.102	0.102	0.000
1E+12	2	0.103	0.102	-0.001
1E+12	3	0.102	0.102	0.000
5E+12	4	0.103	0.102	-0.001
5E+12	5	0.102	0.102	0.000
5E+12	6	0.103	0.102	-0.001
1E+13	7	0.102	0.102	0.000
1E+13	8	0.102	0.102	0.000
1E+13	9	0.102	0.102	0.000
Max		0.103	0.103	0.000
Average		0.102	0.102	0.000
Min		0.102	0.102	-0.001
Std Dev		0.001	0.000	0.000

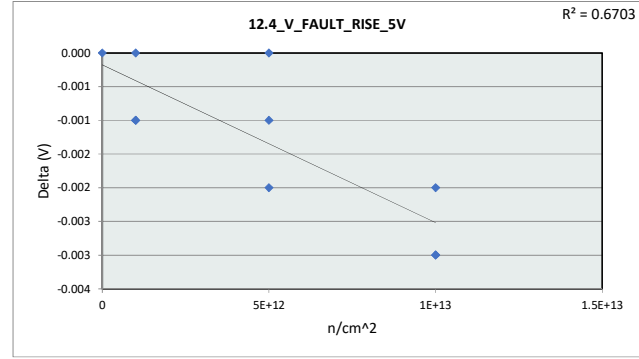


12.3_V_FAULT_HYS_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.11	V		
Min Limit	0.09	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.090	0.090	0.090	0.090
Min	0.103	0.102	0.102	0.102
Average	0.103	0.102	0.102	0.102
Max	0.103	0.102	0.102	0.102
UL	0.110	0.110	0.110	0.110

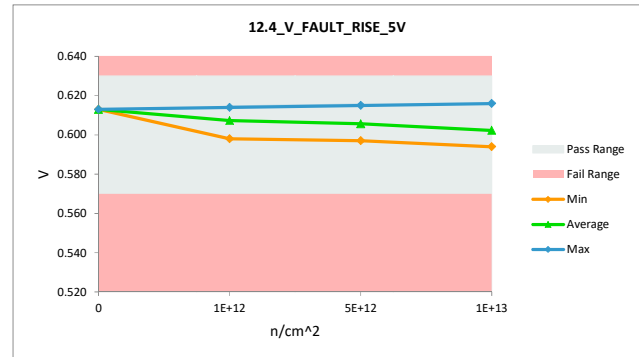


NDD Characterization Report TPS7H5005-SEP

12.4_V_FAULT_RISE_5V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.63		0.63	
Min Limit	0.57		0.57	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.613	0.613	0.000
1E+12	1	0.610	0.610	0.000
1E+12	2	0.599	0.598	-0.001
1E+12	3	0.615	0.614	-0.001
5E+12	4	0.606	0.605	-0.001
5E+12	5	0.617	0.615	-0.002
5E+12	6	0.597	0.597	0.000
1E+13	7	0.619	0.616	-0.003
1E+13	8	0.597	0.594	-0.003
1E+13	9	0.599	0.597	-0.002
Max		0.619	0.616	0.000
Average		0.607	0.606	-0.001
Min		0.597	0.594	-0.003
Std Dev		0.009	0.009	0.001

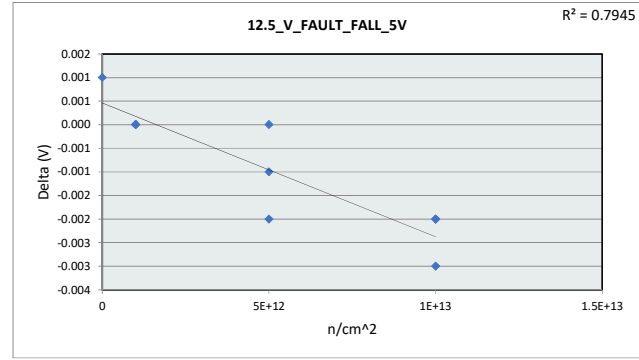


12.4_V_FAULT_RISE_5V				
Test Site				
Tester				
Test Number				
Max Limit	0.63		V	
Min Limit	0.57		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.613	0.598	0.597	0.594
Average	0.613	0.607	0.606	0.602
Max	0.613	0.614	0.615	0.616
UL	0.630	0.630	0.630	0.630

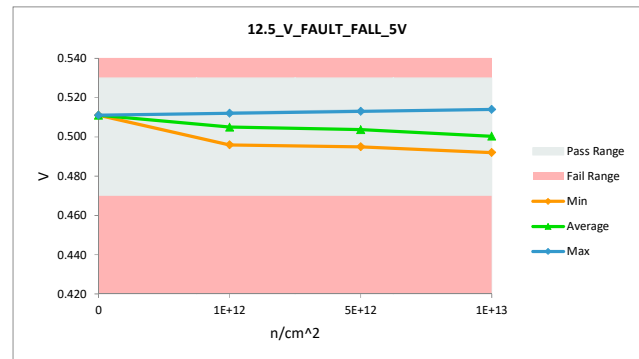


NDD Characterization Report TPS7H5005-SEP

12.5_V_FAULT_FALL_5V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.53		0.53	
Min Limit	0.47		0.47	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.510	0.511	0.001
1E+12	1	0.507	0.507	0.000
1E+12	2	0.496	0.496	0.000
1E+12	3	0.512	0.512	0.000
5E+12	4	0.504	0.503	-0.001
5E+12	5	0.515	0.513	-0.002
5E+12	6	0.495	0.495	0.000
1E+13	7	0.516	0.514	-0.002
1E+13	8	0.495	0.492	-0.003
1E+13	9	0.497	0.495	-0.002
Max		0.516	0.514	0.001
Average		0.505	0.504	-0.001
Min		0.495	0.492	-0.003
Std Dev		0.008	0.009	0.001

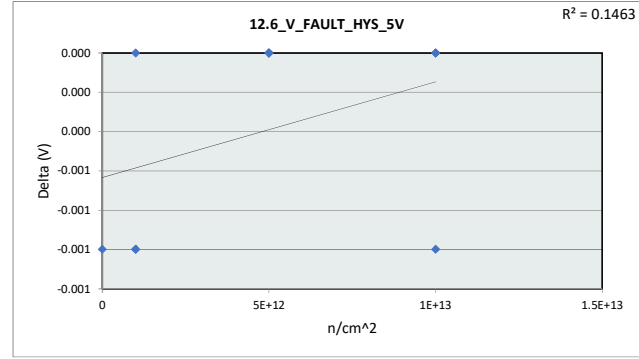


12.5_V_FAULT_FALL_5V				
Test Site				
Tester				
Test Number				
Max Limit	0.53		V	
Min Limit	0.47		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.511	0.496	0.495	0.492
Average	0.511	0.505	0.504	0.500
Max	0.511	0.512	0.513	0.514
UL	0.530	0.530	0.530	0.530

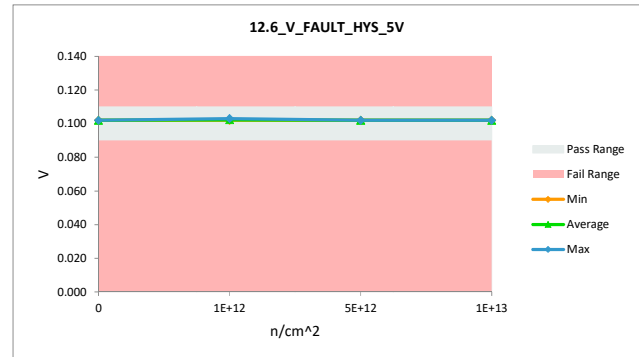


NDD Characterization Report TPS7H5005-SEP

12.6_V_FAULT_HYS_5V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	0.11	0.11	0.11	0.11
Min Limit	0.09	0.09	0.09	0.09
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.103	0.102	-0.001
1E+12	1	0.103	0.103	0.000
1E+12	2	0.103	0.102	-0.001
1E+12	3	0.103	0.102	-0.001
5E+12	4	0.102	0.102	0.000
5E+12	5	0.102	0.102	0.000
5E+12	6	0.102	0.102	0.000
1E+13	7	0.103	0.102	-0.001
1E+13	8	0.102	0.102	0.000
1E+13	9	0.102	0.102	0.000
Max		0.103	0.103	0.000
Average		0.102	0.102	0.000
Min		0.102	0.102	-0.001
Std Dev		0.001	0.000	0.001

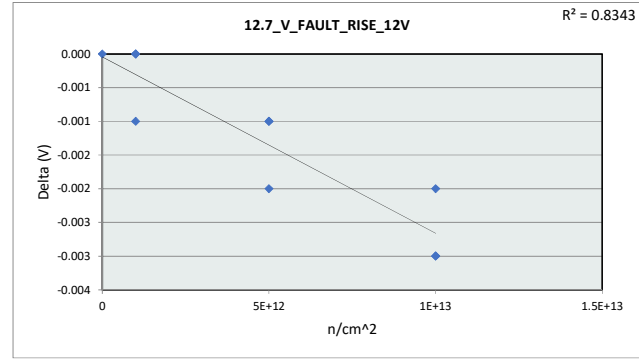


12.6_V_FAULT_HYS_5V				
Test Site				
Tester				
Test Number				
Max Limit	0.11	V		
Min Limit	0.09	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.090	0.090	0.090	0.090
Min	0.102	0.102	0.102	0.102
Average	0.102	0.102	0.102	0.102
Max	0.102	0.103	0.102	0.102
UL	0.110	0.110	0.110	0.110

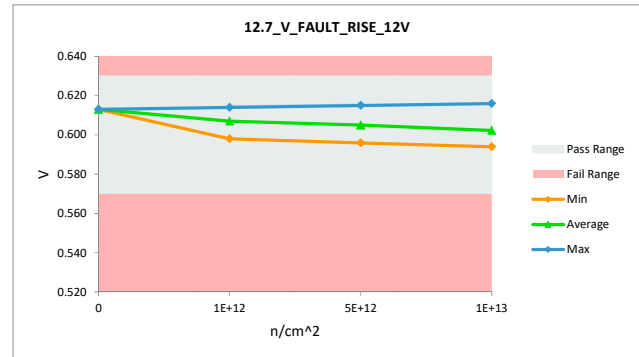


NDD Characterization Report TPS7H5005-SEP

12.7_V_FAULT_RISE_12V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.63		0.63	
Min Limit	0.57		0.57	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.613	0.613	0.000
1E+12	1	0.610	0.609	-0.001
1E+12	2	0.598	0.598	0.000
1E+12	3	0.614	0.614	0.000
5E+12	4	0.606	0.604	-0.002
5E+12	5	0.616	0.615	-0.001
5E+12	6	0.597	0.596	-0.001
1E+13	7	0.619	0.616	-0.003
1E+13	8	0.597	0.594	-0.003
1E+13	9	0.599	0.597	-0.002
Max		0.619	0.616	0.000
Average		0.607	0.606	-0.001
Min		0.597	0.594	-0.003
Std Dev		0.009	0.009	0.001

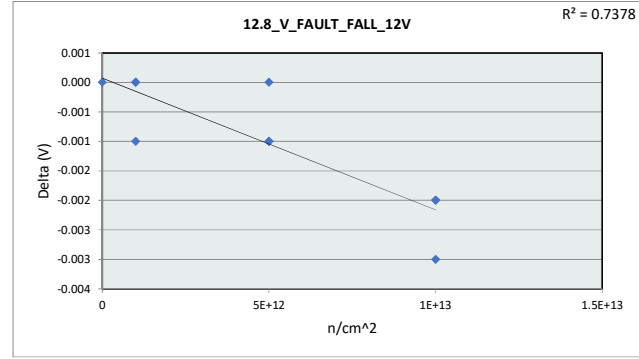


12.7_V_FAULT_RISE_12V				
Test Site				
Tester				
Test Number				
Max Limit	0.63		V	
Min Limit	0.57		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.613	0.598	0.596	0.594
Average	0.613	0.607	0.605	0.602
Max	0.613	0.614	0.615	0.616
UL	0.630	0.630	0.630	0.630

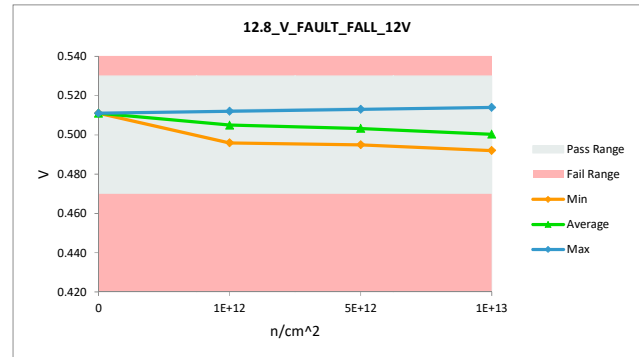


NDD Characterization Report TPS7H5005-SEP

12.8_V_FAULT_FALL_12V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.53		0.53	
Min Limit	0.47		0.47	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.511	0.511	0.000
1E+12	1	0.508	0.507	-0.001
1E+12	2	0.496	0.496	0.000
1E+12	3	0.512	0.512	0.000
5E+12	4	0.503	0.502	-0.001
5E+12	5	0.514	0.513	-0.001
5E+12	6	0.495	0.495	0.000
1E+13	7	0.516	0.514	-0.002
1E+13	8	0.495	0.492	-0.003
1E+13	9	0.497	0.495	-0.002
Max		0.516	0.514	0.000
Average		0.505	0.504	-0.001
Min		0.495	0.492	-0.003
Std Dev		0.008	0.009	0.001

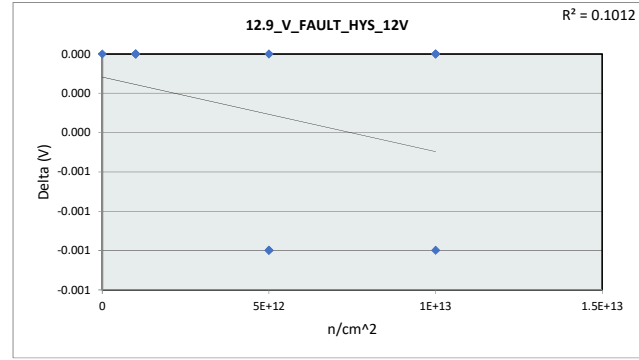


12.8_V_FAULT_FALL_12V				
Test Site				
Tester				
Test Number				
Max Limit	0.53	V		
Min Limit	0.47	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.511	0.496	0.495	0.492
Average	0.511	0.505	0.503	0.500
Max	0.511	0.512	0.513	0.514
UL	0.530	0.530	0.530	0.530

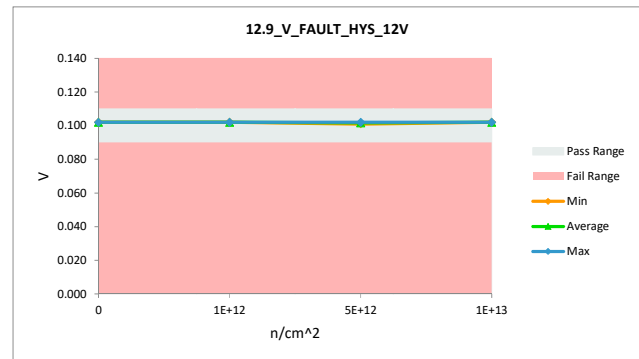


NDD Characterization Report TPS7H5005-SEP

12.9_V_FAULT_HYS_12V				
Test Site				
Tester				
Test Number				
Unit	V	V	V	V
Max Limit	0.11	0.11	0.11	0.11
Min Limit	0.09	0.09	0.09	0.09
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.102	0.102	0.000
1E+12	1	0.102	0.102	0.000
1E+12	2	0.102	0.102	0.000
1E+12	3	0.102	0.102	0.000
5E+12	4	0.103	0.102	-0.001
5E+12	5	0.102	0.102	0.000
5E+12	6	0.102	0.101	-0.001
1E+13	7	0.103	0.102	-0.001
1E+13	8	0.102	0.102	0.000
1E+13	9	0.102	0.102	0.000
Max		0.103	0.102	0.000
Average		0.102	0.102	0.000
Min		0.102	0.101	-0.001
Std Dev		0.000	0.000	0.000

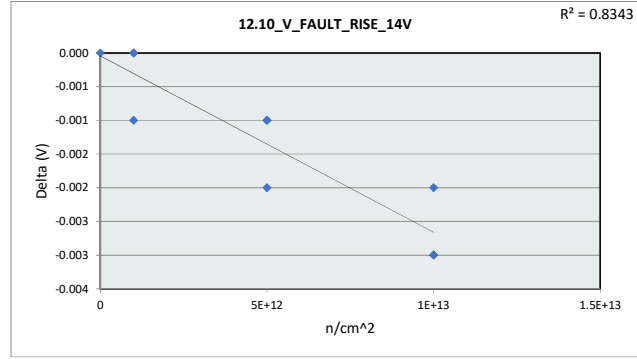


12.9_V_FAULT_HYS_12V				
Test Site				
Tester				
Test Number				
Max Limit	0.11	V		
Min Limit	0.09	V		
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.090	0.090	0.090	0.090
Min	0.102	0.102	0.101	0.102
Average	0.102	0.102	0.102	0.102
Max	0.102	0.102	0.102	0.102
UL	0.110	0.110	0.110	0.110

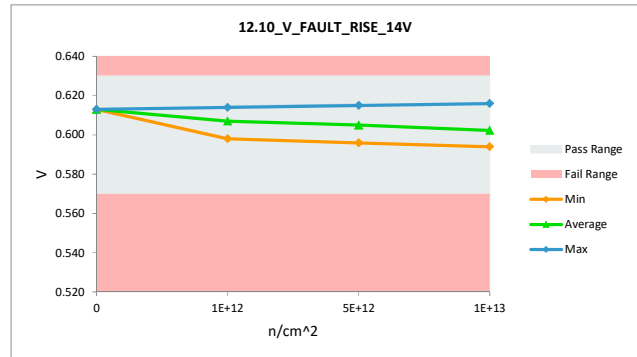


NDD Characterization Report TPS7H5005-SEP

12.10_V_FAULT_RISE_14V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.63		0.63	
Min Limit	0.57		0.57	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.613	0.613	0.000
1E+12	1	0.610	0.609	-0.001
1E+12	2	0.598	0.598	0.000
1E+12	3	0.614	0.614	0.000
5E+12	4	0.606	0.604	-0.002
5E+12	5	0.616	0.615	-0.001
5E+12	6	0.597	0.596	-0.001
1E+13	7	0.619	0.616	-0.003
1E+13	8	0.597	0.594	-0.003
1E+13	9	0.599	0.597	-0.002
Max		0.619	0.616	0.000
Average		0.607	0.606	-0.001
Min		0.597	0.594	-0.003
Std Dev		0.009	0.009	0.001



12.10_V_FAULT_RISE_14V				
Test Site				
Tester				
Test Number				
Max Limit	0.63		V	
Min Limit	0.57		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.613	0.598	0.596	0.594
Average	0.613	0.607	0.605	0.602
Max	0.613	0.614	0.615	0.616
UL	0.630	0.630	0.630	0.630

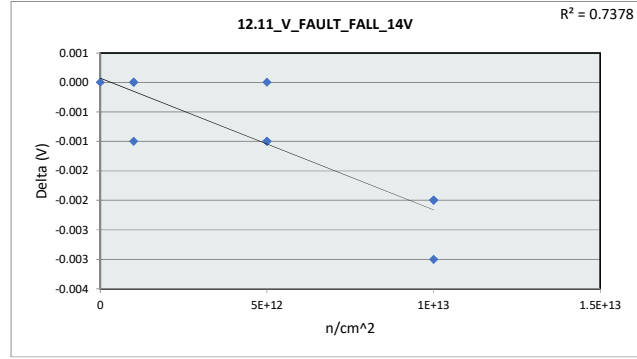


NDD Characterization Report TPS7H5005-SEP

12.11_V_FAULT_FALL_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.53	0.53
Min Limit	0.47	0.47

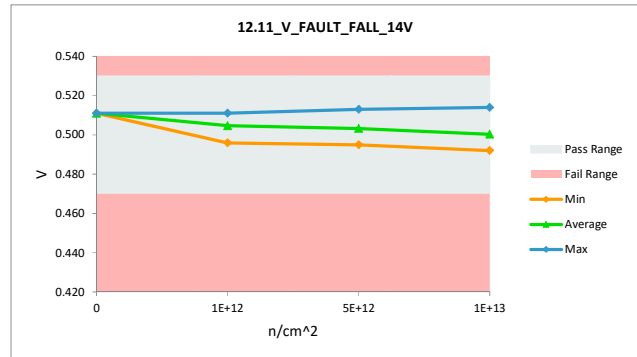
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.511	0.511	0.000
1E+12	1	0.507	0.507	0.000
1E+12	2	0.496	0.496	0.000
1E+12	3	0.512	0.511	-0.001
5E+12	4	0.503	0.502	-0.001
5E+12	5	0.514	0.513	-0.001
5E+12	6	0.495	0.495	0.000
1E+13	7	0.516	0.514	-0.002
1E+13	8	0.495	0.492	-0.003
1E+13	9	0.497	0.495	-0.002
Max		0.516	0.514	0.000
Average		0.505	0.504	-0.001
Min		0.495	0.492	-0.003
Std Dev		0.008	0.009	0.001



12.11_V_FAULT_FALL_14V

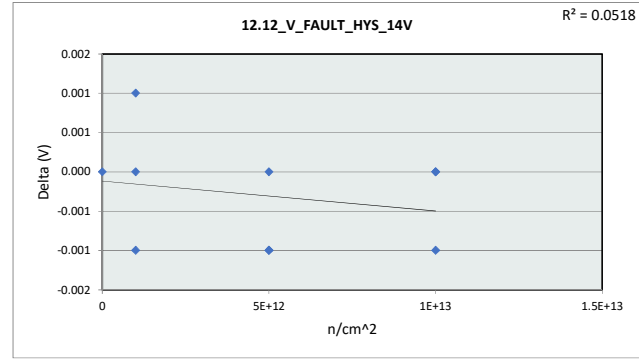
Test Site		
Tester		
Test Number		
Max Limit	0.53	V
Min Limit	0.47	V

n/cm ²	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.511	0.496	0.495	0.492
Average	0.511	0.505	0.503	0.500
Max	0.511	0.511	0.513	0.514
UL	0.530	0.530	0.530	0.530

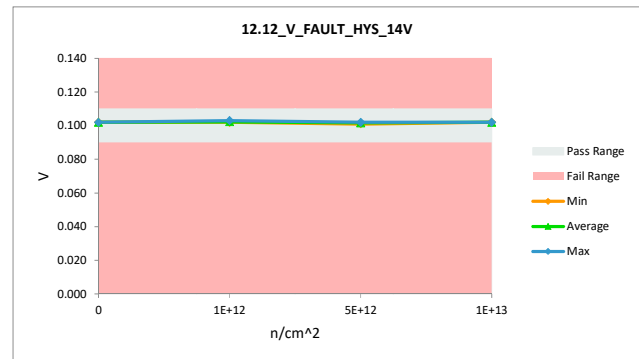


NDD Characterization Report TPS7H5005-SEP

12.12_V_FAULT_HYS_14V				
Test Site				
Tester				
Test Number				
Unit	V		V	
Max Limit	0.11		0.11	
Min Limit	0.09		0.09	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.102	0.102	0.000
1E+12	1	0.103	0.102	-0.001
1E+12	2	0.102	0.102	0.000
1E+12	3	0.102	0.103	0.001
5E+12	4	0.103	0.102	-0.001
5E+12	5	0.102	0.102	0.000
5E+12	6	0.102	0.101	-0.001
1E+13	7	0.103	0.102	-0.001
1E+13	8	0.102	0.102	0.000
1E+13	9	0.102	0.102	0.000
Max		0.103	0.103	0.001
Average		0.102	0.102	0.000
Min		0.102	0.101	-0.001
Std Dev		0.000	0.000	0.001

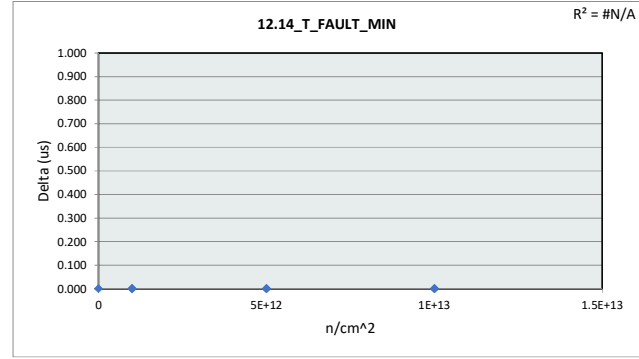


12.12_V_FAULT_HYS_14V				
Test Site				
Tester				
Test Number				
Max Limit	0.11		V	
Min Limit	0.09		V	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.090	0.090	0.090	0.090
Min	0.102	0.102	0.101	0.102
Average	0.102	0.102	0.102	0.102
Max	0.102	0.103	0.102	0.102
UL	0.110	0.110	0.110	0.110

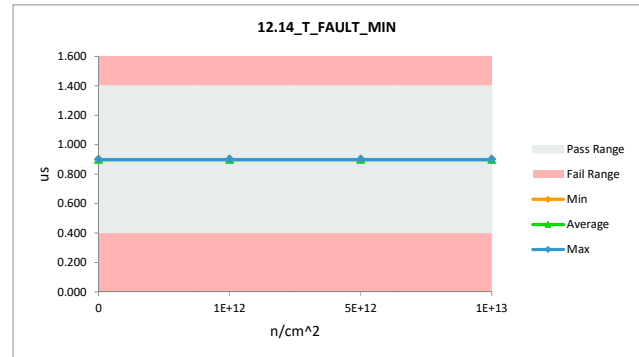


NDD Characterization Report TPS7H5005-SEP

12.14_T_FAULT_MIN				
Test Site				
Tester				
Test Number				
Unit		us	us	
Max Limit		1.4	1.4	
Min Limit		0.4	0.4	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	0.900	0.900	0.000
1E+12	1	0.900	0.900	0.000
1E+12	2	0.900	0.900	0.000
1E+12	3	0.900	0.900 </td <td>0.000</td>	0.000
5E+12	4	0.900	0.900	0.000
5E+12	5	0.900	0.900	0.000
5E+12	6	0.900	0.900	0.000
1E+13	7	0.900	0.900	0.000
1E+13	8	0.900	0.900	0.000
1E+13	9	0.900	0.900	0.000
Max		0.900	0.900	0.000
Average		0.900	0.900	0.000
Min		0.900	0.900	0.000
Std Dev		0.000	0.000	0.000

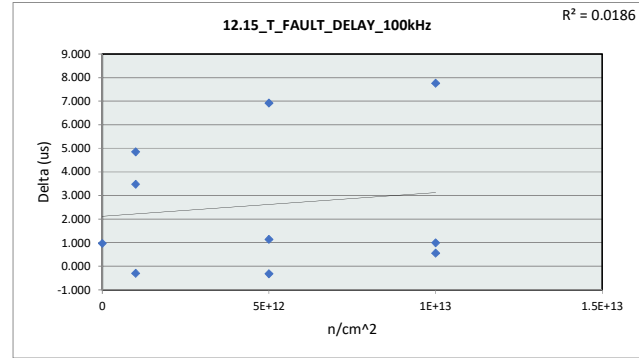


12.14_T_FAULT_MIN				
Test Site				
Tester				
Test Number				
Max Limit		1.4	us	
Min Limit		0.4	us	
n/cm^2	0	1E+12	5E+12	1E+13
LL	0.400	0.400	0.400	0.400
Min	0.900	0.900	0.900	0.900
Average	0.900	0.900	0.900	0.900
Max	0.900	0.900	0.900	0.900
UL	1.400	1.400	1.400	1.400

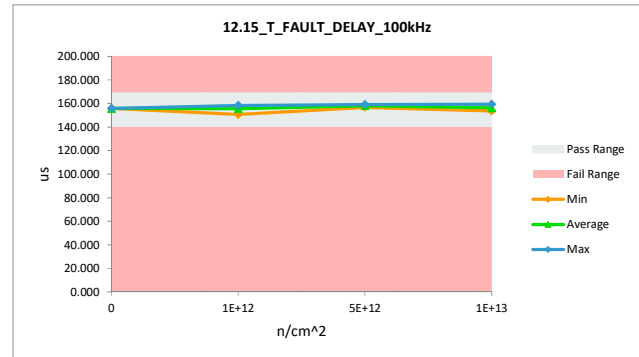


NDD Characterization Report TPS7H5005-SEP

12.15_T_FAULT_DELAY_100kHz				
Test Site				
Tester				
Test Number				
Unit		us	us	
Max Limit		169	169	
Min Limit		140	140	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	154.827	155.790	0.963
1E+12	1	150.907	150.601	-0.306
1E+12	2	152.785	157.631	4.846
1E+12	3	154.986	158.458	3.472
5E+12	4	152.189	159.104	6.915
5E+12	5	157.332	158.466	1.134
5E+12	6	157.116	156.791	-0.325
1E+13	7	155.094	155.640	0.546
1E+13	8	152.584	153.574	0.990
1E+13	9	151.651	159.405	7.754
Max		157.332	159.405	7.754
Average		153.947	156.546	2.599
Min		150.907	150.601	-0.325
Std Dev		2.248	2.766	2.974

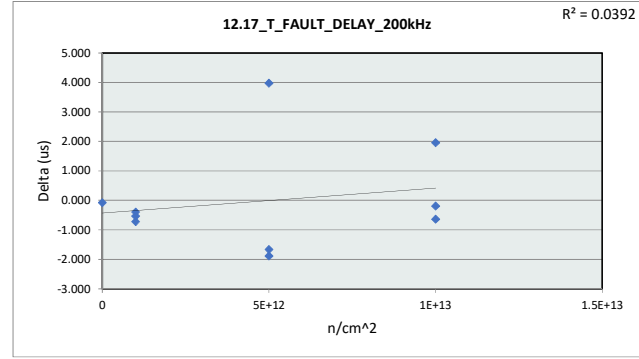


12.15_T_FAULT_DELAY_100kHz				
Test Site				
Tester				
Test Number				
Max Limit		169	us	
Min Limit		140	us	
n/cm ²	0	1E+12	5E+12	1E+13
LL	140.000	140.000	140.000	140.000
Min	155.790	150.601	156.791	153.574
Average	155.790	155.563	158.120	156.206
Max	155.790	158.458	159.104	159.405
UL	169.000	169.000	169.000	169.000

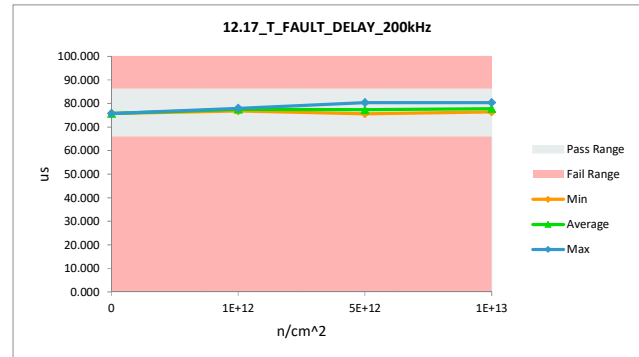


NDD Characterization Report TPS7H5005-SEP

12.17_T_FAULT_DELAY_200kHz				
Test Site				
Tester				
Test Number				
Unit	us		us	
Max Limit	86		86	
Min Limit	66		66	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	75.807	75.726	-0.081
1E+12	1	77.189	76.789	-0.400
1E+12	2	78.388	77.848	-0.540
1E+12	3	78.673	77.944	-0.729
5E+12	4	77.347	75.678	-1.669
5E+12	5	76.336	80.307	3.971
5E+12	6	77.900	76.008	-1.892
1E+13	7	76.761	76.560	-0.201
1E+13	8	77.080	76.441	-0.639
1E+13	9	78.359	80.308	1.949
Max		78.673	80.308	3.971
Average		77.384	77.361	-0.023
Min		75.807	75.678	-1.892
Std Dev		0.942	1.735	1.744

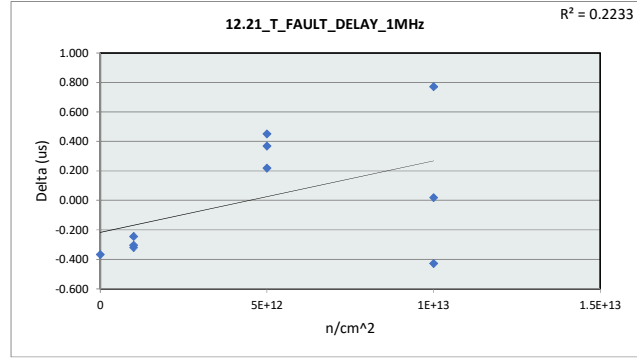


12.17_T_FAULT_DELAY_200kHz				
Test Site				
Tester				
Test Number				
Max Limit	86		us	
Min Limit	66		us	
n/cm^2	0	1E+12	5E+12	1E+13
LL	66.000	66.000	66.000	66.000
Min	75.726	76.789	75.678	76.441
Average	75.726	77.527	77.331	77.770
Max	75.726	77.944	80.307	80.308
UL	86.000	86.000	86.000	86.000

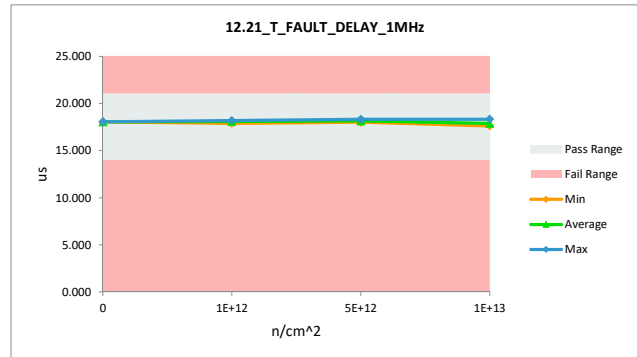


NDD Characterization Report TPS7H5005-SEP

12.21_T_FAULT_DELAY_1MHz				
Test Site				
Tester				
Test Number				
Unit		us	us	
Max Limit		21	21	
Min Limit		14	14	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	18.409	18.041	-0.368
1E+12	1	18.466	18.145	-0.321
1E+12	2	18.195	17.889	-0.306
1E+12	3	18.443	18.197	-0.246
5E+12	4	17.884	18.102	0.218
5E+12	5	17.946	18.314	0.368
5E+12	6	17.552	18.002	0.450
1E+13	7	18.036	17.607	-0.429
1E+13	8	17.689	17.706	0.017
1E+13	9	17.562	18.333	0.771
Max		18.466	18.333	0.771
Average		18.018	18.034	0.015
Min		17.552	17.607	-0.429
Std Dev		0.353	0.241	0.416

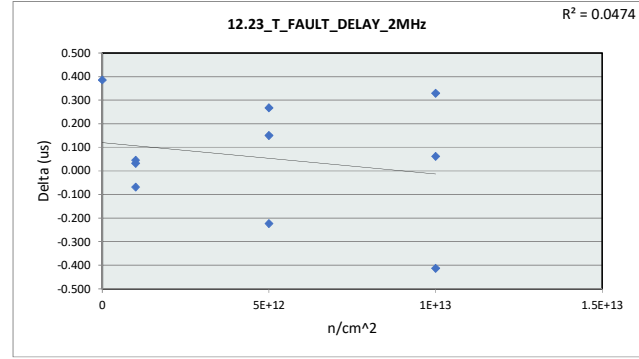


12.21_T_FAULT_DELAY_1MHz				
Test Site				
Tester				
Test Number				
Max Limit		21	us	
Min Limit		14	us	
n/cm^2	0	1E+12	5E+12	1E+13
LL	14.000	14.000	14.000	14.000
Min	18.041	17.889	18.002	17.607
Average	18.041	18.077	18.139	17.882
Max	18.041	18.197	18.314	18.333
UL	21.000	21.000	21.000	21.000

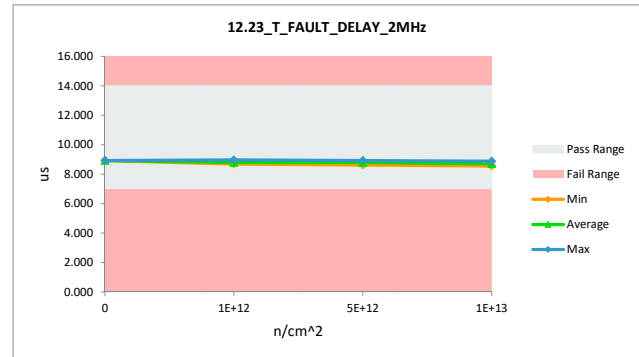


NDD Characterization Report TPS7H5005-SEP

12.23_T_FAULT_DELAY_2MHz				
Test Site				
Tester				
Test Number				
Unit		us	us	
Max Limit		14	14	
Min Limit		7	7	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.541	8.926	0.385
1E+12	1	8.807	8.738	-0.069
1E+12	2	8.929	8.961	0.032
1E+12	3	8.632	8.677	0.045
5E+12	4	8.777	8.927	0.150
5E+12	5	8.855	8.631	-0.224
5E+12	6	8.518	8.785	0.267
1E+13	7	8.643	8.704	0.061
1E+13	8	8.972	8.558	-0.414
1E+13	9	8.548	8.877	0.329
Max		8.972	8.961	0.385
Average		8.722	8.778	0.056
Min		8.518	8.558	-0.414
Std Dev		0.167	0.139	0.248

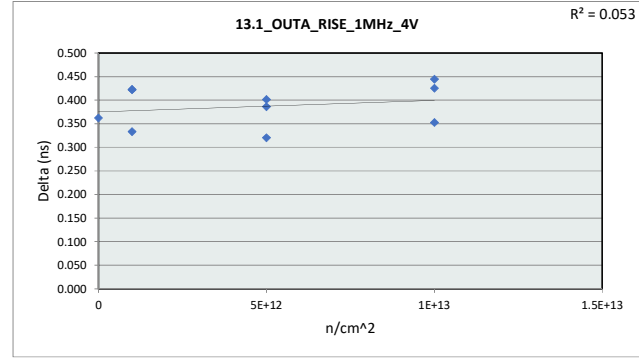


12.23_T_FAULT_DELAY_2MHz				
Test Site				
Tester				
Test Number				
Max Limit		14	us	
Min Limit		7	us	
n/cm^2	0	1E+12	5E+12	1E+13
LL	7.000	7.000	7.000	7.000
Min	8.926	8.677	8.631	8.558
Average	8.926	8.792	8.781	8.713
Max	8.926	8.961	8.927	8.877
UL	14.000	14.000	14.000	14.000

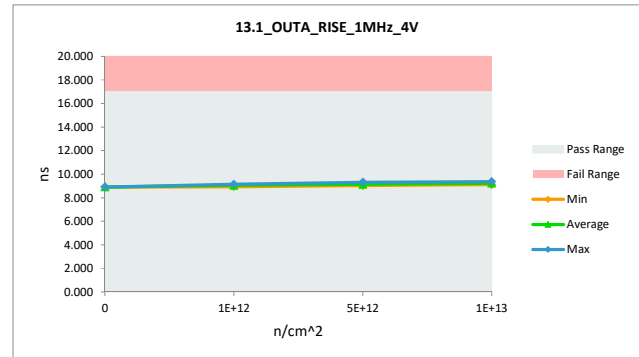


NDD Characterization Report TPS7H5005-SEP

13.1_OUTA_RISE_1MHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit		0	0	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.547	8.909	0.362
1E+12	1	8.806	9.139	0.333
1E+12	2	8.689	9.111	0.422
1E+12	3	8.510	8.932	0.422
5E+12	4	8.707	9.027	0.320
5E+12	5	8.688	9.074	0.386
5E+12	6	8.919	9.320	0.401
1E+13	7	8.927	9.371	0.444
1E+13	8	8.759	9.111	0.352
1E+13	9	8.808	9.233	0.425
Max		8.927	9.371	0.444
Average		8.736	9.123	0.387
Min		8.510	8.909	0.320
Std Dev		0.139	0.152	0.043

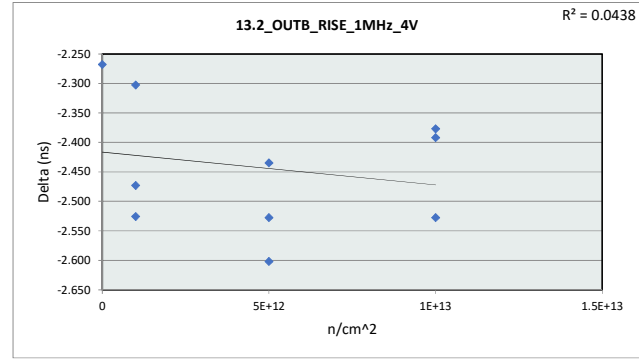


13.1_OUTA_RISE_1MHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit	0	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	8.909	8.932	9.027	9.111
Average	8.909	9.061	9.140	9.238
Max	8.909	9.139	9.320	9.371
UL	17.000	17.000	17.000	17.000

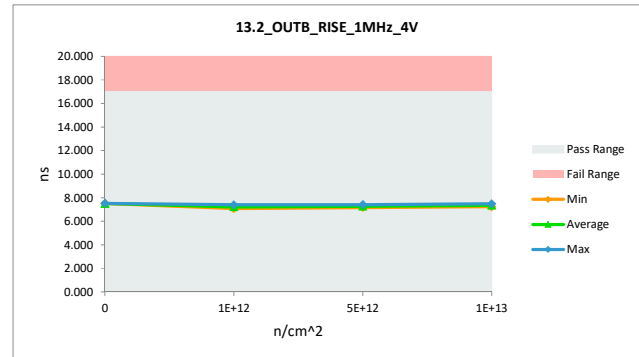


NDD Characterization Report TPS7H5005-SEP

13.2_OUTB_RISE_1MHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit		0	0	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	9.778	7.510	-2.268
1E+12	1	9.689	7.216	-2.473
1E+12	2	9.702	7.399	-2.303
1E+12	3	9.594	7.068	-2.526
5E+12	4	9.695	7.167	-2.528
5E+12	5	9.848	7.246	-2.602
5E+12	6	9.849	7.414	-2.435
1E+13	7	9.757	7.380	-2.377
1E+13	8	9.873	7.481	-2.392
1E+13	9	9.757	7.229	-2.528
Max		9.873	7.510	-2.268
Average		9.754	7.311	-2.443
Min		9.594	7.068	-2.602
Std Dev		0.087	0.146	0.108

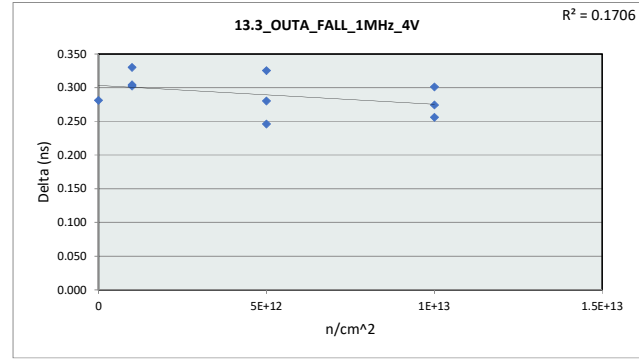


13.2_OUTB_RISE_1MHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit	0	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	7.510	7.068	7.167	7.229
Average	7.510	7.228	7.276	7.363
Max	7.510	7.399	7.414	7.481
UL	17.000	17.000	17.000	17.000

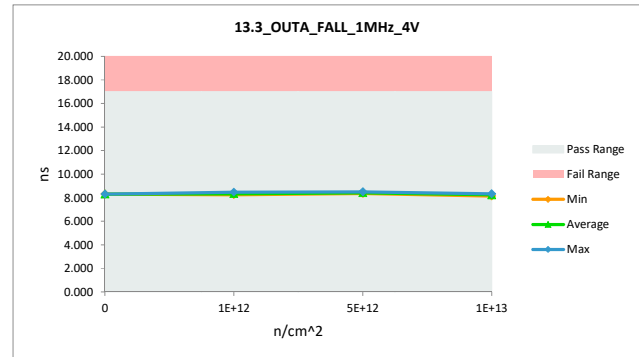


NDD Characterization Report TPS7H5005-SEP

13.3_OUTA_FALL_1MHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit		0	0	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.022	8.303	0.281
1E+12	1	8.159	8.461	0.302
1E+12	2	7.949	8.279	0.330
1E+12	3	7.949	8.253	0.304
5E+12	4	8.136	8.382	0.246
5E+12	5	8.219	8.499	0.280
5E+12	6	8.043	8.368	0.325
1E+13	7	7.876	8.150	0.274
1E+13	8	8.067	8.323	0.256
1E+13	9	7.956	8.257	0.301
Max		8.219	8.499	0.330
Average		8.038	8.328	0.290
Min		7.876	8.150	0.246
Std Dev		0.109	0.104	0.028

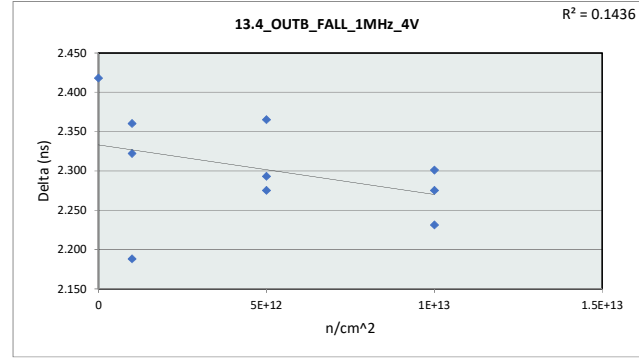


13.3_OUTA_FALL_1MHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit	0	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	8.303	8.253	8.368	8.150
Average	8.303	8.331	8.416	8.243
Max	8.303	8.461	8.499	8.323
UL	17.000	17.000	17.000	17.000

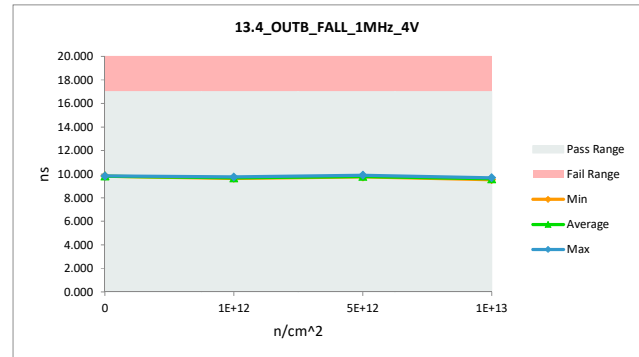


NDD Characterization Report TPS7H5005-SEP

13.4_OUTB_FALL_1MHz_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit		0	0	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.419	9.837	2.418
1E+12	1	7.573	9.761	2.188
1E+12	2	7.283	9.643	2.360
1E+12	3	7.297	9.619	2.322
5E+12	4	7.495	9.770	2.275
5E+12	5	7.608	9.901	2.293
5E+12	6	7.396	9.761	2.365
1E+13	7	7.252	9.527	2.275
1E+13	8	7.384	9.685	2.301
1E+13	9	7.360	9.591	2.231
Max		7.608	9.901	2.418
Average		7.407	9.710	2.303
Min		7.252	9.527	2.188
Std Dev		0.120	0.117	0.067

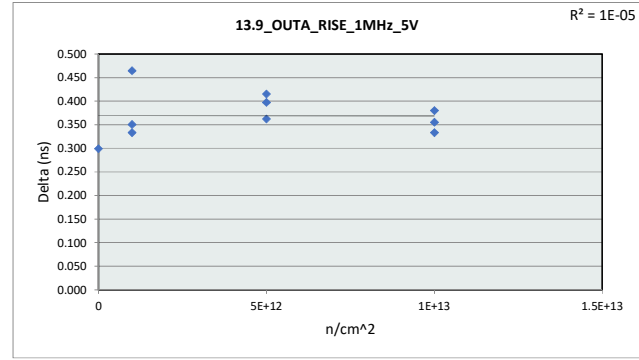


13.4_OUTB_FALL_1MHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit	0	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	9.837	9.619	9.761	9.527
Average	9.837	9.674	9.811	9.601
Max	9.837	9.761	9.901	9.685
UL	17.000	17.000	17.000	17.000

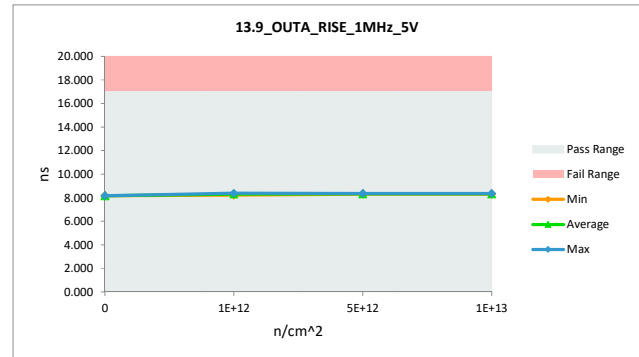


NDD Characterization Report TPS7H5005-SEP

13.9_OUTA_RISE_1MHz_5V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit		0	0	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.858	8.157	0.299
1E+12	1	7.990	8.323	0.333
1E+12	2	7.912	8.376	0.464
1E+12	3	7.865	8.215	0.350
5E+12	4	7.948	8.310	0.362
5E+12	5	7.908	8.323	0.415
5E+12	6	7.959	8.356	0.397
1E+13	7	7.999	8.332	0.333
1E+13	8	7.970	8.350	0.380
1E+13	9	7.933	8.288	0.355
Max		7.999	8.376	0.464
Average		7.934	8.303	0.369
Min		7.858	8.157	0.299
Std Dev		0.049	0.068	0.047

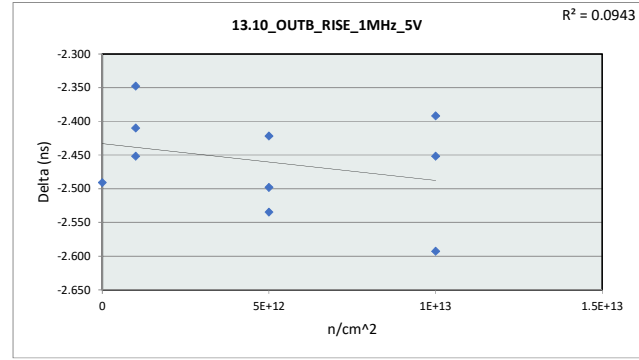


13.9_OUTA_RISE_1MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit	0	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	8.157	8.215	8.310	8.288
Average	8.157	8.305	8.330	8.323
Max	8.157	8.376	8.356	8.350
UL	17.000	17.000	17.000	17.000

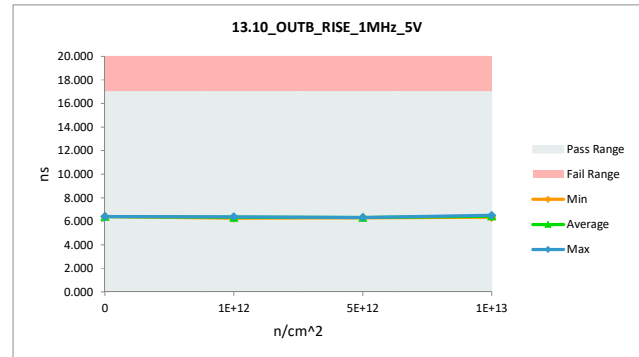


NDD Characterization Report TPS7H5005-SEP

13.10_OUTB_RISE_1MHz_5V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit		0	0	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.895	6.404	-2.491
1E+12	1	8.784	6.332	-2.452
1E+12	2	8.736	6.388	-2.348
1E+12	3	8.666	6.256	-2.410
5E+12	4	8.740	6.318	-2.422
5E+12	5	8.854	6.319	-2.535
5E+12	6	8.797	6.299	-2.498
1E+13	7	8.885	6.493	-2.392
1E+13	8	8.950	6.498	-2.452
1E+13	9	8.919	6.326	-2.593
Max		8.950	6.498	-2.348
Average		8.823	6.363	-2.459
Min		8.666	6.256	-2.593
Std Dev		0.092	0.081	0.072

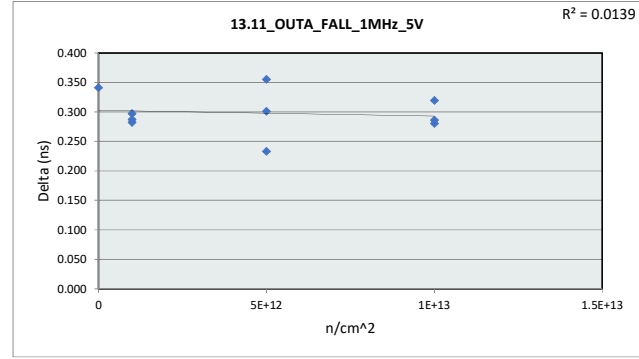


13.10_OUTB_RISE_1MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit		17	ns	
Min Limit		0	ns	
n/cm^2	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	6.404	6.256	6.299	6.326
Average	6.404	6.325	6.312	6.439
Max	6.404	6.388	6.319	6.498
UL	17.000	17.000	17.000	17.000

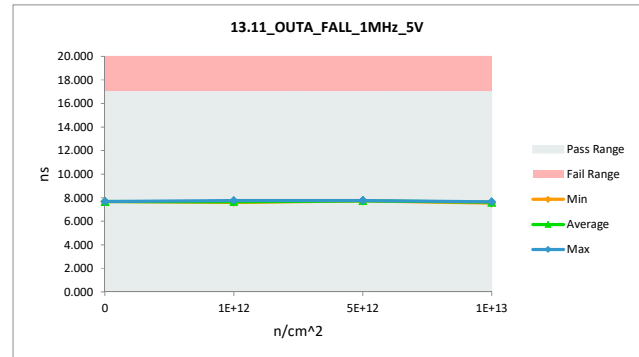


NDD Characterization Report TPS7H5005-SEP

13.11_OUTA_FALL_1MHz_5V				
Test Site				
Tester				
Test Number				
Unit		ns		ns
Max Limit		17		17
Min Limit		0		0
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.321	7.662	0.341
1E+12	1	7.447	7.744	0.297
1E+12	2	7.337	7.619	0.282
1E+12	3	7.297	7.584	0.287
5E+12	4	7.463	7.764	0.301
5E+12	5	7.492	7.725	0.233
5E+12	6	7.383	7.738	0.355
1E+13	7	7.259	7.545	0.286
1E+13	8	7.381	7.661	0.280
1E+13	9	7.313	7.632	0.319
Max		7.492	7.764	0.355
Average		7.369	7.667	0.298
Min		7.259	7.545	0.233
Std Dev		0.078	0.074	0.034

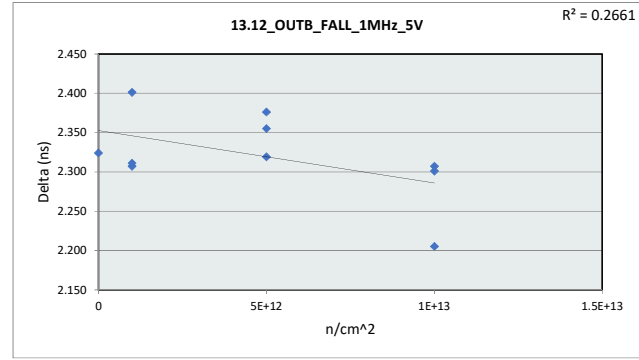


13.11_OUTA_FALL_1MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	17		ns	
Min Limit	0		ns	
n/cm^2	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	7.662	7.584	7.725	7.545
Average	7.662	7.649	7.742	7.613
Max	7.662	7.744	7.764	7.661
UL	17.000	17.000	17.000	17.000

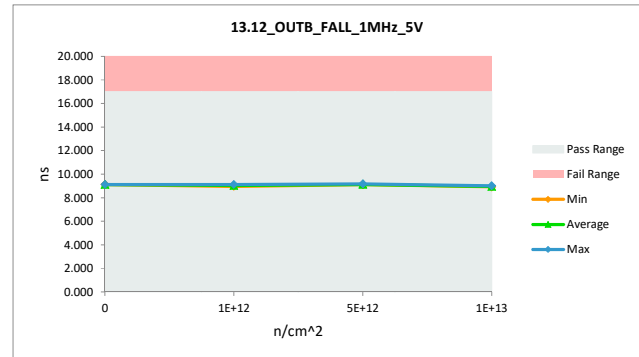


NDD Characterization Report TPS7H5005-SEP

13.12_OUTB_FALL_1MHz_5V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit		0	0	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.795	9.119	2.324
1E+12	1	6.811	9.118	2.307
1E+12	2	6.638	9.039	2.401
1E+12	3	6.646	8.957	2.311
5E+12	4	6.784	9.103	2.319
5E+12	5	6.800	9.176	2.376
5E+12	6	6.756	9.111	2.355
1E+13	7	6.609	8.916	2.307
1E+13	8	6.713	9.014	2.301
1E+13	9	6.715	8.920	2.205
Max		6.811	9.176	2.401
Average		6.727	9.047	2.321
Min		6.609	8.916	2.205
Std Dev		0.074	0.092	0.053

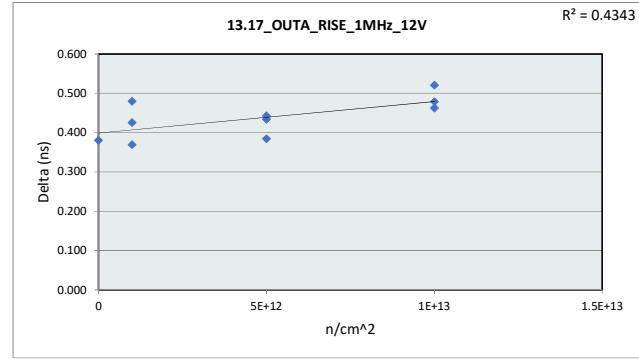


13.12_OUTB_FALL_1MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit	0	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	9.119	8.957	9.103	8.916
Average	9.119	9.038	9.130	8.950
Max	9.119	9.118	9.176	9.014
UL	17.000	17.000	17.000	17.000

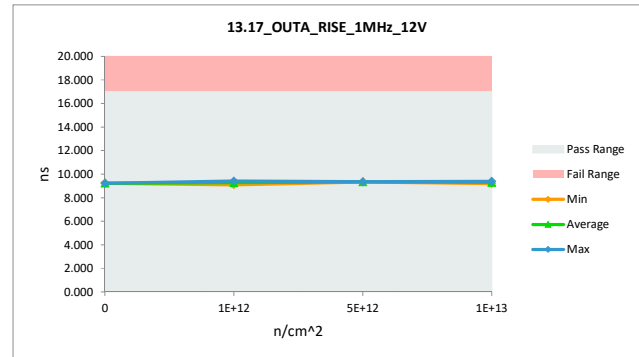


NDD Characterization Report TPS7H5005-SEP

13.17_OUTA_RISE_1MHz_12V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	17	17		
Min Limit	0	0		
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.855	9.235	0.380
1E+12	1	8.858	9.283	0.425
1E+12	2	8.935	9.414	0.479
1E+12	3	8.724	9.093	0.369
5E+12	4	8.948	9.332	0.384
5E+12	5	8.902	9.344	0.442
5E+12	6	8.902	9.336	0.434
1E+13	7	8.814	9.292	0.478
1E+13	8	8.924	9.386	0.462
1E+13	9	8.687	9.207	0.520
Max		8.948	9.414	0.520
Average		8.855	9.292	0.437
Min		8.687	9.093	0.369
Std Dev		0.089	0.094	0.049

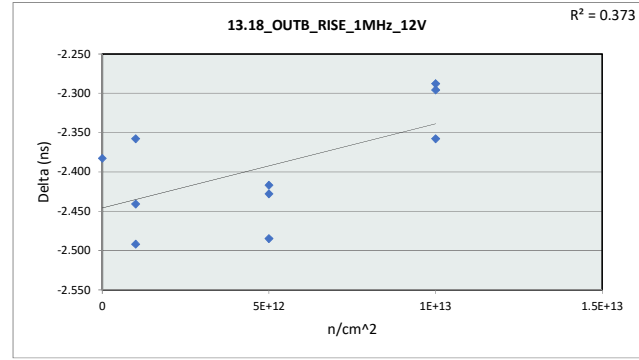


13.17_OUTA_RISE_1MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit	0	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	9.235	9.093	9.332	9.207
Average	9.235	9.263	9.337	9.295
Max	9.235	9.414	9.344	9.386
UL	17.000	17.000	17.000	17.000

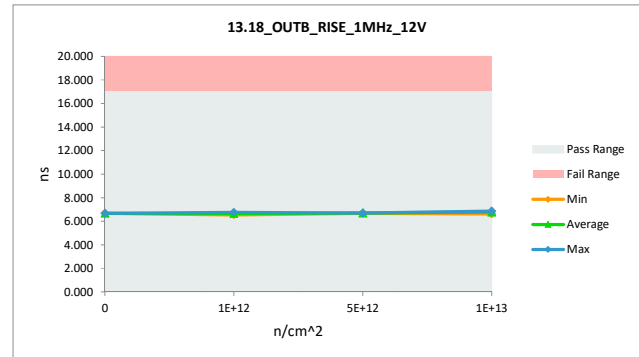


NDD Characterization Report TPS7H5005-SEP

13.18_OUTB_RISE_1MHz_12V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit		0	0	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	9.051	6.668	-2.383
1E+12	1	9.113	6.621	-2.492
1E+12	2	9.122	6.764	-2.358
1E+12	3	8.965	6.524	-2.441
5E+12	4	9.135	6.707	-2.428
5E+12	5	9.166	6.681	-2.485
5E+12	6	9.097	6.680	-2.417
1E+13	7	9.134	6.846	-2.288
1E+13	8	9.150	6.854	-2.296
1E+13	9	8.987	6.629	-2.358
Max		9.166	6.854	-2.288
Average		9.092	6.697	-2.395
Min		8.965	6.524	-2.492
Std Dev		0.069	0.102	0.071

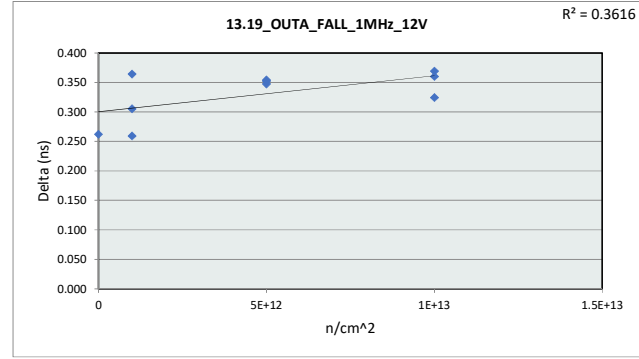


13.18_OUTB_RISE_1MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit	0	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	6.668	6.524	6.680	6.629
Average	6.668	6.636	6.689	6.776
Max	6.668	6.764	6.707	6.854
UL	17.000	17.000	17.000	17.000

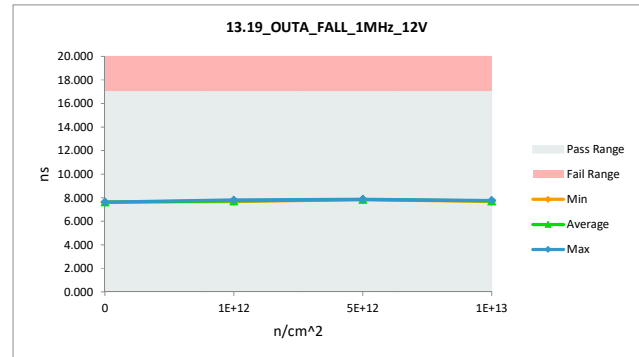


NDD Characterization Report TPS7H5005-SEP

13.19_OUTA_FALL_1MHz_12V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	17	17		
Min Limit	0	0		
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.360	7.622	0.262
1E+12	1	7.492	7.797	0.305
1E+12	2	7.432	7.691	0.259
1E+12	3	7.304	7.668	0.364
5E+12	4	7.516	7.868	0.352
5E+12	5	7.478	7.832	0.354
5E+12	6	7.493	7.840	0.347
1E+13	7	7.303	7.672	0.369
1E+13	8	7.447	7.771	0.324
1E+13	9	7.336	7.696	0.360
Max		7.516	7.868	0.369
Average		7.416	7.746	0.330
Min		7.303	7.622	0.259
Std Dev		0.083	0.086	0.041

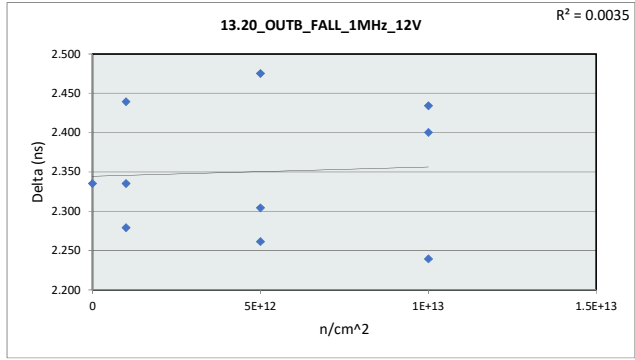


13.19_OUTA_FALL_1MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit	0	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	7.622	7.668	7.832	7.672
Average	7.622	7.719	7.847	7.713
Max	7.622	7.797	7.868	7.771
UL	17.000	17.000	17.000	17.000

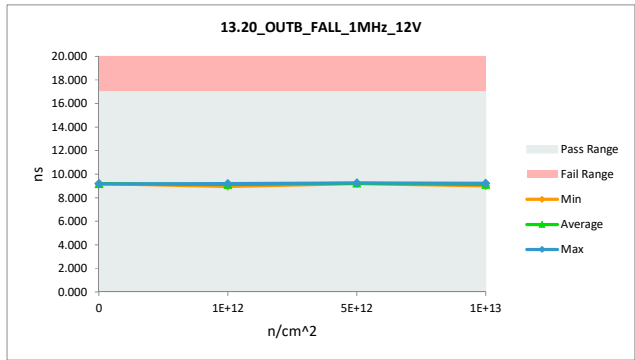


NDD Characterization Report TPS7H5005-SEP

13.20_OUTB_FALL_1MHz_12V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit		0	0	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.843	9.178	2.335
1E+12	1	6.873	9.208	2.335
1E+12	2	6.739	9.178	2.439
1E+12	3	6.682	8.961	2.279
5E+12	4	6.934	9.195	2.261
5E+12	5	6.945	9.249	2.304
5E+12	6	6.784	9.259	2.475
1E+13	7	6.720	9.120	2.400
1E+13	8	6.791	9.225	2.434
1E+13	9	6.773	9.012	2.239
Max		6.945	9.259	2.475
Average		6.808	9.159	2.350
Min		6.682	8.961	2.239
Std Dev		0.089	0.100	0.082

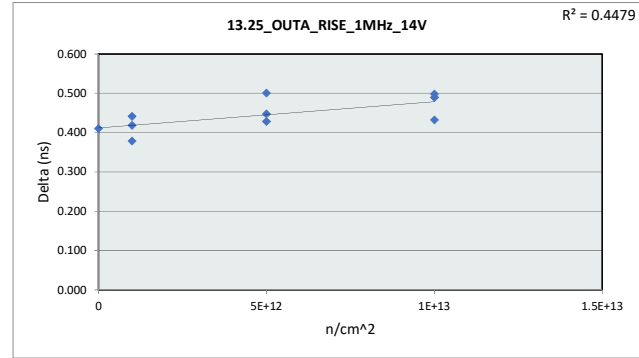


13.20_OUTB_FALL_1MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit	0	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	9.178	8.961	9.195	9.012
Average	9.178	9.116	9.234	9.119
Max	9.178	9.208	9.259	9.225
UL	17.000	17.000	17.000	17.000

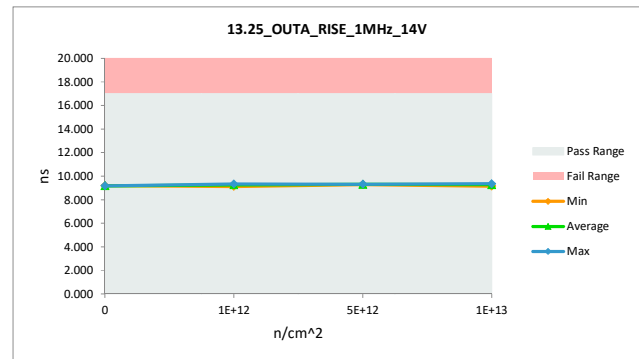


NDD Characterization Report TPS7H5005-SEP

13.25_OUTA_RISE_1MHz_14V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	17	17		
Min Limit	0	0		
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.774	9.184	0.410
1E+12	1	8.860	9.301	0.441
1E+12	2	8.951	9.329	0.378
1E+12	3	8.710	9.128	0.418
5E+12	4	8.860	9.307	0.447
5E+12	5	8.887	9.315	0.428
5E+12	6	8.785	9.285	0.500
1E+13	7	8.797	9.295	0.498
1E+13	8	8.863	9.352	0.489
1E+13	9	8.723	9.155	0.432
Max		8.951	9.352	0.500
Average		8.821	9.265	0.444
Min		8.710	9.128	0.378
Std Dev		0.076	0.079	0.040

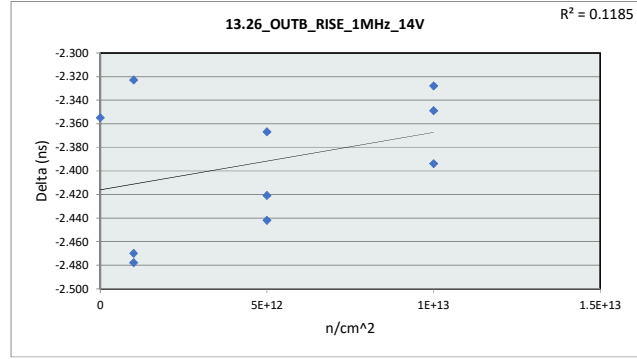


13.25_OUTA_RISE_1MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit	0	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	9.184	9.128	9.285	9.155
Average	9.184	9.253	9.302	9.267
Max	9.184	9.329	9.315	9.352
UL	17.000	17.000	17.000	17.000

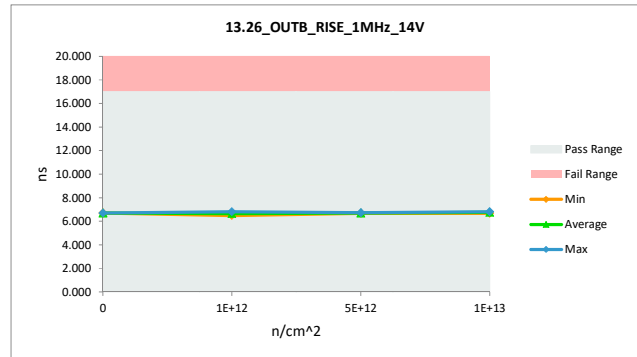


NDD Characterization Report TPS7H5005-SEP

13.26_OUTB_RISE_1MHz_14V				
Test Site				
Tester				
Test Number				
Unit		ns		ns
Max Limit		17		17
Min Limit		0		0
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	9.050	6.695	-2.355
1E+12	1	9.117	6.647	-2.470
1E+12	2	9.127	6.804	-2.323
1E+12	3	8.973	6.495	-2.478
5E+12	4	9.117	6.675	-2.442
5E+12	5	9.143	6.722	-2.421
5E+12	6	9.039	6.672	-2.367
1E+13	7	9.158	6.809	-2.349
1E+13	8	9.198	6.804	-2.394
1E+13	9	9.002	6.674	-2.328
Max		9.198	6.809	-2.323
Average		9.092	6.700	-2.393
Min		8.973	6.495	-2.478
Std Dev		0.073	0.095	0.057

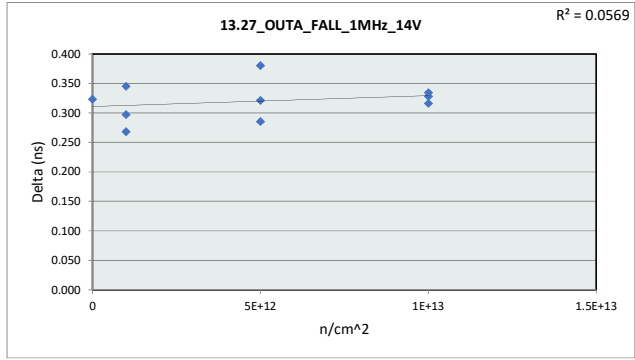


13.26_OUTB_RISE_1MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit		17		ns
Min Limit		0		ns
n/cm^2	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	6.695	6.495	6.672	6.674
Average	6.695	6.649	6.690	6.762
Max	6.695	6.804	6.722	6.809
UL	17.000	17.000	17.000	17.000

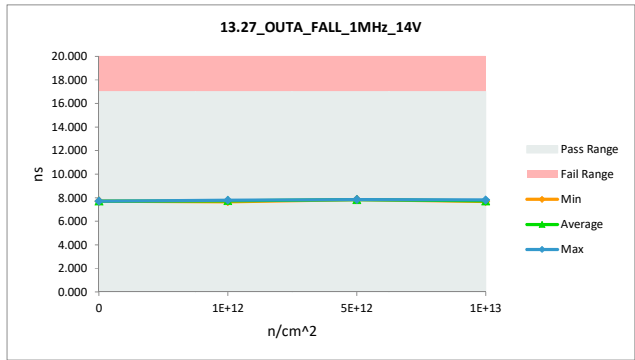


NDD Characterization Report TPS7H5005-SEP

13.27_OUTA_FALL_1MHz_14V				
Test Site				
Tester				
Test Number				
Unit		ns		ns
Max Limit		17		17
Min Limit		0		0
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.380	7.703	0.323
1E+12	1	7.522	7.790	0.268
1E+12	2	7.430	7.775	0.345
1E+12	3	7.356	7.653	0.297
5E+12	4	7.523	7.844	0.321
5E+12	5	7.556	7.841	0.285
5E+12	6	7.447	7.827	0.380
1E+13	7	7.357	7.673	0.316
1E+13	8	7.463	7.797	0.334
1E+13	9	7.375	7.703	0.328
Max		7.556	7.844	0.380
Average		7.441	7.761	0.320
Min		7.356	7.653	0.268
Std Dev		0.074	0.072	0.032

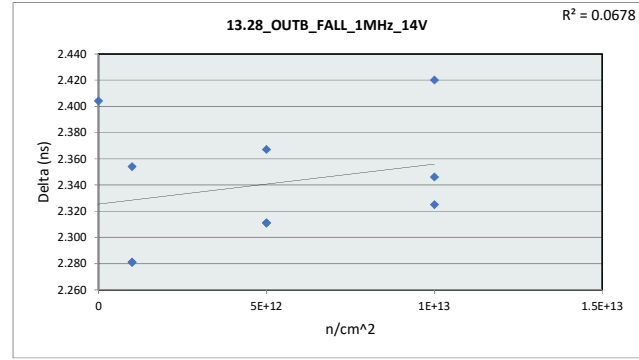


13.27_OUTA_FALL_1MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	17		ns	
Min Limit	0		ns	
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	7.703	7.653	7.827	7.673
Average	7.703	7.739	7.837	7.724
Max	7.703	7.790	7.844	7.797
UL	17.000	17.000	17.000	17.000

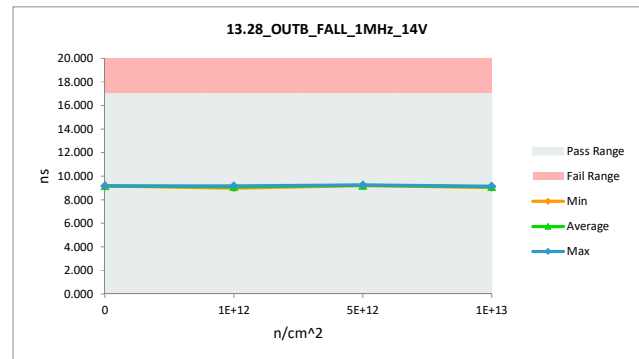


NDD Characterization Report TPS7H5005-SEP

13.28_OUTB_FALL_1MHz_14V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		17	17	
Min Limit		0	0	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.767	9.171	2.404
1E+12	1	6.889	9.170	2.281
1E+12	2	6.759	9.113	2.354
1E+12	3	6.713	8.994	2.281
5E+12	4	6.887	9.198	2.311
5E+12	5	6.929	9.240	2.311
5E+12	6	6.870	9.237	2.367
1E+13	7	6.676	9.096	2.420
1E+13	8	6.810	9.135	2.325
1E+13	9	6.687	9.033	2.346
Max		6.929	9.240	2.420
Average		6.799	9.139	2.340
Min		6.676	8.994	2.281
Std Dev		0.092	0.082	0.048

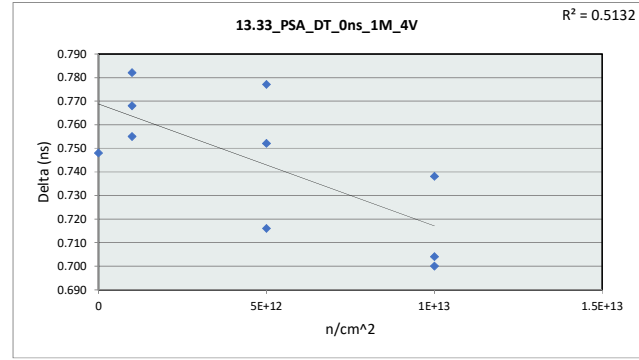


13.28_OUTB_FALL_1MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit	0	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	0.000	0.000	0.000	0.000
Min	9.171	8.994	9.198	9.033
Average	9.171	9.092	9.225	9.088
Max	9.171	9.170	9.240	9.135
UL	17.000	17.000	17.000	17.000

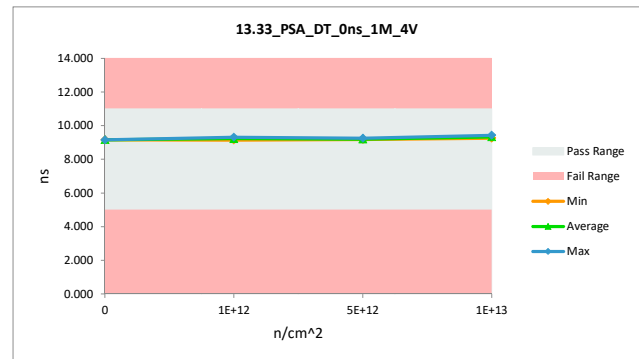


NDD Characterization Report TPS7H5005-SEP

13.33_PSA_DT_Ons_1M_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		11	11	
Min Limit		5	5	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.408	9.156	0.748
1E+12	1	8.541	9.323	0.782
1E+12	2	8.449	9.204	0.755
1E+12	3	8.367	9.135	0.768
5E+12	4	8.406	9.183	0.777
5E+12	5	8.440	9.192	0.752
5E+12	6	8.536	9.252	0.716
1E+13	7	8.556	9.260	0.704
1E+13	8	8.609	9.309	0.700
1E+13	9	8.693	9.431	0.738
Max		8.693	9.431	0.782
Average		8.501	9.245	0.744
Min		8.367	9.135	0.700
Std Dev		0.104	0.090	0.029

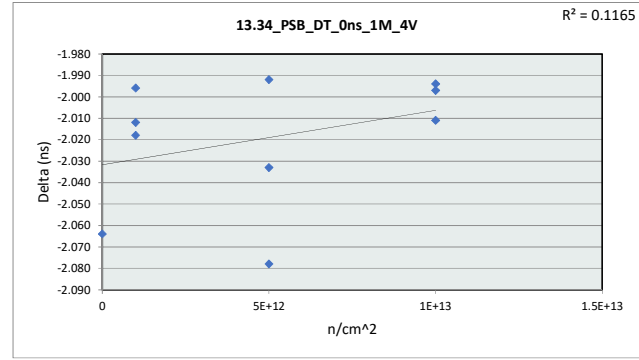


13.33_PSA_DT_Ons_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	9.156	9.135	9.183	9.260
Average	9.156	9.221	9.209	9.333
Max	9.156	9.323	9.252	9.431
UL	11.000	11.000	11.000	11.000

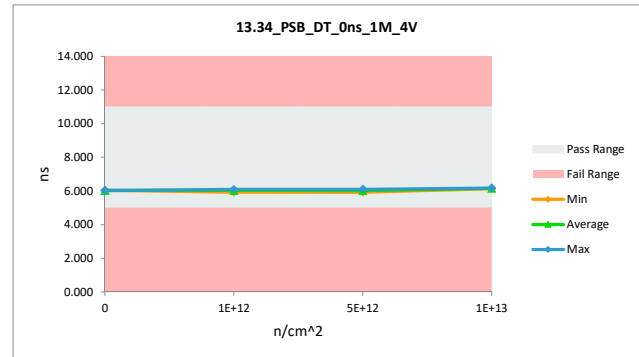


NDD Characterization Report TPS7H5005-SEP

13.34_PSB_DT_0ns_1M_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		11	11	
Min Limit		5	5	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	8.094	6.030	-2.064
1E+12	1	8.107	6.089	-2.018
1E+12	2	8.070	6.074	-1.996
1E+12	3	7.939	5.927	-2.012
5E+12	4	8.048	6.015	-2.033
5E+12	5	8.011	5.933	-2.078
5E+12	6	8.090	6.098	-1.992
1E+13	7	8.175	6.164	-2.011
1E+13	8	8.165	6.171	-1.994
1E+13	9	8.141	6.144	-1.997
Max		8.175	6.171	-1.992
Average		8.084	6.065	-2.019
Min		7.939	5.927	-2.078
Std Dev		0.072	0.088	0.030

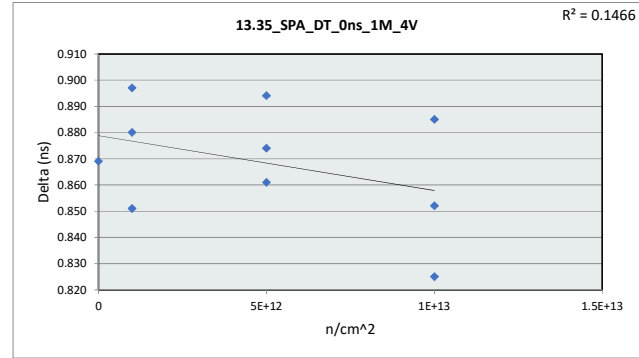


13.34_PSB_DT_0ns_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	6.030	5.927	5.933	6.144
Average	6.030	6.030	6.015	6.160
Max	6.030	6.089	6.098	6.171
UL	11.000	11.000	11.000	11.000

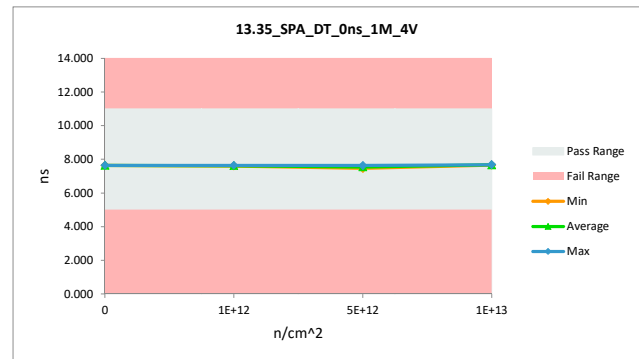


NDD Characterization Report TPS7H5005-SEP

13.35_SPA_DT_Ons_1M_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		11	11	
Min Limit		5	5	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.770	7.639	0.869
1E+12	1	6.729	7.626	0.897
1E+12	2	6.760	7.640	0.880
1E+12	3	6.748	7.599	0.851
5E+12	4	6.596	7.457	0.861
5E+12	5	6.674	7.548	0.874
5E+12	6	6.739	7.633	0.894
1E+13	7	6.856	7.681	0.825
1E+13	8	6.783	7.668	0.885
1E+13	9	6.804	7.656	0.852
Max		6.856	7.681	0.897
Average		6.746	7.615	0.869
Min		6.596	7.457	0.825
Std Dev		0.071	0.067	0.022

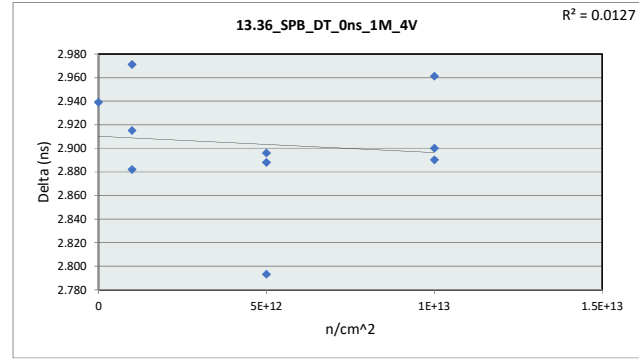


13.35_SPA_DT_Ons_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	7.639	7.599	7.457	7.656
Average	7.639	7.622	7.546	7.668
Max	7.639	7.640	7.633	7.681
UL	11.000	11.000	11.000	11.000

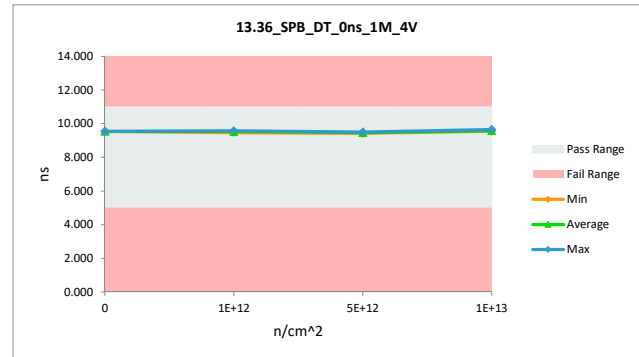


NDD Characterization Report TPS7H5005-SEP

13.36_SPB_DT_Ons_1M_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		11	11	
Min Limit		5	5	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.603	9.542	2.939
1E+12	1	6.614	9.585	2.971
1E+12	2	6.628	9.543	2.915
1E+12	3	6.589	9.471	2.882
5E+12	4	6.603	9.499	2.896
5E+12	5	6.633	9.426	2.793
5E+12	6	6.604	9.492	2.888
1E+13	7	6.684	9.645	2.961
1E+13	8	6.657	9.557	2.900
1E+13	9	6.665	9.555	2.890
Max		6.684	9.645	2.971
Average		6.628	9.531	2.903
Min		6.589	9.426	2.793
Std Dev		0.031	0.062	0.050

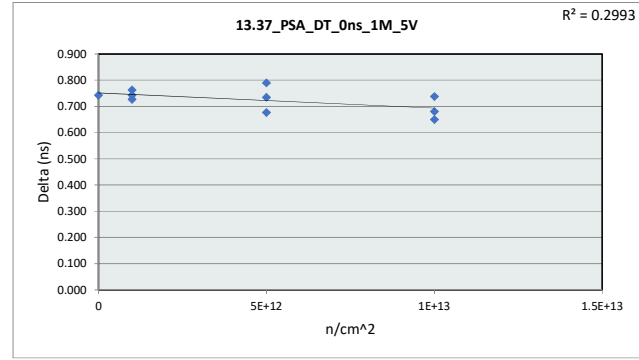


13.36_SPB_DT_Ons_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	9.542	9.471	9.426	9.555
Average	9.542	9.533	9.472	9.586
Max	9.542	9.585	9.499	9.645
UL	11.000	11.000	11.000	11.000

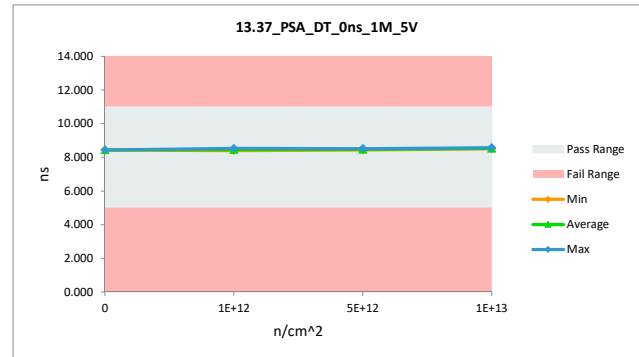


NDD Characterization Report TPS7H5005-SEP

13.37_PSA_DT_Ons_1M_5V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		11	11	
Min Limit		5	5	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.697	8.439	0.742
1E+12	1	7.772	8.534	0.762
1E+12	2	7.710	8.436	0.726
1E+12	3	7.658	8.400	0.742
5E+12	4	7.748	8.424	0.676
5E+12	5	7.687	8.476	0.789
5E+12	6	7.787	8.521	0.734
1E+13	7	7.766	8.503	0.737
1E+13	8	7.860	8.540	0.680
1E+13	9	7.921	8.570	0.649
Max		7.921	8.570	0.789
Average		7.761	8.484	0.724
Min		7.658	8.400	0.649
Std Dev		0.081	0.058	0.043

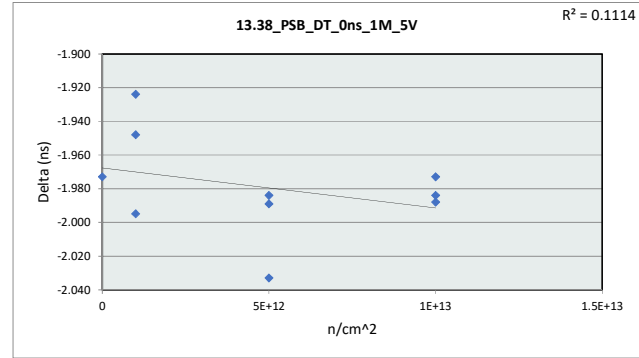


13.37_PSA_DT_Ons_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	8.439	8.400	8.424	8.503
Average	8.439	8.457	8.474	8.538
Max	8.439	8.534	8.521	8.570
UL	11.000	11.000	11.000	11.000

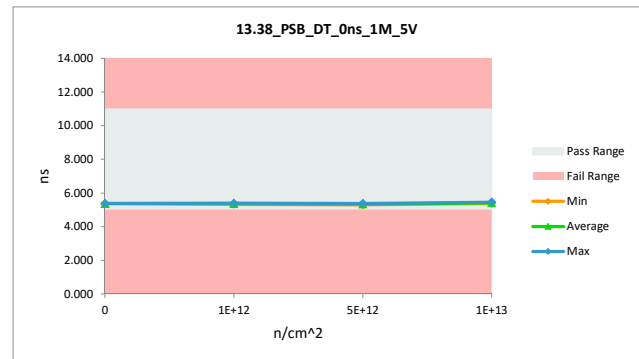


NDD Characterization Report TPS7H5005-SEP

13.38_PSB_DT_Ons_1M_5V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		11	11	
Min Limit		5	5	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.338	5.365	-1.973
1E+12	1	7.382	5.387	-1.995
1E+12	2	7.314	5.390	-1.924
1E+12	3	7.268	5.320	-1.948
5E+12	4	7.310	5.326	-1.984
5E+12	5	7.327	5.294	-2.033
5E+12	6	7.368	5.379	-1.989
1E+13	7	7.361	5.377	-1.984
1E+13	8	7.407	5.419	-1.988
1E+13	9	7.430	5.457	-1.973
Max		7.430	5.457	-1.924
Average		7.351	5.371	-1.979
Min		7.268	5.294	-2.033
Std Dev		0.049	0.048	0.029

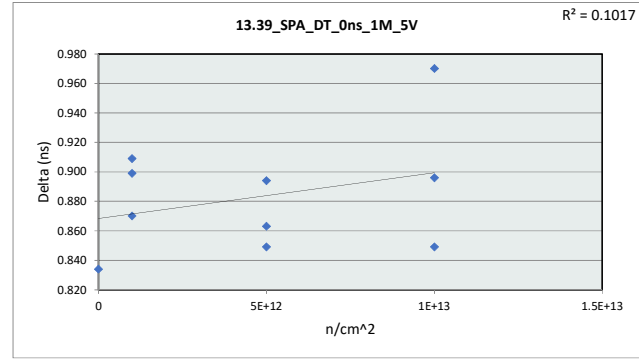


13.38_PSB_DT_Ons_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	5.365	5.320	5.294	5.377
Average	5.365	5.366	5.333	5.418
Max	5.365	5.390	5.379	5.457
UL	11.000	11.000	11.000	11.000

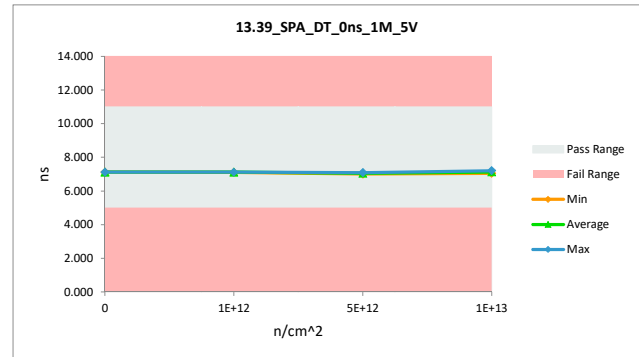


NDD Characterization Report TPS7H5005-SEP

13.39_SPA_DT_Ons_1M_5V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	11		11	
Min Limit	5		5	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.282	7.116	0.834
1E+12	1	6.221	7.120	0.899
1E+12	2	6.211	7.120	0.909
1E+12	3	6.233	7.103	0.870
5E+12	4	6.139	7.002	0.863
5E+12	5	6.196	7.090	0.894
5E+12	6	6.214	7.063	0.849
1E+13	7	6.237	7.207	0.970
1E+13	8	6.220	7.116	0.896
1E+13	9	6.201	7.050	0.849
Max		6.282	7.207	0.970
Average		6.215	7.099	0.883
Min		6.139	7.002	0.834
Std Dev		0.036	0.054	0.040

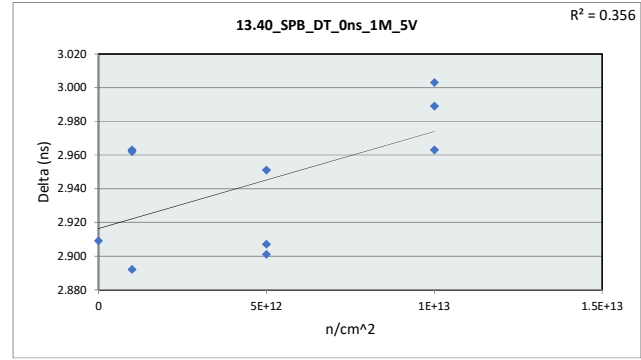


13.39_SPA_DT_Ons_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	7.116	7.103	7.002	7.050
Average	7.116	7.114	7.052	7.124
Max	7.116	7.120	7.090	7.207
UL	11.000	11.000	11.000	11.000

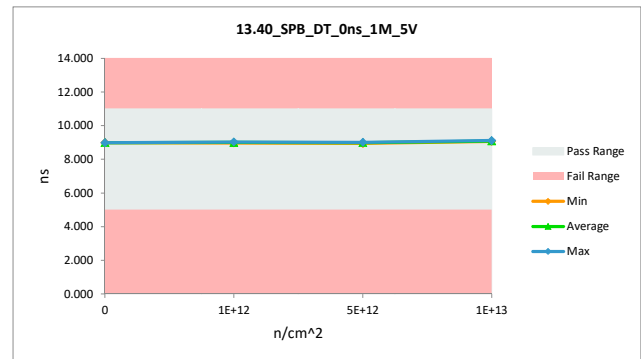


NDD Characterization Report TPS7H5005-SEP

13.40_SPB_DT_0ns_1M_5V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	11		11	
Min Limit	5		5	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.079	8.988	2.909
1E+12	1	6.066	9.028	2.962
1E+12	2	6.068	8.960	2.892
1E+12	3	6.045	9.008	2.963
5E+12	4	6.039	8.946	2.907
5E+12	5	6.104	9.005	2.901
5E+12	6	6.049	9.000	2.951
1E+13	7	6.065	9.068	3.003
1E+13	8	6.083	9.072	2.989
1E+13	9	6.151	9.114	2.963
Max		6.151	9.114	3.003
Average		6.075	9.019	2.944
Min		6.039	8.946	2.892
Std Dev		0.033	0.052	0.039

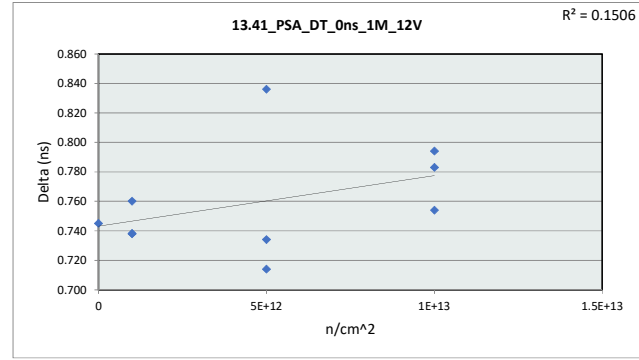


13.40_SPB_DT_0ns_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	11		ns	
Min Limit	5		ns	
n/cm^2	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	8.988	8.960	8.946	9.068
Average	8.988	8.999	8.984	9.085
Max	8.988	9.028	9.005	9.114
UL	11.000	11.000	11.000	11.000

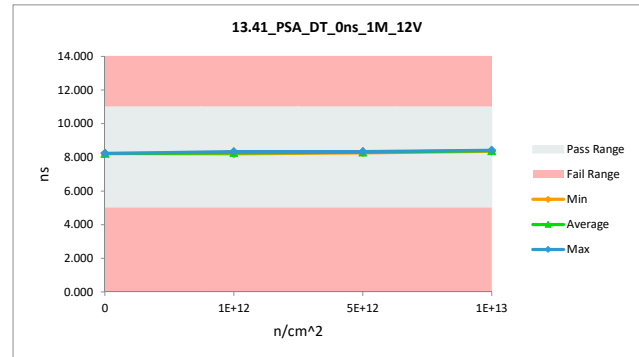


NDD Characterization Report TPS7H5005-SEP

13.41_PSA_DT_Ons_1M_12V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	11		11	
Min Limit	5		5	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.486	8.231	0.745
1E+12	1	7.574	8.334	0.760
1E+12	2	7.527	8.265	0.738
1E+12	3	7.465	8.203	0.738
5E+12	4	7.552	8.266	0.714
5E+12	5	7.559	8.293	0.734
5E+12	6	7.505	8.341	0.836
1E+13	7	7.608	8.362	0.754
1E+13	8	7.613	8.407	0.794
1E+13	9	7.631	8.414	0.783
Max		7.631	8.414	0.836
Average		7.552	8.312	0.760
Min		7.465	8.203	0.714
Std Dev		0.056	0.072	0.036

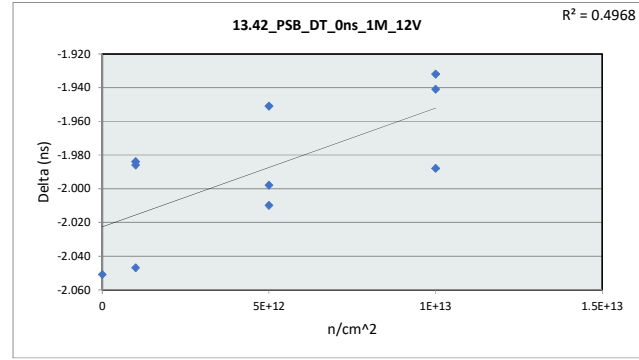


13.41_PSA_DT_Ons_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	8.231	8.203	8.266	8.362
Average	8.231	8.267	8.300	8.394
Max	8.231	8.334	8.341	8.414
UL	11.000	11.000	11.000	11.000

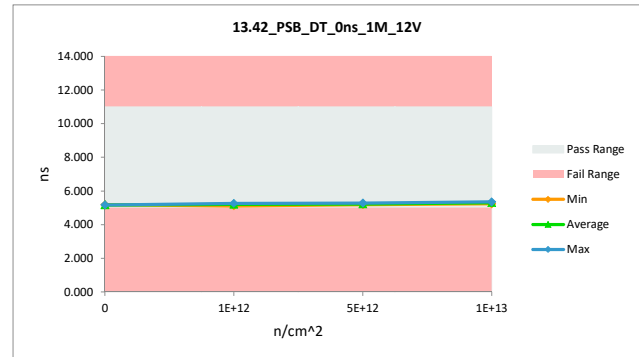


NDD Characterization Report TPS7H5005-SEP

13.42_PSB_DT_Ons_1M_12V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	11		11	
Min Limit	5		5	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.223	5.172	-2.051
1E+12	1	7.244	5.260	-1.984
1E+12	2	7.225	5.239	-1.986
1E+12	3	7.163	5.116	-2.047
5E+12	4	7.205	5.195	-2.010
5E+12	5	7.136	5.185	-1.951
5E+12	6	7.275	5.277	-1.998
1E+13	7	7.245	5.304	-1.941
1E+13	8	7.280	5.348	-1.932
1E+13	9	7.224	5.236	-1.988
Max		7.280	5.348	-1.932
Average		7.222	5.233	-1.989
Min		7.136	5.116	-2.051
Std Dev		0.045	0.068	0.040

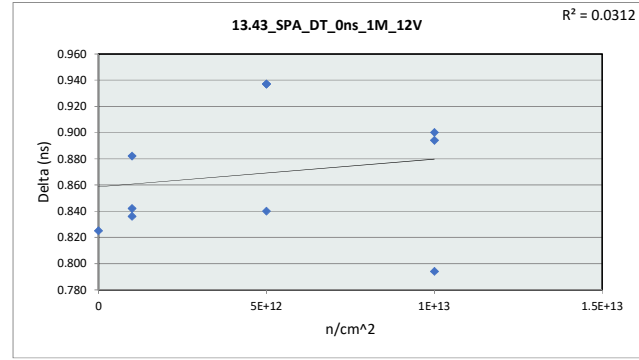


13.42_PSB_DT_Ons_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	5.172	5.116	5.185	5.236
Average	5.172	5.205	5.219	5.296
Max	5.172	5.260	5.277	5.348
UL	11.000	11.000	11.000	11.000

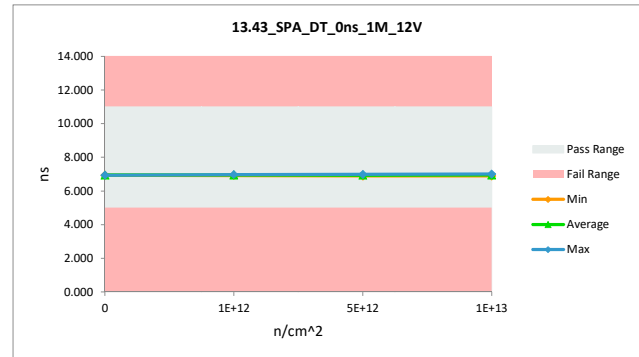


NDD Characterization Report TPS7H5005-SEP

13.43_SPA_DT_Ons_1M_12V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	11	11		
Min Limit	5	5		
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.115	6.940	0.825
1E+12	1	6.089	6.971	0.882
1E+12	2	6.134	6.976	0.842
1E+12	3	6.090	6.926	0.836
5E+12	4	5.955	6.892	0.937
5E+12	5	6.093	6.933	0.840
5E+12	6	6.056	6.993	0.937
1E+13	7	6.117	7.011	0.894
1E+13	8	6.102	6.896	0.794
1E+13	9	6.066	6.966	0.900
Max		6.134	7.011	0.937
Average		6.082	6.950	0.869
Min		5.955	6.892	0.794
Std Dev		0.050	0.040	0.049

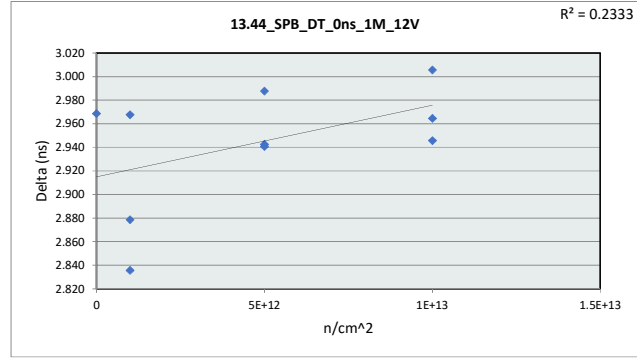


13.43_SPA_DT_Ons_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	6.940	6.926	6.892	6.896
Average	6.940	6.958	6.939	6.958
Max	6.940	6.976	6.993	7.011
UL	11.000	11.000	11.000	11.000

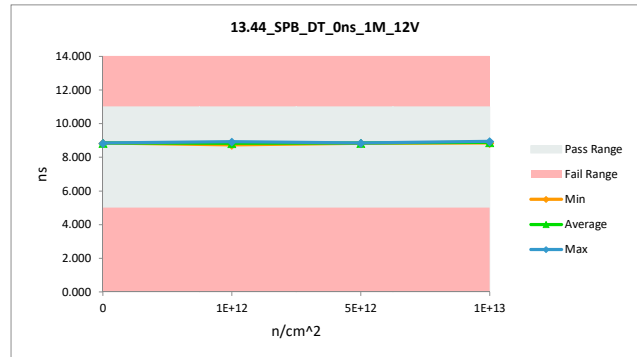


NDD Characterization Report TPS7H5005-SEP

13.44_SPB_DT_Ons_1M_12V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		11	11	
Min Limit		5	5	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	5.878	8.847	2.969
1E+12	1	5.948	8.827	2.879
1E+12	2	5.958	8.926	2.968
1E+12	3	5.913	8.749	2.836
5E+12	4	5.855	8.843	2.988
5E+12	5	5.915	8.856	2.941
5E+12	6	5.906	8.849	2.943
1E+13	7	5.944	8.890	2.946
1E+13	8	5.945	8.951	3.006
1E+13	9	5.894	8.859	2.965
Max		5.958	8.951	3.006
Average		5.916	8.860	2.944
Min		5.855	8.749	2.836
Std Dev		0.034	0.055	0.051

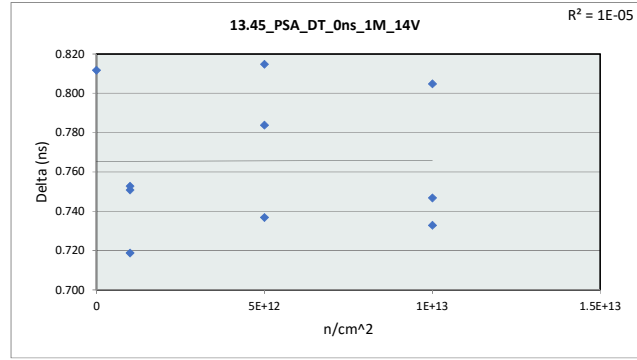


13.44_SPB_DT_Ons_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	8.847	8.749	8.843	8.859
Average	8.847	8.834	8.849	8.900
Max	8.847	8.926	8.856	8.951
UL	11.000	11.000	11.000	11.000

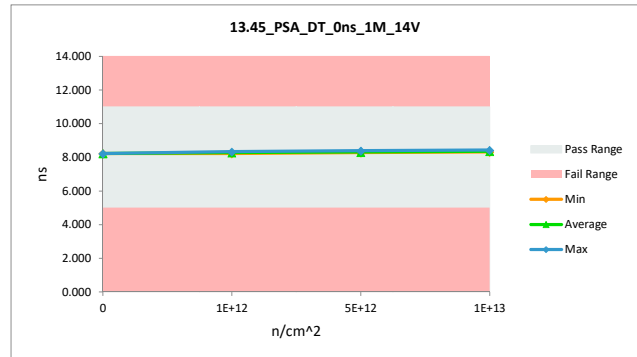


NDD Characterization Report TPS7H5005-SEP

13.45_PSA_DT_Ons_1M_14V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		11	11	
Min Limit		5	5	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.422	8.234	0.812
1E+12	1	7.619	8.338	0.719
1E+12	2	7.507	8.260	0.753
1E+12	3	7.474	8.225	0.751
5E+12	4	7.538	8.275	0.737
5E+12	5	7.501	8.285	0.784
5E+12	6	7.577	8.392	0.815
1E+13	7	7.578	8.325	0.747
1E+13	8	7.618	8.351	0.733
1E+13	9	7.628	8.433	0.805
Max		7.628	8.433	0.815
Average		7.546	8.312	0.766
Min		7.422	8.225	0.719
Std Dev		0.069	0.068	0.035

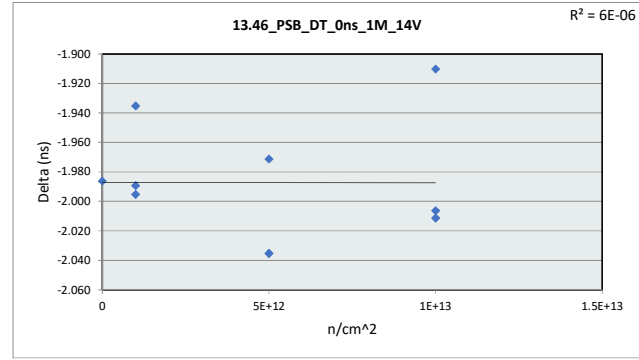


13.45_PSA_DT_Ons_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	8.234	8.225	8.275	8.325
Average	8.234	8.274	8.317	8.370
Max	8.234	8.338	8.392	8.433
UL	11.000	11.000	11.000	11.000

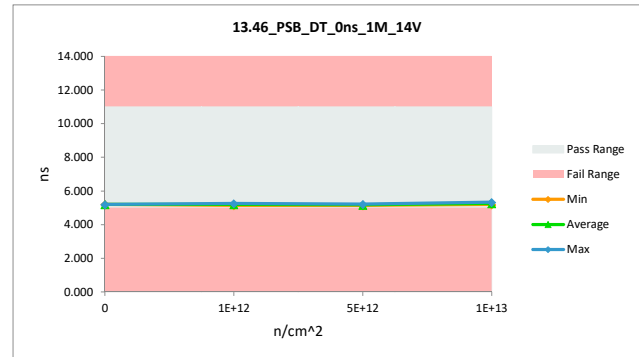


NDD Characterization Report TPS7H5005-SEP

13.46_PSB_DT_Ons_1M_14V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	11	11		
Min Limit	5	5		
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	7.192	5.206	-1.986
1E+12	1	7.196	5.207	-1.989
1E+12	2	7.197	5.262	-1.935
1E+12	3	7.139	5.144	-1.995
5E+12	4	7.198	5.163	-2.035
5E+12	5	7.180	5.145	-2.035
5E+12	6	7.191	5.220	-1.971
1E+13	7	7.260	5.254	-2.006
1E+13	8	7.246	5.336	-1.910
1E+13	9	7.214	5.203	-2.011
Max		7.260	5.336	-1.910
Average		7.201	5.214	-1.987
Min		7.139	5.144	-2.035
Std Dev		0.034	0.059	0.040

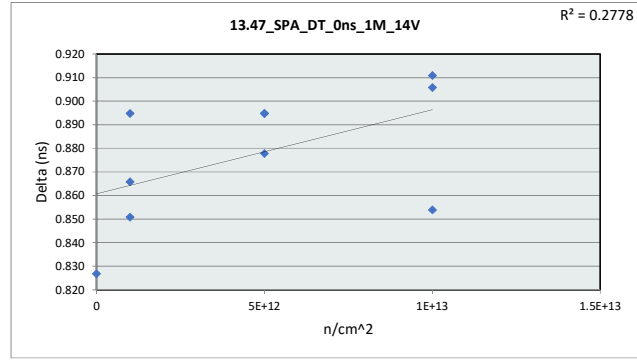


13.46_PSB_DT_Ons_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	5.206	5.144	5.145	5.203
Average	5.206	5.204	5.176	5.264
Max	5.206	5.262	5.220	5.336
UL	11.000	11.000	11.000	11.000

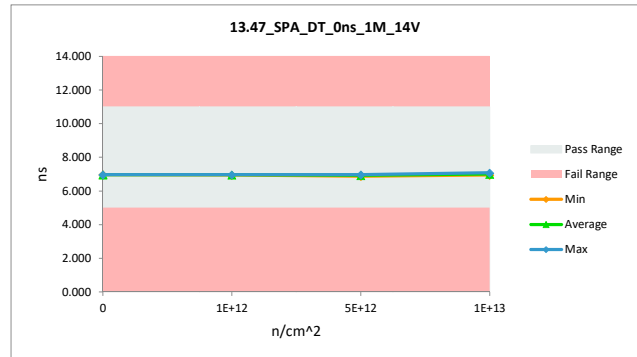


NDD Characterization Report TPS7H5005-SEP

13.47_SPA_DT_Ons_1M_14V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		11	11	
Min Limit		5	5	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	6.150	6.977	0.827
1E+12	1	6.110	6.961	0.851
1E+12	2	6.114	6.980	0.866
1E+12	3	6.052	6.947	0.895
5E+12	4	5.988	6.883	0.895
5E+12	5	6.060	6.955	0.895
5E+12	6	6.097	6.975	0.878
1E+13	7	6.173	7.084	0.911
1E+13	8	6.104	6.958	0.854
1E+13	9	6.078	6.984	0.906
Max		6.173	7.084	0.911
Average		6.093	6.970	0.878
Min		5.988	6.883	0.827
Std Dev		0.052	0.049	0.027

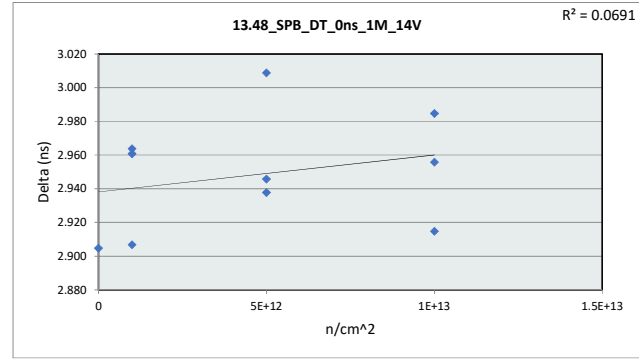


13.47_SPA_DT_Ons_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	6.977	6.947	6.883	6.958
Average	6.977	6.963	6.938	7.009
Max	6.977	6.980	6.975	7.084
UL	11.000	11.000	11.000	11.000

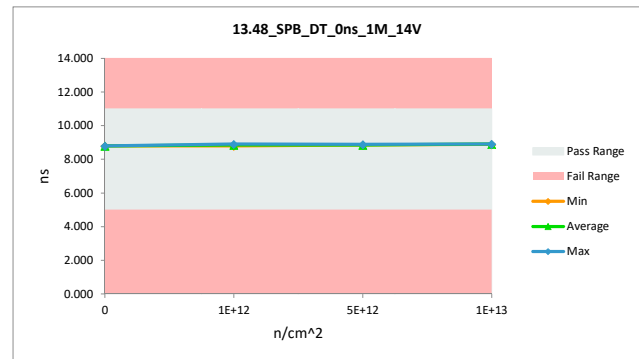


NDD Characterization Report TPS7H5005-SEP

13.48_SPB_DT_Ons_1M_14V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	11	11		
Min Limit	5	5		
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	5.898	8.803	2.905
1E+12	1	5.936	8.900	2.964
1E+12	2	5.947	8.908	2.961
1E+12	3	5.884	8.791	2.907
5E+12	4	5.878	8.887	3.009
5E+12	5	5.907	8.853	2.946
5E+12	6	5.906	8.844	2.938
1E+13	7	6.000	8.915	2.915
1E+13	8	5.956	8.912	2.956
1E+13	9	5.900	8.885	2.985
Max		6.000	8.915	3.009
Average		5.921	8.870	2.949
Min		5.878	8.791	2.905
Std Dev		0.038	0.045	0.034

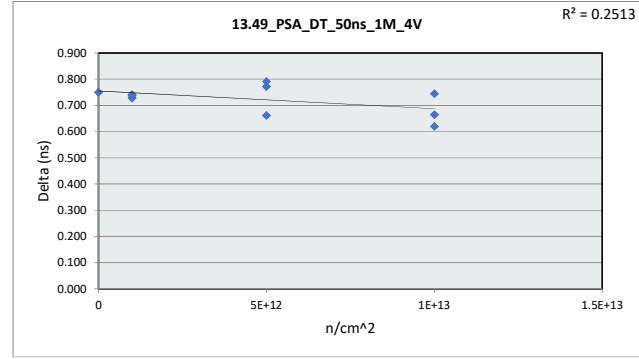


13.48_SPB_DT_Ons_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	11	ns		
Min Limit	5	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	5.000	5.000	5.000	5.000
Min	8.803	8.791	8.844	8.885
Average	8.803	8.866	8.861	8.904
Max	8.803	8.908	8.887	8.915
UL	11.000	11.000	11.000	11.000

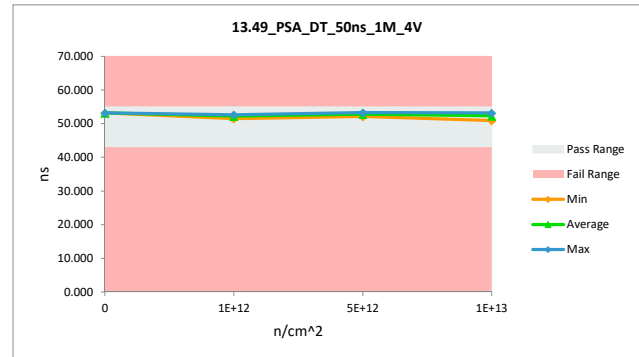


NDD Characterization Report TPS7H5005-SEP

13.49_PSA_DT_50ns_1M_4V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	55		55	
Min Limit	43		43	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	52.434	53.186	0.752
1E+12	1	51.836	52.575	0.739
1E+12	2	51.927	52.670	0.743
1E+12	3	50.757	51.487	0.730
5E+12	4	52.108	52.882	0.774
5E+12	5	51.393	52.186	0.793
5E+12	6	52.666	53.329	0.663
1E+13	7	52.228	52.894	0.666
1E+13	8	52.462	53.208	0.746
1E+13	9	50.336	50.957	0.621
Max		52.666	53.329	0.793
Average		51.815	52.537	0.723
Min		50.336	50.957	0.621
Std Dev		0.766	0.781	0.055

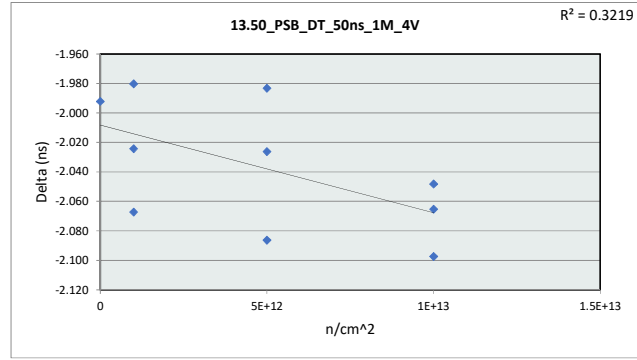


13.49_PSA_DT_50ns_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	55		ns	
Min Limit	43		ns	
n/cm^2	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	53.186	51.487	52.186	50.957
Average	53.186	52.244	52.799	52.353
Max	53.186	52.670	53.329	53.208
UL	55.000	55.000	55.000	55.000

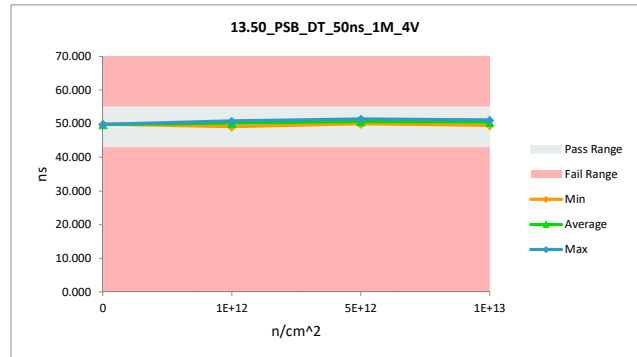


NDD Characterization Report TPS7H5005-SEP

13.50_PSB_DT_50ns_1M_4V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	55	55		
Min Limit	43	43		
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	51.818	49.826	-1.992
1E+12	1	52.883	50.816	-2.067
1E+12	2	52.608	50.584	-2.024
1E+12	3	51.057	49.077	-1.980
5E+12	4	52.727	50.701	-2.026
5E+12	5	51.927	49.944	-1.983
5E+12	6	53.508	51.422	-2.086
1E+13	7	53.152	51.104	-2.048
1E+13	8	52.898	50.833	-2.065
1E+13	9	51.596	49.499	-2.097
Max		53.508	51.422	-1.980
Average		52.417	50.381	-2.037
Min		51.057	49.077	-2.097
Std Dev		0.777	0.754	0.043

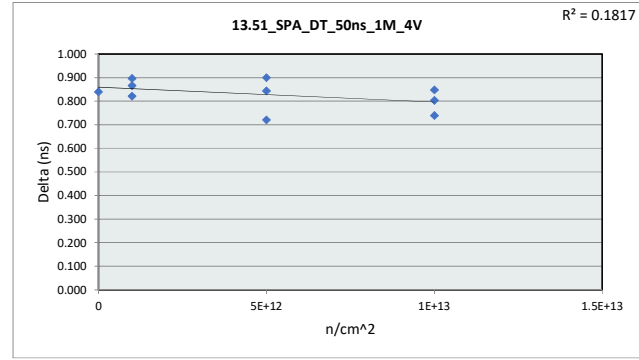


13.50_PSB_DT_50ns_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	55	ns		
Min Limit	43	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	49.826	49.077	49.944	49.499
Average	49.826	50.159	50.689	50.479
Max	49.826	50.816	51.422	51.104
UL	55.000	55.000	55.000	55.000

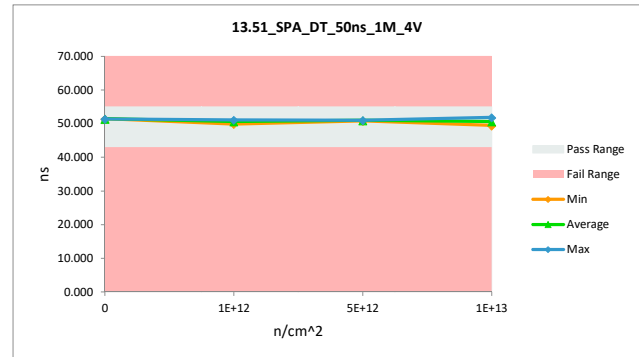


NDD Characterization Report TPS7H5005-SEP

13.51_SPA_DT_50ns_1M_4V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	55		55	
Min Limit	43		43	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	50.618	51.459	0.841
1E+12	1	50.079	50.902	0.823
1E+12	2	50.250	51.148	0.898
1E+12	3	49.021	49.889	0.868
5E+12	4	50.206	51.051	0.845
5E+12	5	50.157	51.058	0.901
5E+12	6	50.107	50.829	0.722
1E+13	7	49.847	50.588	0.741
1E+13	8	51.045	51.850	0.805
1E+13	9	48.614	49.463	0.849
Max		51.045	51.850	0.901
Average		49.994	50.824	0.829
Min		48.614	49.463	0.722
Std Dev		0.709	0.704	0.060

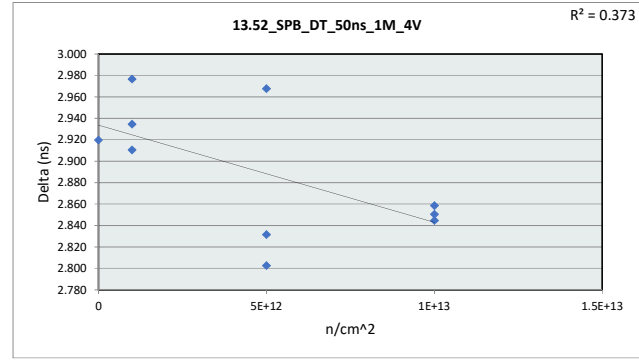


13.51_SPA_DT_50ns_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	55		ns	
Min Limit	43		ns	
n/cm ²	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	51.459	49.889	50.829	49.463
Average	51.459	50.646	50.979	50.634
Max	51.459	51.148	51.058	51.850
UL	55.000	55.000	55.000	55.000

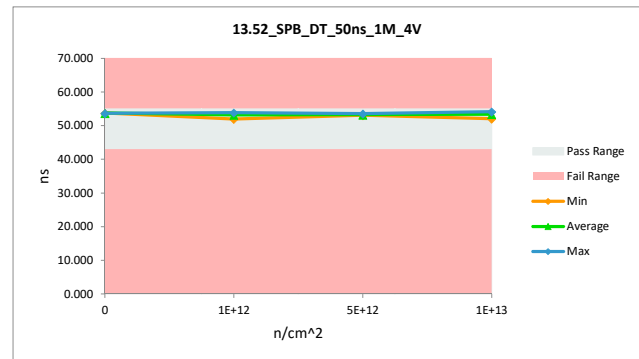


NDD Characterization Report TPS7H5005-SEP

13.52_SPB_DT_50ns_1M_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		55	55	
Min Limit		43	43	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	50.819	53.739	2.920
1E+12	1	50.926	53.903	2.977
1E+12	2	50.821	53.732	2.911
1E+12	3	49.057	51.992	2.935
5E+12	4	50.603	53.571	2.968
5E+12	5	50.238	53.070	2.832
5E+12	6	50.336	53.139	2.803
1E+13	7	51.160	54.019	2.859
1E+13	8	51.354	54.205	2.851
1E+13	9	49.247	52.092	2.845
Max		51.354	54.205	2.977
Average		50.456	53.346	2.890
Min		49.057	51.992	2.803
Std Dev		0.767	0.773	0.060

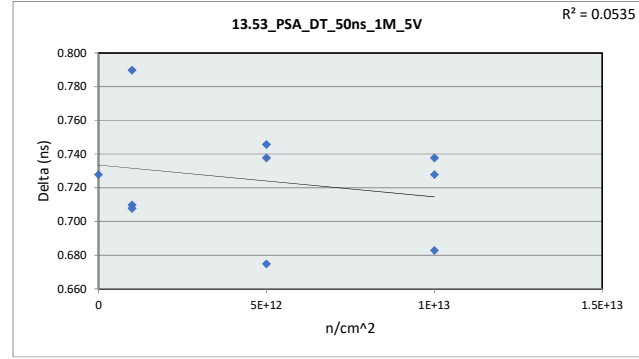


13.52_SPB_DT_50ns_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	55	ns		
Min Limit	43	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	53.739	51.992	53.070	52.092
Average	53.739	53.209	53.260	53.439
Max	53.739	53.903	53.571	54.205
UL	55.000	55.000	55.000	55.000

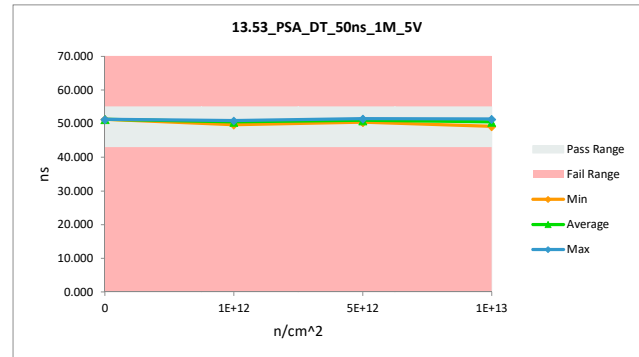


NDD Characterization Report TPS7H5005-SEP

13.53_PSA_DT_50ns_1M_5V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	55	55		
Min Limit	43	43		
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	50.618	51.346	0.728
1E+12	1	50.104	50.894	0.790
1E+12	2	50.195	50.903	0.708
1E+12	3	49.034	49.744	0.710
5E+12	4	50.257	51.003	0.746
5E+12	5	49.715	50.453	0.738
5E+12	6	50.809	51.484	0.675
1E+13	7	50.323	51.006	0.683
1E+13	8	50.635	51.373	0.738
1E+13	9	48.474	49.202	0.728
Max		50.809	51.484	0.790
Average		50.016	50.741	0.724
Min		48.474	49.202	0.675
Std Dev		0.745	0.742	0.033

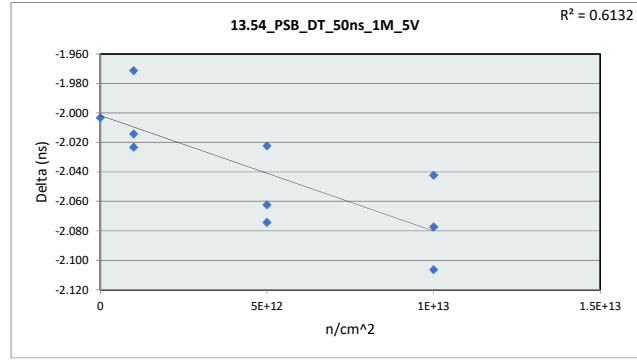


13.53_PSA_DT_50ns_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	55	ns		
Min Limit	43	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	51.346	49.744	50.453	49.202
Average	51.346	50.514	50.980	50.527
Max	51.346	50.903	51.484	51.373
UL	55.000	55.000	55.000	55.000

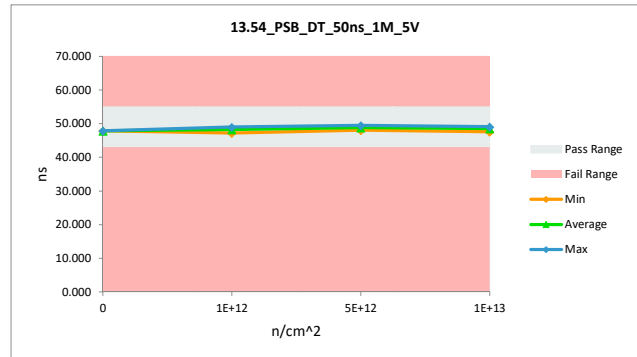


NDD Characterization Report TPS7H5005-SEP

13.54_PSB_DT_50ns_1M_5V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	55		55	
Min Limit	43		43	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	49.930	47.927	-2.003
1E+12	1	51.012	48.998	-2.014
1E+12	2	50.707	48.736	-1.971
1E+12	3	49.217	47.194	-2.023
5E+12	4	50.965	48.943	-2.022
5E+12	5	50.157	48.095	-2.062
5E+12	6	51.549	49.475	-2.074
1E+13	7	51.147	49.105	-2.042
1E+13	8	51.036	48.959	-2.077
1E+13	9	49.711	47.605	-2.106
Max		51.549	49.475	-1.971
Average		50.543	48.504	-2.039
Min		49.217	47.194	-2.106
Std Dev		0.747	0.747	0.041

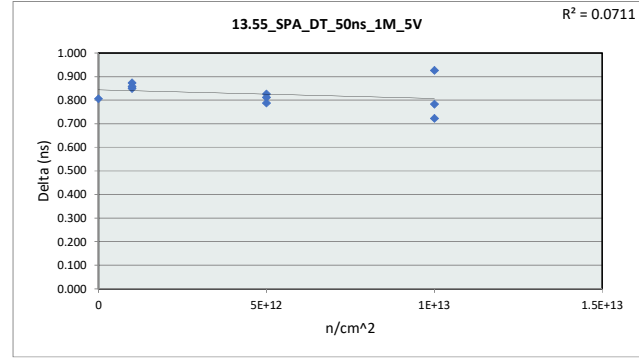


13.54_PSB_DT_50ns_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	55		ns	
Min Limit	43		ns	
n/cm ²	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	47.927	47.194	48.095	47.605
Average	47.927	48.309	48.838	48.556
Max	47.927	48.998	49.475	49.105
UL	55.000	55.000	55.000	55.000

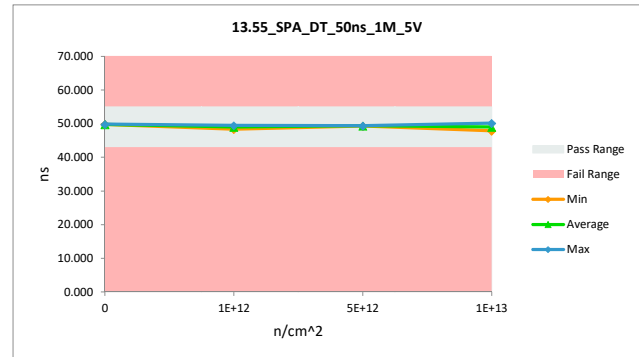


NDD Characterization Report TPS7H5005-SEP

13.55_SPA_DT_50ns_1M_5V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		55	55	
Min Limit		43	43	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	49.005	49.813	0.808
1E+12	1	48.470	49.322	0.852
1E+12	2	48.632	49.492	0.860
1E+12	3	47.507	48.382	0.875
5E+12	4	48.604	49.394	0.790
5E+12	5	48.539	49.367	0.828
5E+12	6	48.520	49.333	0.813
1E+13	7	48.253	49.038	0.785
1E+13	8	49.468	50.193	0.725
1E+13	9	46.949	47.877	0.928
Max		49.468	50.193	0.928
Average		48.395	49.221	0.826
Min		46.949	47.877	0.725
Std Dev		0.712	0.666	0.056

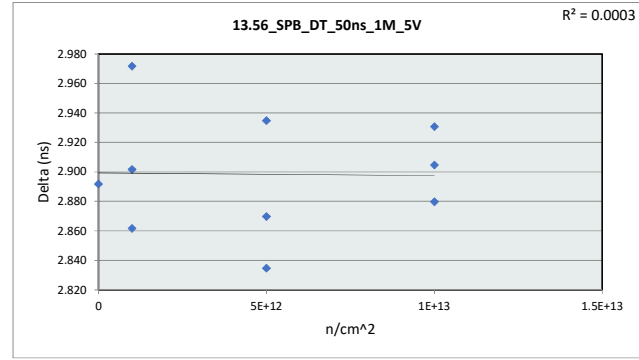


13.55_SPA_DT_50ns_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	55	ns		
Min Limit	43	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	49.813	48.382	49.333	47.877
Average	49.813	49.065	49.365	49.036
Max	49.813	49.492	49.394	50.193
UL	55.000	55.000	55.000	55.000

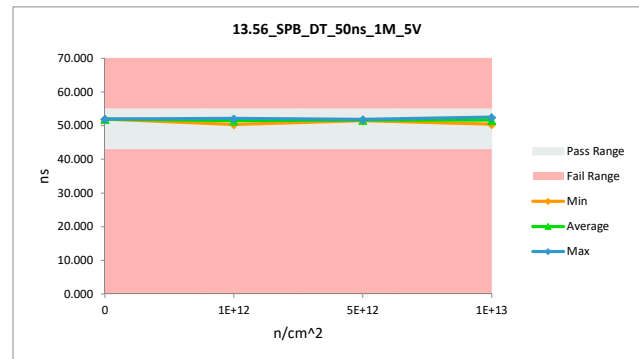


NDD Characterization Report TPS7H5005-SEP

13.56_SPB_DT_50ns_1M_5V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	55	55		
Min Limit	43	43		
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	49.125	52.017	2.892
1E+12	1	49.280	52.142	2.862
1E+12	2	49.050	52.022	2.972
1E+12	3	47.452	50.354	2.902
5E+12	4	48.973	51.908	2.935
5E+12	5	48.609	51.479	2.870
5E+12	6	48.698	51.533	2.835
1E+13	7	49.364	52.244	2.880
1E+13	8	49.625	52.530	2.905
1E+13	9	47.503	50.434	2.931
Max		49.625	52.530	2.972
Average		48.768	51.666	2.898
Min		47.452	50.354	2.835
Std Dev		0.743	0.738	0.040

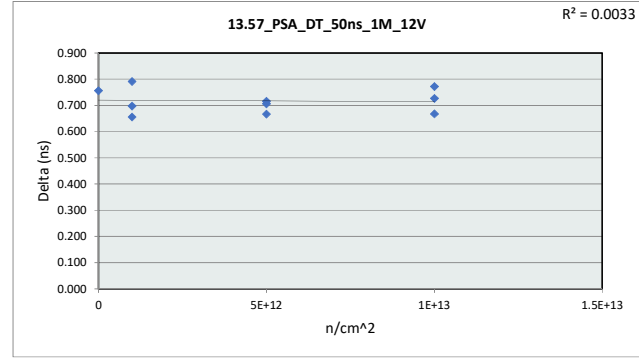


13.56_SPB_DT_50ns_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	55	ns		
Min Limit	43	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	52.017	50.354	51.479	50.434
Average	52.017	51.506	51.640	51.736
Max	52.017	52.142	51.908	52.530
UL	55.000	55.000	55.000	55.000

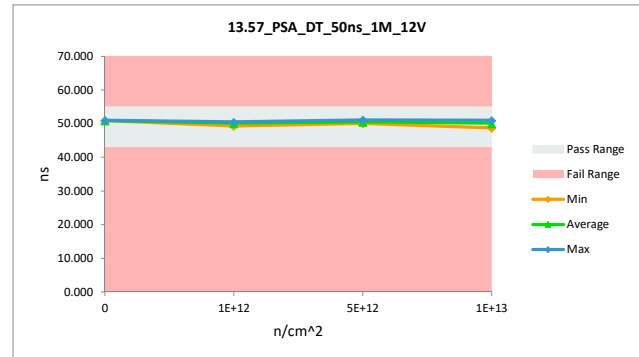


NDD Characterization Report TPS7H5005-SEP

13.57_PSA_DT_50ns_1M_12V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	55		55	
Min Limit	43		43	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	50.199	50.957	0.758
1E+12	1	49.753	50.546	0.793
1E+12	2	49.823	50.522	0.699
1E+12	3	48.656	49.313	0.657
5E+12	4	49.919	50.587	0.668
5E+12	5	49.339	50.047	0.708
5E+12	6	50.430	51.147	0.717
1E+13	7	49.976	50.704	0.728
1E+13	8	50.210	50.984	0.774
1E+13	9	48.103	48.772	0.669
Max		50.430	51.147	0.793
Average		49.641	50.358	0.717
Min		48.103	48.772	0.657
Std Dev		0.739	0.768	0.047



13.57_PSA_DT_50ns_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	55		ns	
Min Limit	43		ns	
n/cm ²	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	50.957	49.313	50.047	48.772
Average	50.957	50.127	50.594	50.153
Max	50.957	50.546	51.147	50.984
UL	55.000	55.000	55.000	55.000

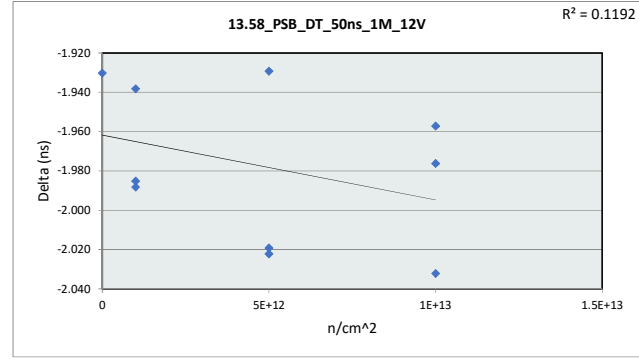


NDD Characterization Report TPS7H5005-SEP

13.58_PSB_DT_50ns_1M_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	55	55
Min Limit	43	43

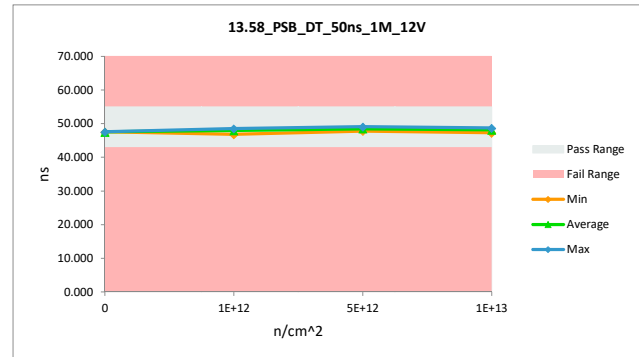
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	49.487	47.557	-1.930
1E+12	1	50.597	48.609	-1.988
1E+12	2	50.316	48.378	-1.938
1E+12	3	48.814	46.829	-1.985
5E+12	4	50.620	48.598	-2.022
5E+12	5	49.756	47.827	-1.929
5E+12	6	51.100	49.081	-2.019
1E+13	7	50.705	48.673	-2.032
1E+13	8	50.577	48.620	-1.957
1E+13	9	49.237	47.261	-1.976
Max		51.100	49.081	-1.929
Average		50.121	48.143	-1.978
Min		48.814	46.829	-2.032
Std Dev		0.749	0.731	0.039



13.58_PSB_DT_50ns_1M_12V

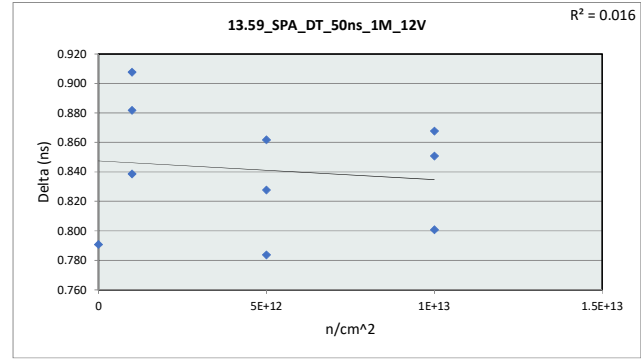
Test Site		
Tester		
Test Number		
Max Limit	55	ns
Min Limit	43	ns

n/cm^2	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	47.557	46.829	47.827	47.261
Average	47.557	47.939	48.502	48.185
Max	47.557	48.609	49.081	48.673
UL	55.000	55.000	55.000	55.000

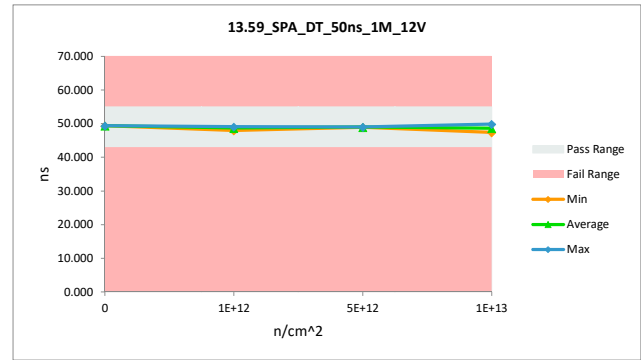


NDD Characterization Report TPS7H5005-SEP

13.59_SPA_DT_50ns_1M_12V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	55	55		
Min Limit	43	43		
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	48.595	49.386	0.791
1E+12	1	48.087	48.995	0.908
1E+12	2	48.199	49.081	0.882
1E+12	3	47.134	47.973	0.839
5E+12	4	48.192	49.054	0.862
5E+12	5	48.187	49.015	0.828
5E+12	6	48.118	48.902	0.784
1E+13	7	47.884	48.685	0.801
1E+13	8	49.032	49.900	0.868
1E+13	9	46.568	47.419	0.851
Max		49.032	49.900	0.908
Average		48.000	48.841	0.841
Min		46.568	47.419	0.784
Std Dev		0.697	0.698	0.041

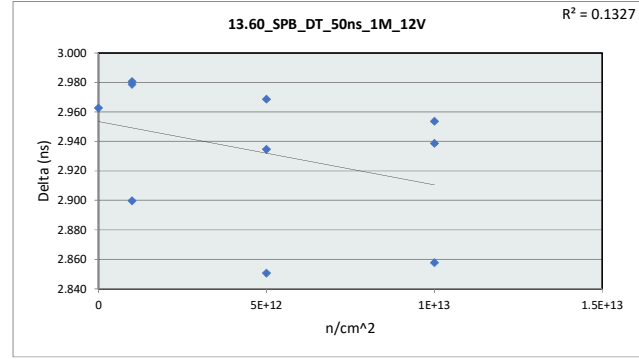


13.59_SPA_DT_50ns_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	55	ns		
Min Limit	43	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	49.386	47.973	48.902	47.419
Average	49.386	48.683	48.990	48.668
Max	49.386	49.081	49.054	49.900
UL	55.000	55.000	55.000	55.000

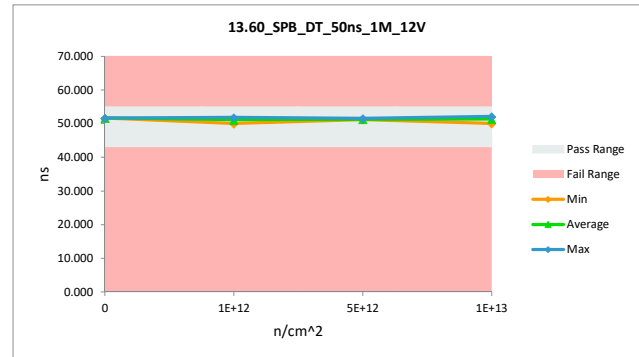


NDD Characterization Report TPS7H5005-SEP

13.60_SPB_DT_50ns_1M_12V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	55		55	
Min Limit	43		43	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	48.705	51.668	2.963
1E+12	1	48.844	51.823	2.979
1E+12	2	48.759	51.659	2.900
1E+12	3	47.056	50.037	2.981
5E+12	4	48.627	51.562	2.935
5E+12	5	48.215	51.184	2.969
5E+12	6	48.370	51.221	2.851
1E+13	7	48.978	51.917	2.939
1E+13	8	49.280	52.138	2.858
1E+13	9	47.130	50.084	2.954
Max		49.280	52.138	2.981
Average		48.396	51.329	2.933
Min		47.056	50.037	2.851
Std Dev		0.748	0.728	0.048

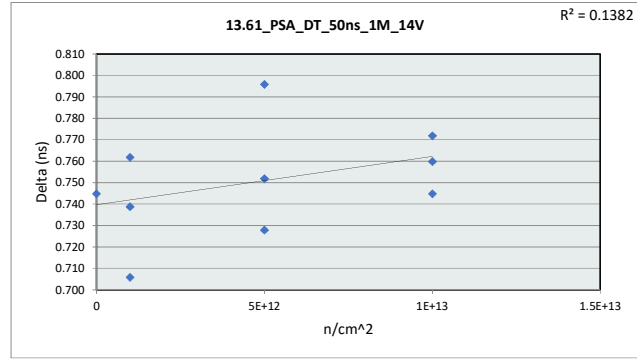


13.60_SPB_DT_50ns_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	55	ns		
Min Limit	43	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	51.668	50.037	51.184	50.084
Average	51.668	51.173	51.322	51.380
Max	51.668	51.823	51.562	52.138
UL	55.000	55.000	55.000	55.000

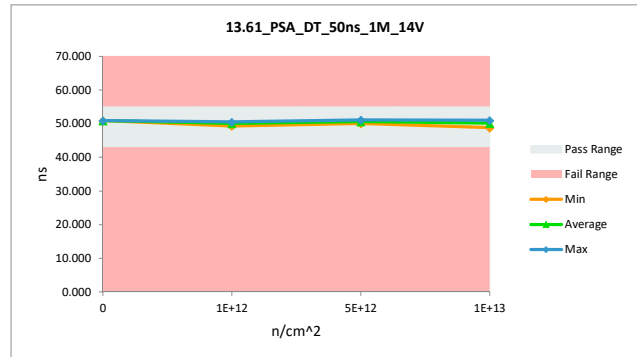


NDD Characterization Report TPS7H5005-SEP

13.61_PSA_DT_50ns_1M_14V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	55		55	
Min Limit	43		43	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	50.187	50.932	0.745
1E+12	1	49.801	50.507	0.706
1E+12	2	49.739	50.501	0.762
1E+12	3	48.615	49.354	0.739
5E+12	4	49.904	50.632	0.728
5E+12	5	49.298	50.094	0.796
5E+12	6	50.398	51.150	0.752
1E+13	7	49.958	50.703	0.745
1E+13	8	50.232	50.992	0.760
1E+13	9	48.033	48.805	0.772
Max		50.398	51.150	0.796
Average		49.616	50.367	0.751
Min		48.033	48.805	0.706
Std Dev		0.758	0.752	0.025

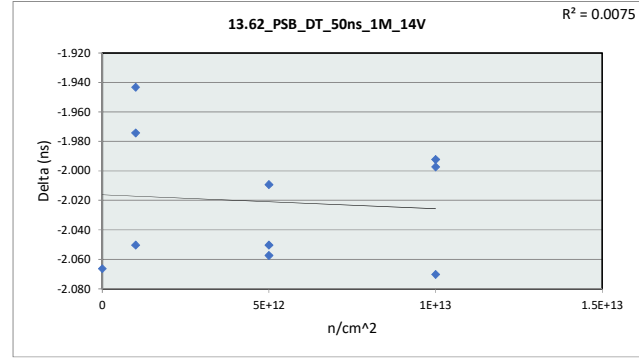


13.61_PSA_DT_50ns_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	55	ns		
Min Limit	43	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	50.932	49.354	50.094	48.805
Average	50.932	50.121	50.625	50.167
Max	50.932	50.507	51.150	50.992
UL	55.000	55.000	55.000	55.000

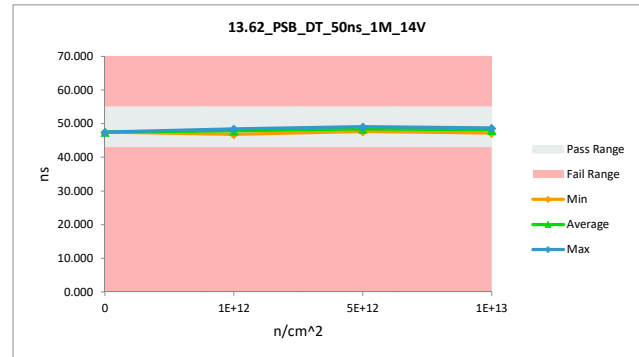


NDD Characterization Report TPS7H5005-SEP

13.62_PSB_DT_50ns_1M_14V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	55		55	
Min Limit	43		43	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	49.584	47.518	-2.066
1E+12	1	50.549	48.499	-2.050
1E+12	2	50.344	48.370	-1.974
1E+12	3	48.783	46.840	-1.943
5E+12	4	50.580	48.571	-2.009
5E+12	5	49.780	47.730	-2.050
5E+12	6	51.169	49.112	-2.057
1E+13	7	50.682	48.690	-1.992
1E+13	8	50.602	48.532	-2.070
1E+13	9	49.230	47.233	-1.997
Max		51.169	49.112	-1.943
Average		50.130	48.110	-2.021
Min		48.783	46.840	-2.070
Std Dev		0.751	0.732	0.044

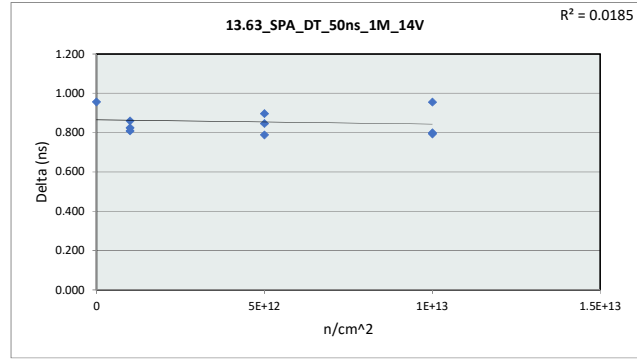


13.62_PSB_DT_50ns_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	55		ns	
Min Limit	43		ns	
n/cm ²	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	47.518	46.840	47.730	47.233
Average	47.518	47.903	48.471	48.152
Max	47.518	48.499	49.112	48.690
UL	55.000	55.000	55.000	55.000

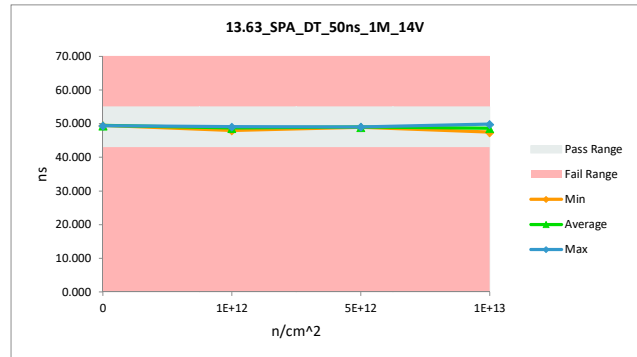


NDD Characterization Report TPS7H5005-SEP

13.63_SPA_DT_50ns_1M_14V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	55		55	
Min Limit	43		43	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	48.503	49.461	0.958
1E+12	1	48.100	48.962	0.862
1E+12	2	48.280	49.107	0.827
1E+12	3	47.140	47.951	0.811
5E+12	4	48.175	49.074	0.899
5E+12	5	48.186	49.034	0.848
5E+12	6	48.132	48.922	0.790
1E+13	7	47.874	48.669	0.795
1E+13	8	49.039	49.840	0.801
1E+13	9	46.510	47.467	0.957
Max		49.039	49.840	0.958
Average		47.994	48.849	0.855
Min		46.510	47.467	0.790
Std Dev		0.705	0.689	0.064

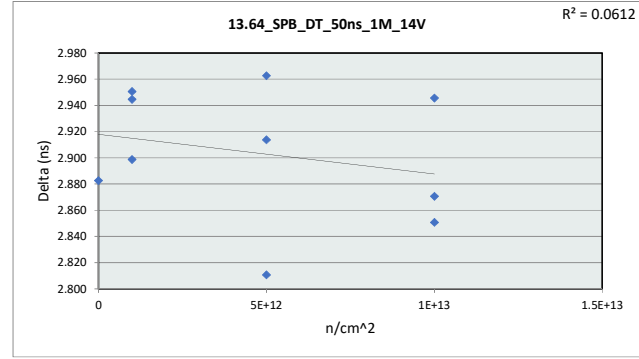


13.63_SPA_DT_50ns_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	55		ns	
Min Limit	43		ns	
n/cm ²	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	49.461	47.951	48.922	47.467
Average	49.461	48.673	49.010	48.659
Max	49.461	49.107	49.074	49.840
UL	55.000	55.000	55.000	55.000

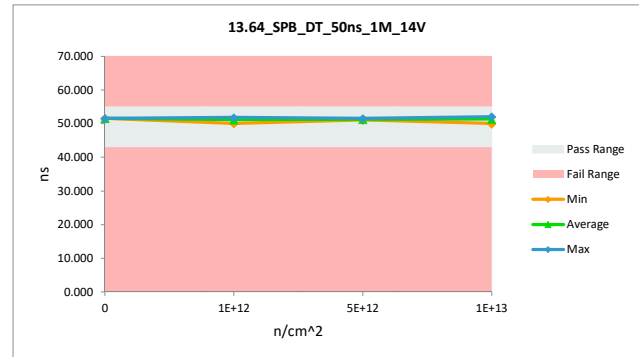


NDD Characterization Report TPS7H5005-SEP

13.64_SPB_DT_50ns_1M_14V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	55		55	
Min Limit	43		43	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	48.732	51.615	2.883
1E+12	1	48.885	51.830	2.945
1E+12	2	48.746	51.697	2.951
1E+12	3	47.144	50.043	2.899
5E+12	4	48.625	51.588	2.963
5E+12	5	48.236	51.150	2.914
5E+12	6	48.377	51.188	2.811
1E+13	7	48.984	51.930	2.946
1E+13	8	49.262	52.113	2.851
1E+13	9	47.159	50.030	2.871
Max		49.262	52.113	2.963
Average		48.415	51.318	2.903
Min		47.144	50.030	2.811
Std Dev		0.726	0.738	0.050

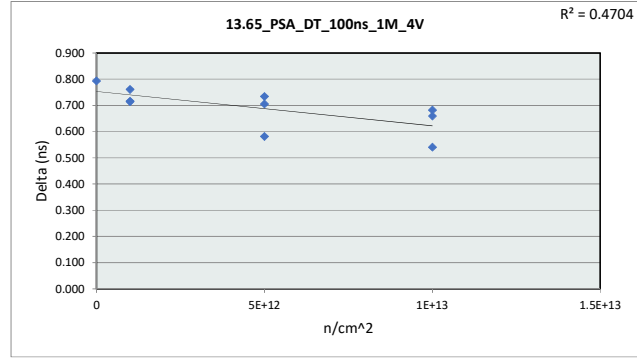


13.64_SPB_DT_50ns_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	55	ns		
Min Limit	43	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	43.000	43.000	43.000	43.000
Min	51.615	50.043	51.150	50.030
Average	51.615	51.190	51.309	51.358
Max	51.615	51.830	51.588	52.113
UL	55.000	55.000	55.000	55.000

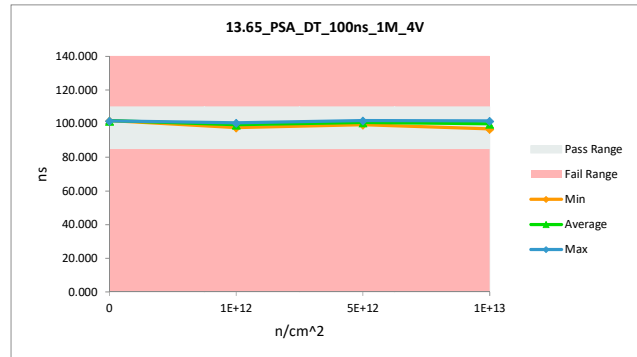


NDD Characterization Report TPS7H5005-SEP

13.65_PSA_DT_100ns_1M_4V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		110	110	
Min Limit		85	85	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	100.993	101.788	0.795
1E+12	1	99.430	100.147	0.717
1E+12	2	99.714	100.477	0.763
1E+12	3	97.058	97.774	0.716
5E+12	4	100.217	100.924	0.707
5E+12	5	98.708	99.444	0.736
5E+12	6	101.320	101.903	0.583
1E+13	7	100.539	101.200	0.661
1E+13	8	100.911	101.595	0.684
1E+13	9	96.331	96.873	0.542
Max		101.320	101.903	0.795
Average		99.522	100.213	0.690
Min		96.331	96.873	0.542
Std Dev		1.693	1.716	0.078

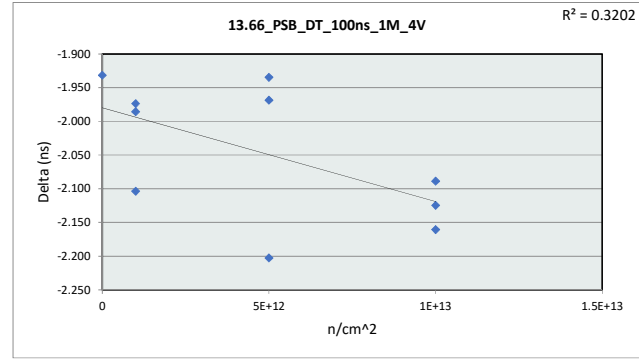


13.65_PSA_DT_100ns_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	110	ns		
Min Limit	85	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	101.788	97.774	99.444	96.873
Average	101.788	99.466	100.757	99.889
Max	101.788	100.477	101.903	101.595
UL	110.000	110.000	110.000	110.000

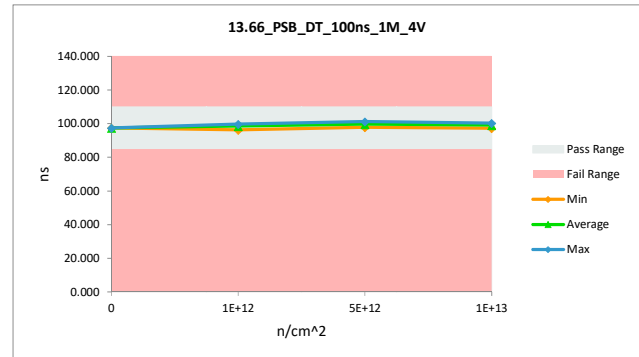


NDD Characterization Report TPS7H5005-SEP

13.66_PSB_DT_100ns_1M_4V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	110		110	
Min Limit	85		85	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	99.404	97.473	-1.931
1E+12	1	101.923	99.820	-2.103
1E+12	2	101.527	99.542	-1.985
1E+12	3	98.240	96.267	-1.973
5E+12	4	101.979	100.045	-1.934
5E+12	5	99.873	97.905	-1.968
5E+12	6	103.429	101.227	-2.202
1E+13	7	102.454	100.366	-2.088
1E+13	8	101.679	99.555	-2.124
1E+13	9	99.458	97.298	-2.160
Max		103.429	101.227	-1.931
Average		100.997	98.950	-2.047
Min		98.240	96.267	-2.202
Std Dev		1.646	1.601	0.100

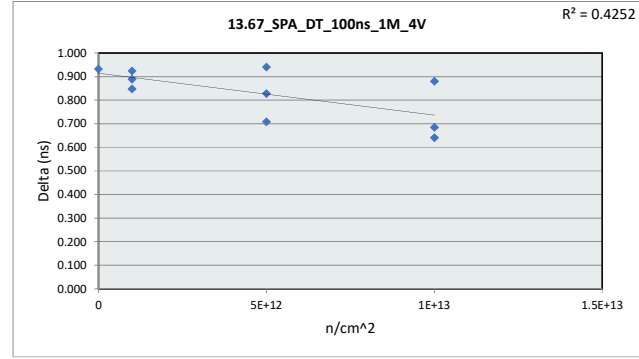


13.66_PSB_DT_100ns_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	110		ns	
Min Limit	85		ns	
n/cm ²	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	97.473	96.267	97.905	97.298
Average	97.473	98.543	99.726	99.073
Max	97.473	99.820	101.227	100.366
UL	110.000	110.000	110.000	110.000

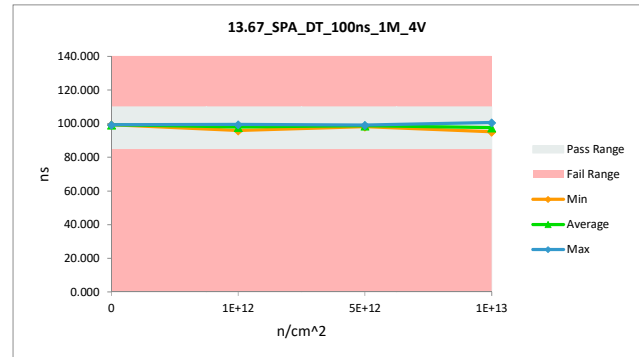


NDD Characterization Report TPS7H5005-SEP

13.67_SPA_DT_100ns_1M_4V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	110		110	
Min Limit	85		85	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	98.461	99.395	0.934
1E+12	1	97.487	98.413	0.926
1E+12	2	98.719	99.568	0.849
1E+12	3	95.028	95.919	0.891
5E+12	4	98.449	99.279	0.830
5E+12	5	98.084	99.026	0.942
5E+12	6	97.553	98.263	0.710
1E+13	7	96.471	97.113	0.642
1E+13	8	100.063	100.749	0.686
1E+13	9	94.357	95.239	0.882
Max		100.063	100.749	0.942
Average		97.467	98.296	0.829
Min		94.357	95.239	0.642
Std Dev		1.740	1.724	0.110

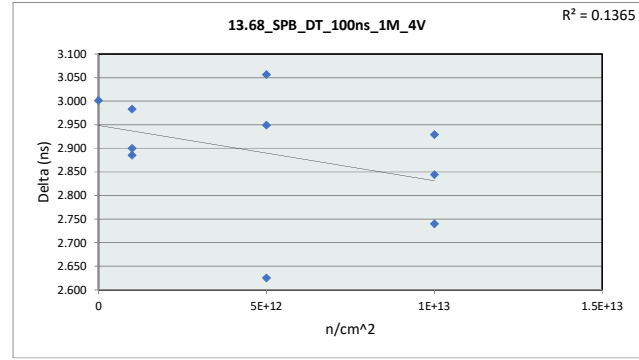


13.67_SPA_DT_100ns_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	110		ns	
Min Limit	85		ns	
n/cm ²	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	99.395	95.919	98.263	95.239
Average	99.395	97.967	98.856	97.700
Max	99.395	99.568	99.279	100.749
UL	110.000	110.000	110.000	110.000

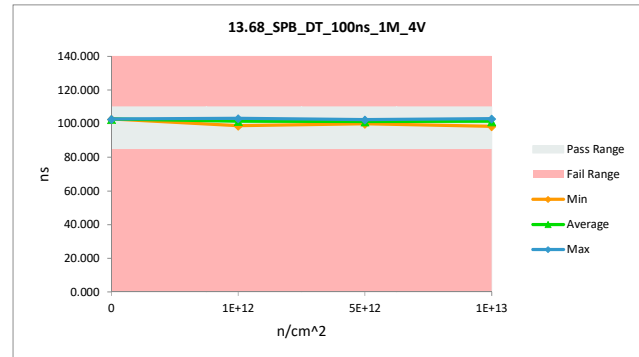


NDD Characterization Report TPS7H5005-SEP

13.68_SPB_DT_100ns_1M_4V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	110		110	
Min Limit	85		85	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	99.759	102.761	3.002
1E+12	1	100.156	103.140	2.984
1E+12	2	99.735	102.636	2.901
1E+12	3	95.845	98.731	2.886
5E+12	4	99.464	102.414	2.950
5E+12	5	98.473	101.530	3.057
5E+12	6	97.322	99.948	2.626
1E+13	7	99.965	102.706	2.741
1E+13	8	100.160	103.005	2.845
1E+13	9	95.550	98.480	2.930
Max		100.160	103.140	3.057
Average		98.643	101.535	2.892
Min		95.550	98.480	2.626
Std Dev		1.783	1.805	0.128

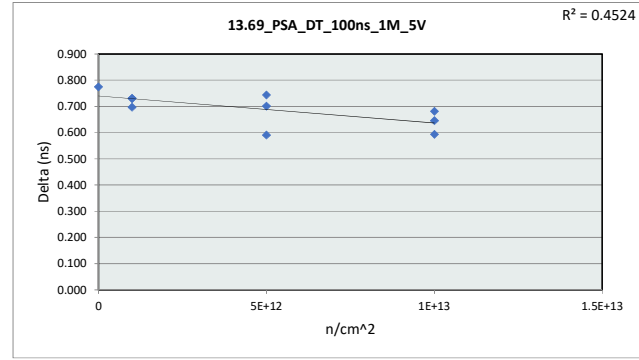


13.68_SPB_DT_100ns_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	110		ns	
Min Limit	85		ns	
n/cm ²	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	102.761	98.731	99.948	98.480
Average	102.761	101.502	101.297	101.397
Max	102.761	103.140	102.414	103.005
UL	110.000	110.000	110.000	110.000

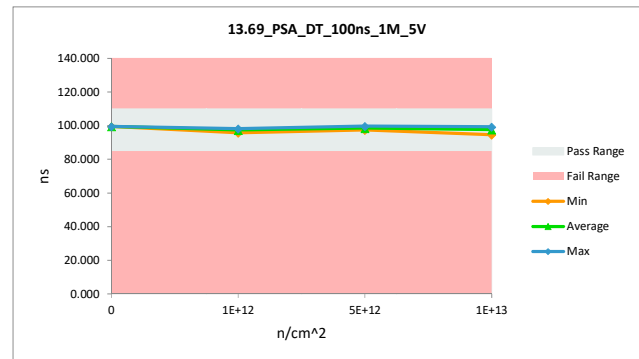


NDD Characterization Report TPS7H5005-SEP

13.69_PSA_DT_100ns_1M_5V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	110	110		
Min Limit	85	85		
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	98.838	99.614	0.776
1E+12	1	97.407	98.139	0.732
1E+12	2	97.571	98.269	0.698
1E+12	3	95.043	95.775	0.732
5E+12	4	97.928	98.673	0.745
5E+12	5	96.641	97.344	0.703
5E+12	6	99.088	99.680	0.592
1E+13	7	98.206	98.889	0.683
1E+13	8	98.667	99.314	0.647
1E+13	9	94.018	94.613	0.595
Max		99.088	99.680	0.776
Average		97.341	98.031	0.690
Min		94.018	94.613	0.592
Std Dev		1.667	1.678	0.062

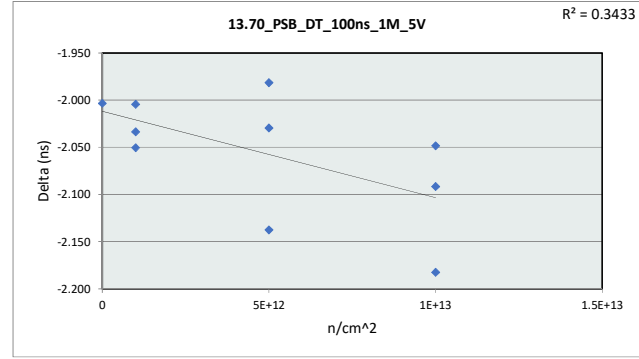


13.69_PSA_DT_100ns_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	110	ns		
Min Limit	85	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	99.614	95.775	97.344	94.613
Average	99.614	97.394	98.566	97.605
Max	99.614	98.269	99.680	99.314
UL	110.000	110.000	110.000	110.000

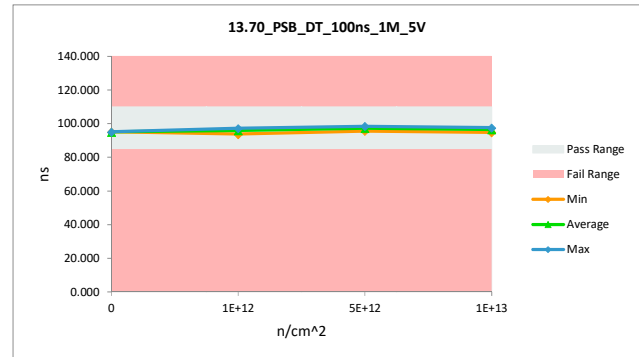


NDD Characterization Report TPS7H5005-SEP

13.70_PSB_DT_100ns_1M_5V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	110	110		
Min Limit	85	85		
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	97.135	95.132	-2.003
1E+12	1	99.295	97.262	-2.033
1E+12	2	99.074	97.024	-2.050
1E+12	3	95.802	93.798	-2.004
5E+12	4	99.800	97.771	-2.029
5E+12	5	97.621	95.640	-1.981
5E+12	6	100.653	98.516	-2.137
1E+13	7	99.656	97.608	-2.048
1E+13	8	99.346	97.255	-2.091
1E+13	9	97.031	94.849	-2.182
Max		100.653	98.516	-1.981
Average		98.541	96.486	-2.056
Min		95.802	93.798	-2.182
Std Dev		1.542	1.526	0.063

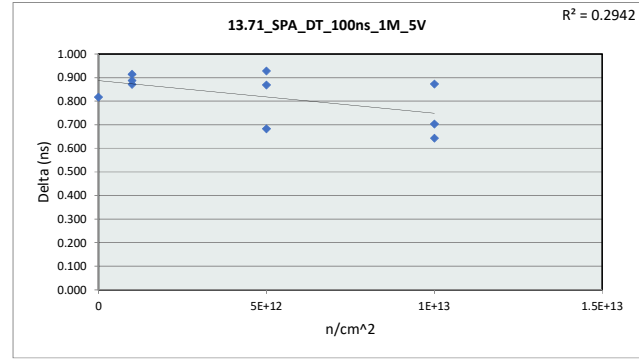


13.70_PSB_DT_100ns_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	110	ns		
Min Limit	85	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	95.132	93.798	95.640	94.849
Average	95.132	96.028	97.309	96.571
Max	95.132	97.262	98.516	97.608
UL	110.000	110.000	110.000	110.000

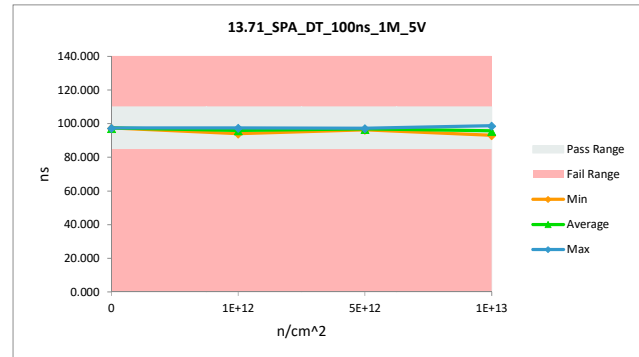


NDD Characterization Report TPS7H5005-SEP

13.71_SPA_DT_100ns_1M_5V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	110	110		
Min Limit	85	85		
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	96.583	97.402	0.819
1E+12	1	95.605	96.521	0.916
1E+12	2	96.644	97.533	0.889
1E+12	3	93.239	94.112	0.873
5E+12	4	96.382	97.252	0.870
5E+12	5	96.079	97.009	0.930
5E+12	6	95.637	96.322	0.685
1E+13	7	94.549	95.194	0.645
1E+13	8	98.110	98.815	0.705
1E+13	9	92.248	93.122	0.874
	Max	98.110	98.815	0.930
	Average	95.508	96.328	0.821
	Min	92.248	93.122	0.645
	Std Dev	1.733	1.720	0.103

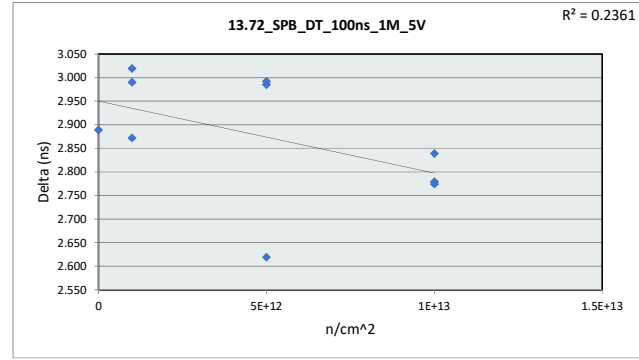


13.71_SPA_DT_100ns_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	110	ns		
Min Limit	85	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	97.402	94.112	96.322	93.122
Average	97.402	96.055	96.861	95.710
Max	97.402	97.533	97.252	98.815
UL	110.000	110.000	110.000	110.000

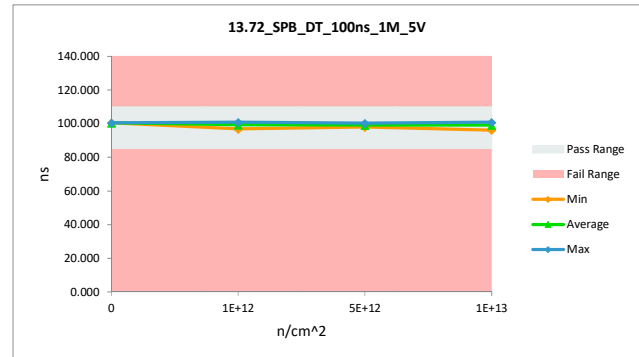


NDD Characterization Report TPS7H5005-SEP

13.72_SPB_DT_100ns_1M_5V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	110		110	
Min Limit	85		85	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	97.679	100.569	2.890
1E+12	1	97.968	100.988	3.020
1E+12	2	97.423	100.296	2.873
1E+12	3	93.821	96.812	2.991
5E+12	4	97.393	100.379	2.986
5E+12	5	96.504	99.497	2.993
5E+12	6	95.300	97.920	2.620
1E+13	7	97.720	100.500	2.780
1E+13	8	98.061	100.836	2.775
1E+13	9	93.381	96.221	2.840
Max		98.061	100.988	3.020
Average		96.525	99.402	2.877
Min		93.381	96.221	2.620
Std Dev		1.747	1.761	0.127

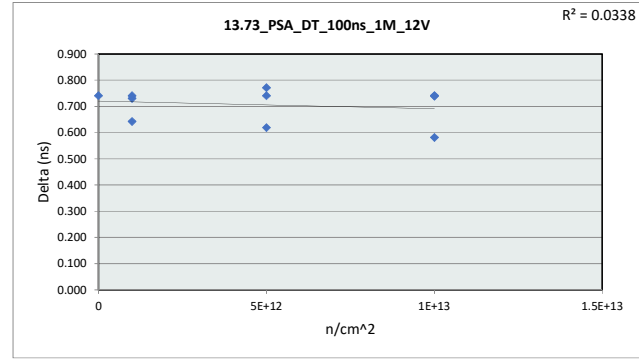


13.72_SPB_DT_100ns_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	110		ns	
Min Limit	85		ns	
n/cm ²	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	100.569	96.812	97.920	96.221
Average	100.569	99.365	99.265	99.186
Max	100.569	100.988	100.379	100.836
UL	110.000	110.000	110.000	110.000

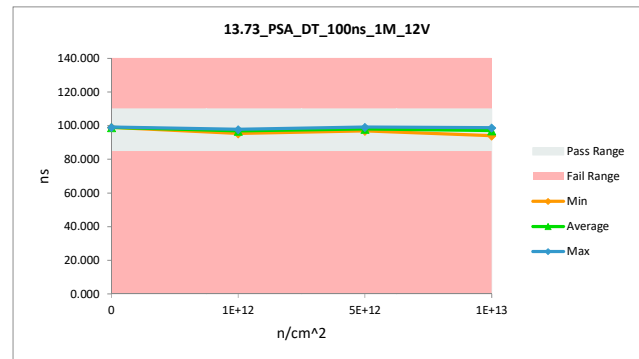


NDD Characterization Report TPS7H5005-SEP

13.73_PSA_DT_100ns_1M_12V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	110	110		
Min Limit	85	85		
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	98.360	99.102	0.742
1E+12	1	96.976	97.718	0.742
1E+12	2	97.199	97.843	0.644
1E+12	3	94.580	95.312	0.732
5E+12	4	97.428	98.170	0.742
5E+12	5	96.179	96.952	0.773
5E+12	6	98.552	99.173	0.621
1E+13	7	97.725	98.466	0.741
1E+13	8	98.172	98.915	0.743
1E+13	9	93.542	94.125	0.583
Max		98.552	99.173	0.773
Average		96.871	97.578	0.706
Min		93.542	94.125	0.583
Std Dev		1.657	1.678	0.065

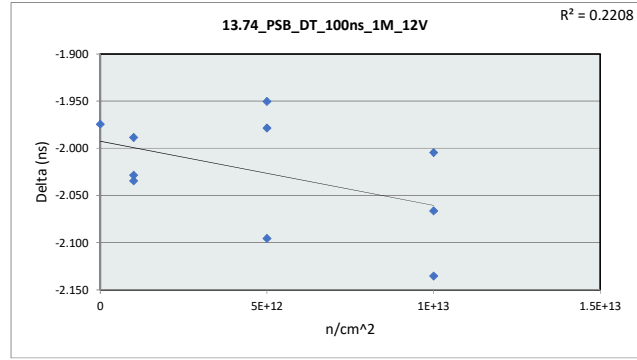


13.73_PSA_DT_100ns_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	110	ns		
Min Limit	85	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	99.102	95.312	96.952	94.125
Average	99.102	96.958	98.098	97.169
Max	99.102	97.843	99.173	98.915
UL	110.000	110.000	110.000	110.000

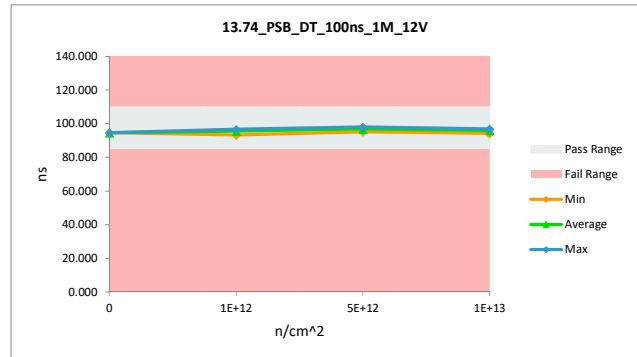


NDD Characterization Report TPS7H5005-SEP

13.74_PSB_DT_100ns_1M_12V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	110	110		
Min Limit	85	85		
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	96.605	94.631	-1.974
1E+12	1	98.728	96.700	-2.028
1E+12	2	98.637	96.649	-1.988
1E+12	3	95.325	93.291	-2.034
5E+12	4	99.254	97.304	-1.950
5E+12	5	97.177	95.199	-1.978
5E+12	6	100.125	98.030	-2.095
1E+13	7	98.994	96.990	-2.004
1E+13	8	98.850	96.784	-2.066
1E+13	9	96.345	94.210	-2.135
Max		100.125	98.030	-1.950
Average		98.004	95.979	-2.025
Min		95.325	93.291	-2.135
Std Dev		1.537	1.541	0.059

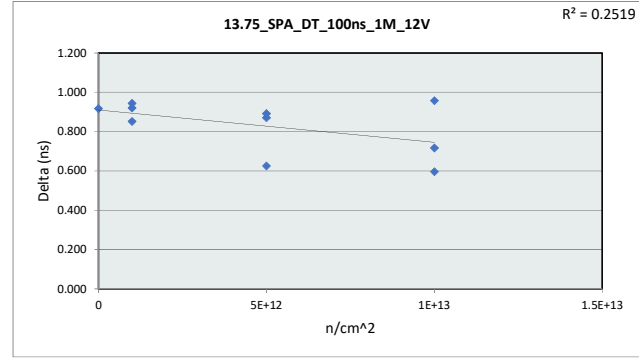


13.74_PSB_DT_100ns_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	110	ns		
Min Limit	85	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	94.631	93.291	95.199	94.210
Average	94.631	95.547	96.844	95.995
Max	94.631	96.700	98.030	96.990
UL	110.000	110.000	110.000	110.000

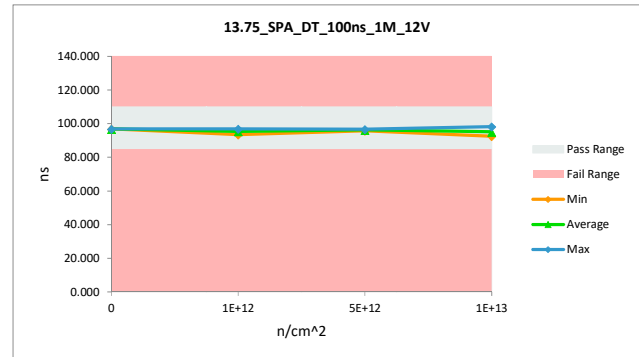


NDD Characterization Report TPS7H5005-SEP

13.75_SPA_DT_100ns_1M_12V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	110	110		
Min Limit	85	85		
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	95.959	96.878	0.919
1E+12	1	95.045	95.991	0.946
1E+12	2	96.060	96.982	0.922
1E+12	3	92.713	93.567	0.854
5E+12	4	95.809	96.681	0.872
5E+12	5	95.593	96.487	0.894
5E+12	6	95.131	95.758	0.627
1E+13	7	93.996	94.594	0.598
1E+13	8	97.559	98.278	0.719
1E+13	9	91.590	92.549	0.959
Max		97.559	98.278	0.959
Average		94.945	95.777	0.831
Min		91.590	92.549	0.598
Std Dev		1.747	1.732	0.133

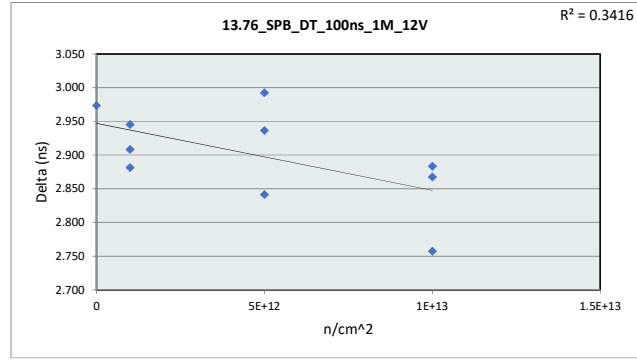


13.75_SPA_DT_100ns_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	110	ns		
Min Limit	85	ns		
n/cm^2	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	96.878	93.567	95.758	92.549
Average	96.878	95.513	96.309	95.140
Max	96.878	96.982	96.681	98.278
UL	110.000	110.000	110.000	110.000

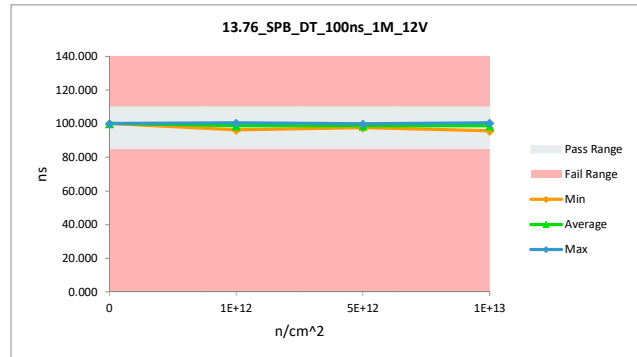


NDD Characterization Report TPS7H5005-SEP

13.76_SPB_DT_100ns_1M_12V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	110	110		
Min Limit	85	85		
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	97.149	100.123	2.974
1E+12	1	97.542	100.488	2.946
1E+12	2	96.980	99.889	2.909
1E+12	3	93.428	96.310	2.882
5E+12	4	96.929	99.866	2.937
5E+12	5	96.086	99.079	2.993
5E+12	6	94.757	97.599	2.842
1E+13	7	97.220	99.978	2.758
1E+13	8	97.588	100.456	2.868
1E+13	9	92.908	95.792	2.884
Max		97.588	100.488	2.993
Average		96.059	98.958	2.899
Min		92.908	95.792	2.758
Std Dev		1.739	1.750	0.069

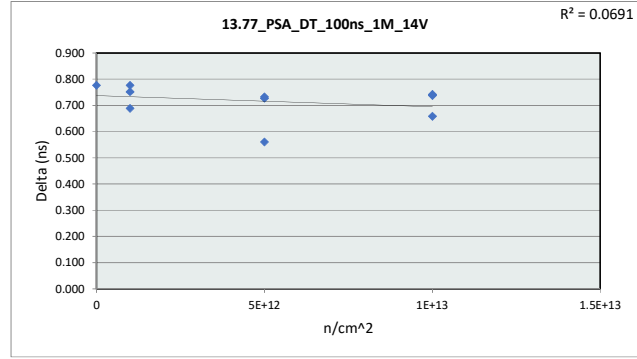


13.76_SPB_DT_100ns_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	110	ns		
Min Limit	85	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	100.123	96.310	97.599	95.792
Average	100.123	98.896	98.848	98.742
Max	100.123	100.488	99.866	100.456
UL	110.000	110.000	110.000	110.000

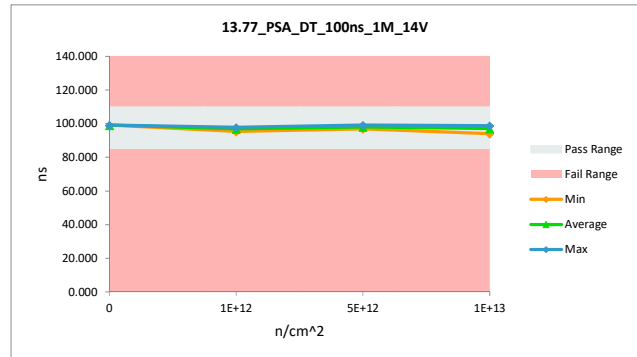


NDD Characterization Report TPS7H5005-SEP

13.77_PSA_DT_100ns_1M_14V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		110	110	
Min Limit		85	85	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	98.364	99.142	0.778
1E+12	1	96.990	97.743	0.753
1E+12	2	97.161	97.851	0.690
1E+12	3	94.534	95.312	0.778
5E+12	4	97.411	98.140	0.729
5E+12	5	96.173	96.907	0.734
5E+12	6	98.554	99.116	0.562
1E+13	7	97.723	98.462	0.739
1E+13	8	98.166	98.910	0.744
1E+13	9	93.476	94.136	0.660
Max		98.554	99.142	0.778
Average		96.855	97.572	0.717
Min		93.476	94.136	0.562
Std Dev		1.678	1.674	0.065

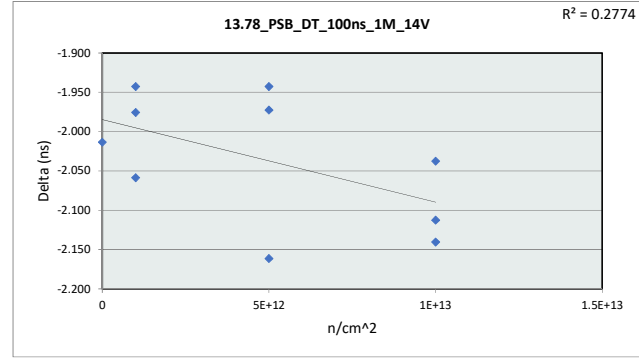


13.77_PSA_DT_100ns_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	110	ns		
Min Limit	85	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	99.142	95.312	96.907	94.136
Average	99.142	96.969	98.054	97.169
Max	99.142	97.851	99.116	98.910
UL	110.000	110.000	110.000	110.000

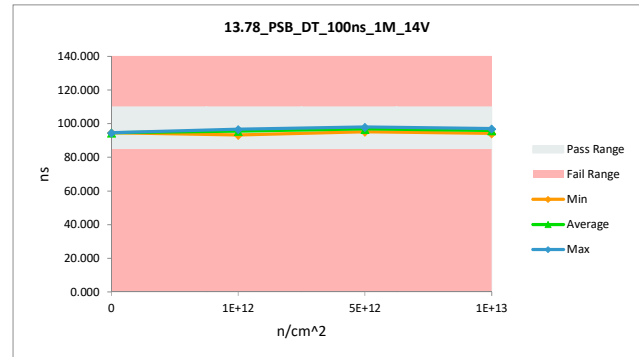


NDD Characterization Report TPS7H5005-SEP

13.78_PSB_DT_100ns_1M_14V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	110	110		
Min Limit	85	85		
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	96.698	94.685	-2.013
1E+12	1	98.783	96.725	-2.058
1E+12	2	98.570	96.628	-1.942
1E+12	3	95.277	93.302	-1.975
5E+12	4	99.239	97.297	-1.942
5E+12	5	97.214	95.242	-1.972
5E+12	6	100.125	97.964	-2.161
1E+13	7	99.101	97.064	-2.037
1E+13	8	98.855	96.743	-2.112
1E+13	9	96.339	94.199	-2.140
Max		100.125	97.964	-1.942
Average		98.020	95.985	-2.035
Min		95.277	93.302	-2.161
Std Dev		1.543	1.526	0.081

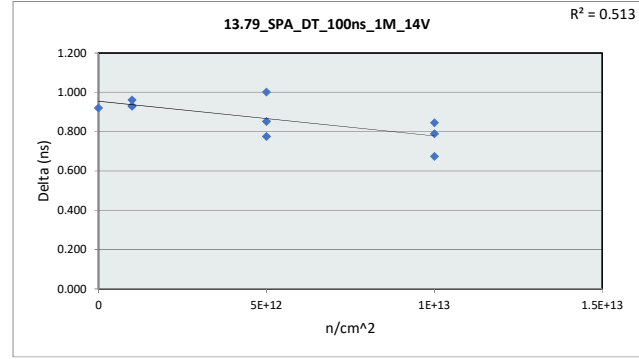


13.78_PSB_DT_100ns_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	110	ns		
Min Limit	85	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	94.685	93.302	95.242	94.199
Average	94.685	95.552	96.834	96.002
Max	94.685	96.725	97.964	97.064
UL	110.000	110.000	110.000	110.000

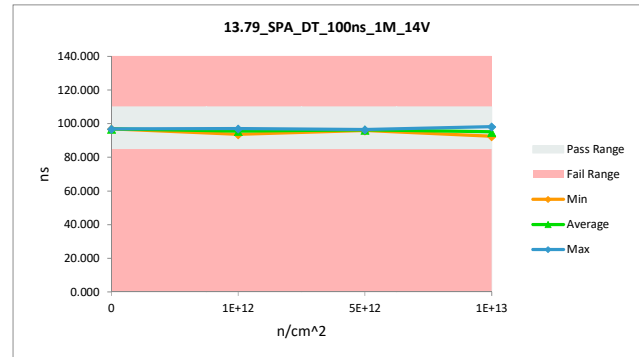


NDD Characterization Report TPS7H5005-SEP

13.79_SPA_DT_100ns_1M_14V				
Test Site				
Tester				
Test Number				
Unit	ns		ns	
Max Limit	110		110	
Min Limit	85		85	
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	95.999	96.921	0.922
1E+12	1	95.049	95.980	0.931
1E+12	2	96.078	97.041	0.963
1E+12	3	92.684	93.617	0.933
5E+12	4	95.776	96.630	0.854
5E+12	5	95.532	96.535	1.003
5E+12	6	95.116	95.894	0.778
1E+13	7	93.976	94.652	0.676
1E+13	8	97.515	98.306	0.791
1E+13	9	91.684	92.531	0.847
Max		97.515	98.306	1.003
Average		94.941	95.811	0.870
Min		91.684	92.531	0.676
Std Dev		1.724	1.736	0.100

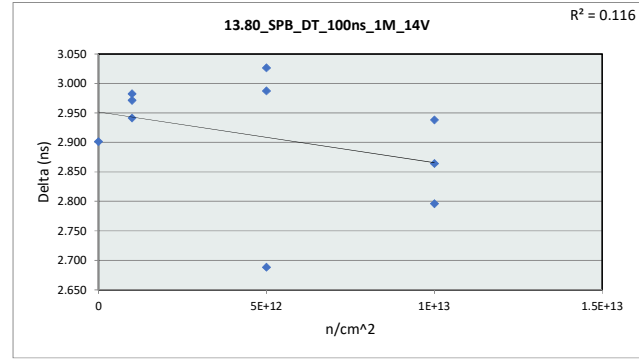


13.79_SPA_DT_100ns_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	110		ns	
Min Limit	85		ns	
n/cm^2	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	96.921	93.617	95.894	92.531
Average	96.921	95.546	96.353	95.163
Max	96.921	97.041	96.630	98.306
UL	110.000	110.000	110.000	110.000

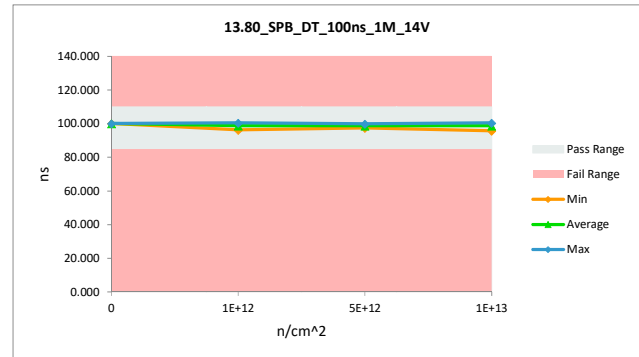


NDD Characterization Report TPS7H5005-SEP

13.80_SPB_DT_100ns_1M_14V				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		110	110	
Min Limit		85	85	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	97.186	100.088	2.902
1E+12	1	97.544	100.516	2.972
1E+12	2	96.997	99.980	2.983
1E+12	3	93.338	96.280	2.942
5E+12	4	96.895	99.922	3.027
5E+12	5	96.083	99.071	2.988
5E+12	6	94.784	97.473	2.689
1E+13	7	97.176	99.973	2.797
1E+13	8	97.512	100.451	2.939
1E+13	9	92.900	95.765	2.865
Max		97.544	100.516	3.027
Average		96.041	98.952	2.910
Min		92.900	95.765	2.689
Std Dev		1.745	1.780	0.102

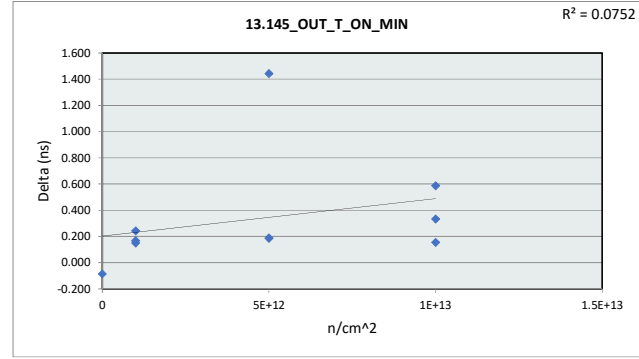


13.80_SPB_DT_100ns_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	110	ns		
Min Limit	85	ns		
n/cm ²	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	100.088	96.280	97.473	95.765
Average	100.088	98.925	98.822	98.730
Max	100.088	100.516	99.922	100.451
UL	110.000	110.000	110.000	110.000

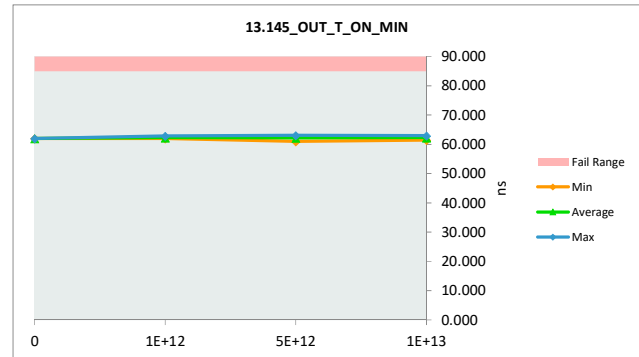


NDD Characterization Report TPS7H5005-SEP

13.145_OUT_T_ON_MIN				
Test Site				
Tester				
Test Number				
Unit		ns	ns	
Max Limit		85	85	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	62.086	62.003	-0.083
1E+12	1	61.797	61.968	0.171
1E+12	2	62.601	62.846	0.245
1E+12	3	61.962	62.116	0.154
5E+12	4	62.457	62.648	0.191
5E+12	5	60.794	60.984	0.190
5E+12	6	61.642	63.088	1.446
1E+13	7	62.586	62.923	0.337
1E+13	8	61.797	62.387	0.590
1E+13	9	61.305	61.462	0.157
Max		62.601	63.088	1.446
Average		61.903	62.243	0.340
Min		60.794	60.984	-0.083
Std Dev		0.575	0.672	0.424

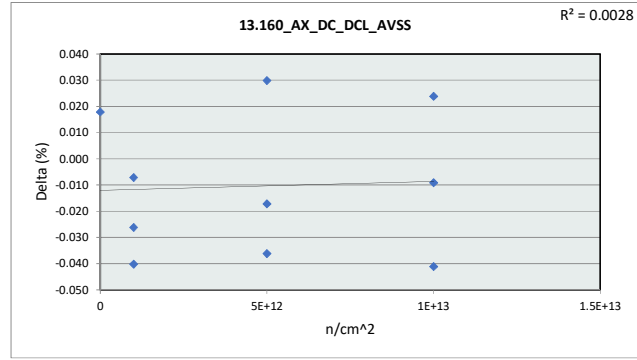


13.145_OUT_T_ON_MIN				
Test Site				
Tester				
Test Number				
Max Limit		85	ns	
Min Limit			ns	
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	62.003	61.968	60.984	61.462
Average	62.003	62.310	62.240	62.257
Max	62.003	62.846	63.088	62.923
UL	85.000	85.000	85.000	85.000

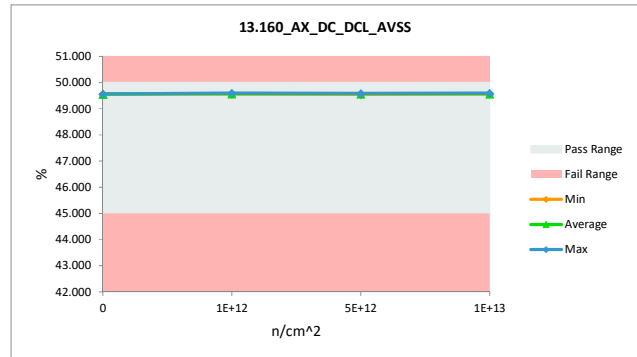


NDD Characterization Report TPS7H5005-SEP

13.160_AX_DC_DCL_AVSS				
Test Site				
Tester				
Test Number				
Unit		%	%	
Max Limit		50	50	
Min Limit		45	45	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	49.549	49.567	0.018
1E+12	1	49.591	49.565	-0.026
1E+12	2	49.609	49.569	-0.040
1E+12	3	49.611	49.604	-0.007
5E+12	4	49.552	49.582	0.030
5E+12	5	49.592	49.556	-0.036
5E+12	6	49.606	49.589	-0.017
1E+13	7	49.608	49.567	-0.041
1E+13	8	49.570	49.561	-0.009
1E+13	9	49.573	49.597	0.024
Max		49.611	49.604	0.030
Average		49.586	49.576	-0.010
Min		49.549	49.556	-0.041
Std Dev		0.024	0.016	0.027

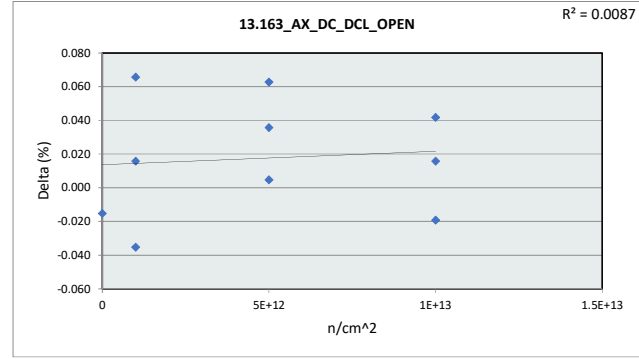


13.160_AX_DC_DCL_AVSS				
Test Site				
Tester				
Test Number				
Max Limit	50	%		
Min Limit	45	%		
n/cm ²	0	1E+12	5E+12	1E+13
LL	45.000	45.000	45.000	45.000
Min	49.567	49.565	49.556	49.561
Average	49.567	49.579	49.576	49.575
Max	49.567	49.604	49.589	49.597
UL	50.000	50.000	50.000	50.000

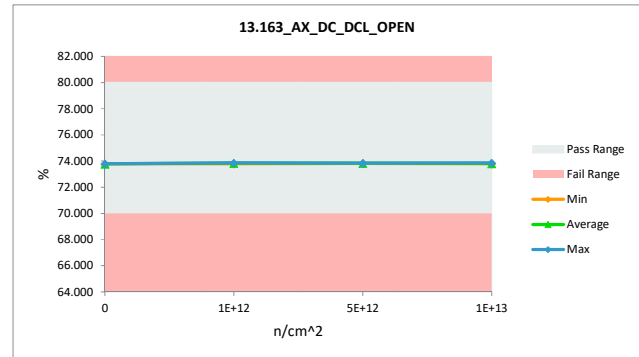


NDD Characterization Report TPS7H5005-SEP

13.163_AX_DC_DCL_OPEN				
Test Site				
Tester				
Test Number				
Unit		%	%	
Max Limit		80	80	
Min Limit		70	70	
n/cm ²	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	73.808	73.793	-0.015
1E+12	1	73.789	73.855	0.066
1E+12	2	73.826	73.791	-0.035
1E+12	3	73.849	73.865	0.016
5E+12	4	73.843	73.848	0.005
5E+12	5	73.763	73.826	0.063
5E+12	6	73.813	73.849	0.036
1E+13	7	73.824	73.866	0.042
1E+13	8	73.807	73.788	-0.019
1E+13	9	73.815	73.831	0.016
Max		73.849	73.866	0.066
Average		73.814	73.831	0.017
Min		73.763	73.788	-0.035
Std Dev		0.025	0.031	0.034

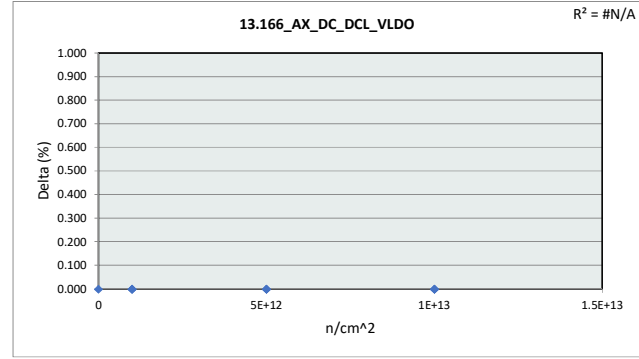


13.163_AX_DC_DCL_OPEN				
Test Site				
Tester				
Test Number				
Max Limit	80	%		
Min Limit	70	%		
n/cm ²	0	1E+12	5E+12	1E+13
LL	70.000	70.000	70.000	70.000
Min	73.793	73.791	73.826	73.788
Average	73.793	73.837	73.841	73.828
Max	73.793	73.865	73.849	73.866
UL	80.000	80.000	80.000	80.000

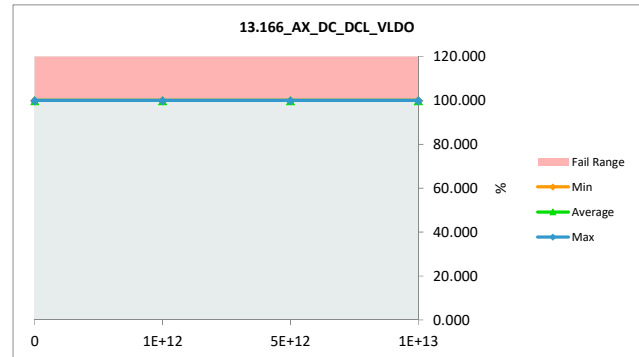


NDD Characterization Report TPS7H5005-SEP

13.166_AX_DC_DCL_VLDO				
Test Site				
Tester				
Test Number				
Unit		%	%	
Max Limit		100	100	
Min Limit				
n/cm^2	Serial #	Pre_NDD_5005-SEP	Post_NDD_5005-SEP	Delta
0	10	100.000	100.000	0.000
1E+12	1	100.000	100.000	0.000
1E+12	2	100.000	100.000	0.000
1E+12	3	100.000	100.000	0.000
5E+12	4	100.000	100.000	0.000
5E+12	5	100.000	100.000	0.000
5E+12	6	100.000	100.000	0.000
1E+13	7	100.000	100.000	0.000
1E+13	8	100.000	100.000	0.000
1E+13	9	100.000	100.000	0.000
Max		100.000	100.000	0.000
Average		100.000	100.000	0.000
Min		100.000	100.000	0.000
Std Dev		0.000	0.000	0.000



13.166_AX_DC_DCL_VLDO				
Test Site				
Tester				
Test Number				
Max Limit	100	%		
Min Limit		%		
n/cm^2	0	1E+12	5E+12	1E+13
LL				
Min	100.000	100.000	100.000	100.000
Average	100.000	100.000	100.000	100.000
Max	100.000	100.000	100.000	100.000
UL	100.000	100.000	100.000	100.000



6 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

Changes from Revision * (August 2022) to Revision A (August 2024)	Page
• Updated document title.....	1
• Updated document to include information for TPS7H5001-SP QMLP.....	1

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