

SVIDAdd=0(R7=DNP)  
 ZeroLoadLine(R29=Open)  
 Vboot=1V(R4=DNP)  
 SlewRate=10mV/us(R8=30k)  
 Imax=6.4A(R5=5826k)

FSW=1MHz(R14=150k)  
 OCL=11A(R12=75k)  
 USR Level8(LeastSensitive)  
 (R6=9.37k)  
 OSRLevel8(LeastSensitive)  
 (R15=150k)  
 RAMP=100mV(R13=39k)

# TIDA-00572

## Intel® Pentium™ N3700 VCC0+VCC1 Rail

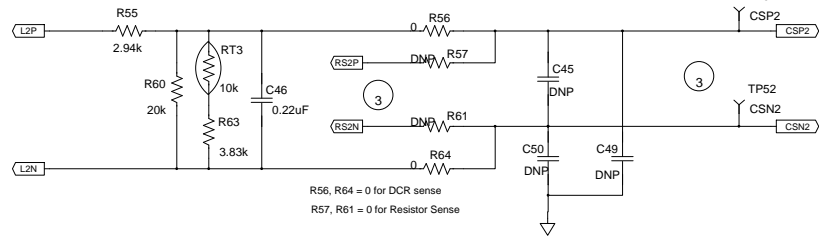
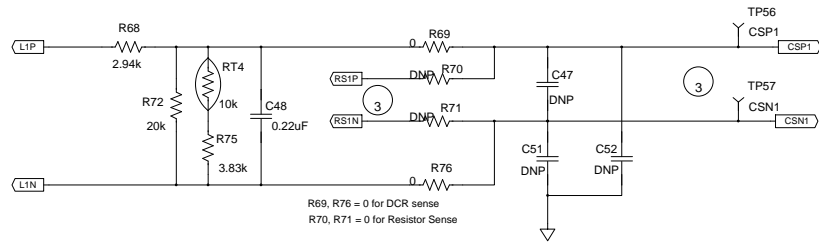
Texas Instruments

Notes:

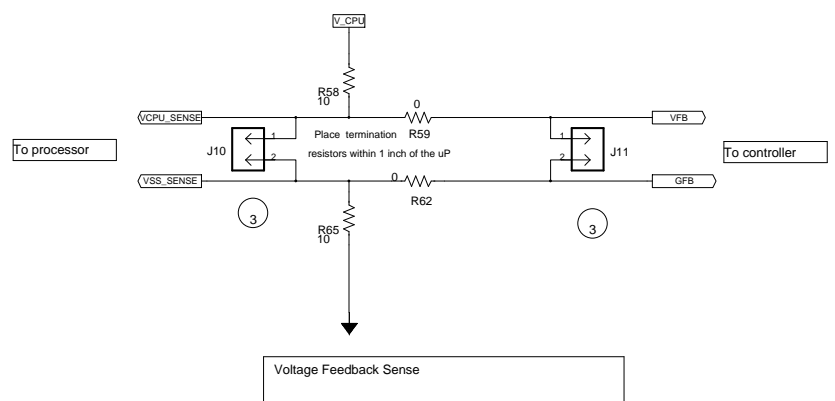
- 1 "1" before a component value indicates this component is not populated in the standard configuration.
- 2 These connections require kelvin connections to the component
- 3 These connections are to be run as differential pairs.

Title <b>Evaluation Schematic, TPS51631, VR12.5</b>		
Size <b>C</b>	Number	Rev <b>A</b>
Date <b>5/6/2015</b>	Drawn by <b>Bo Wang</b>	

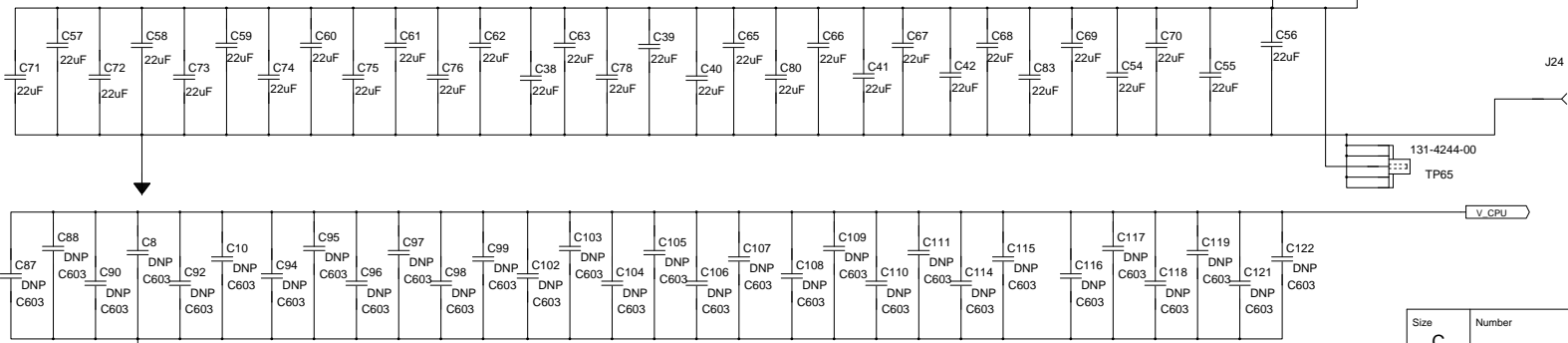
Current Feedback Selection (DCR Sense/ Res Sense) and Filtering



Notes:  
 1 A "\*" before a component value indicates this component is not populated in the standard configuration.  
 2 These connections require kelvin connections to the component.  
 3 These connections are to be run as differential pairs.



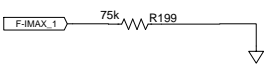
Output Ceramic Decoupling



Note: ONLY TEST CIRCUITRY, NOT PART OF REFERENCE DESIGN

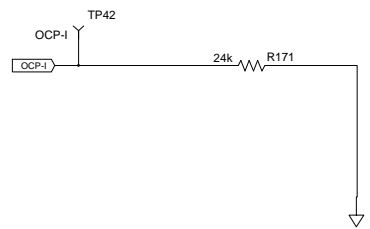
Frequency, OCP, OSR, SLEW, RAMP SELECTIONS

SWITCHING FREQUENCY SELECTION

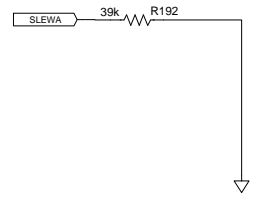


R199	Fsw
150K	1MHz
100K	900kHz
75K	800kHz
56k	700kHz
39k	600kHz
30k	500kHz
24k	400kHz
20k	300kHz

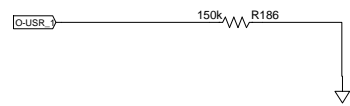
OVER-CURRENT PROTECTION SELECTION



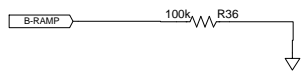
SLEW RATE SELECTION



OSR SELECTION



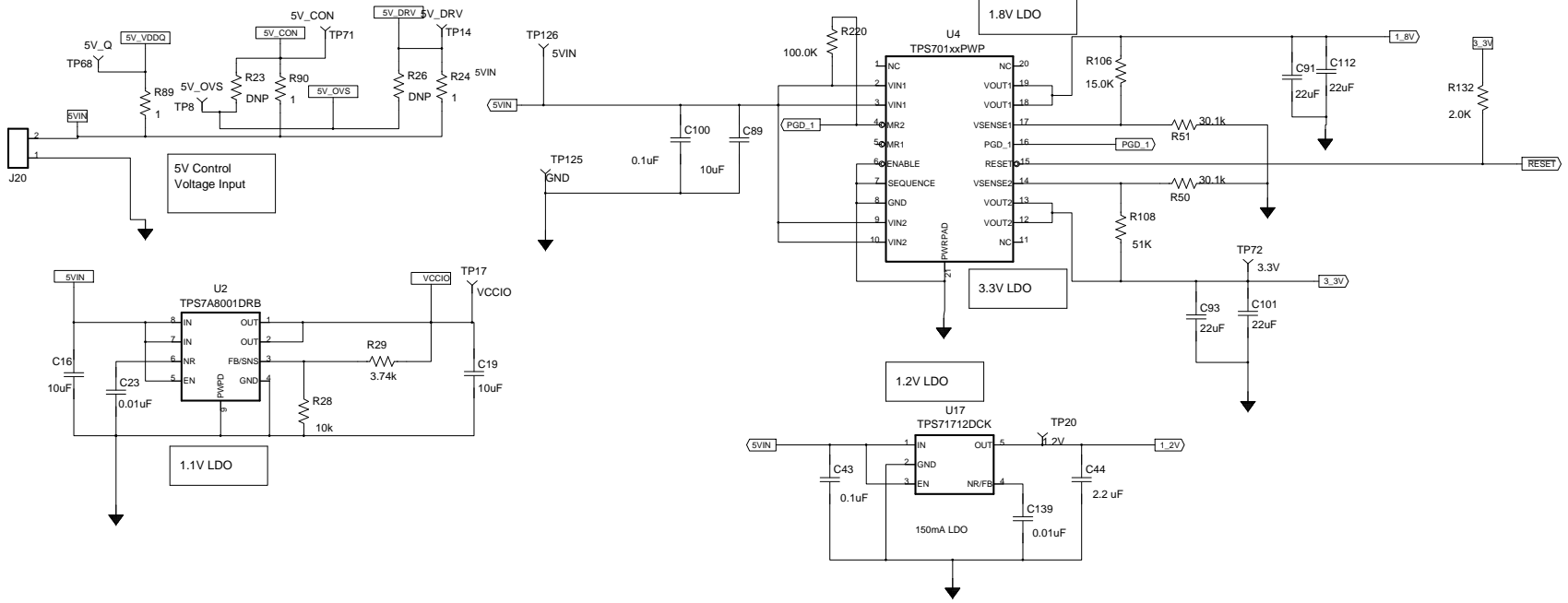
RAMP SELECTION



Size C	Number	Rev A
Date 5/6/2015	Drawn by Bo Wang	

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LDOs

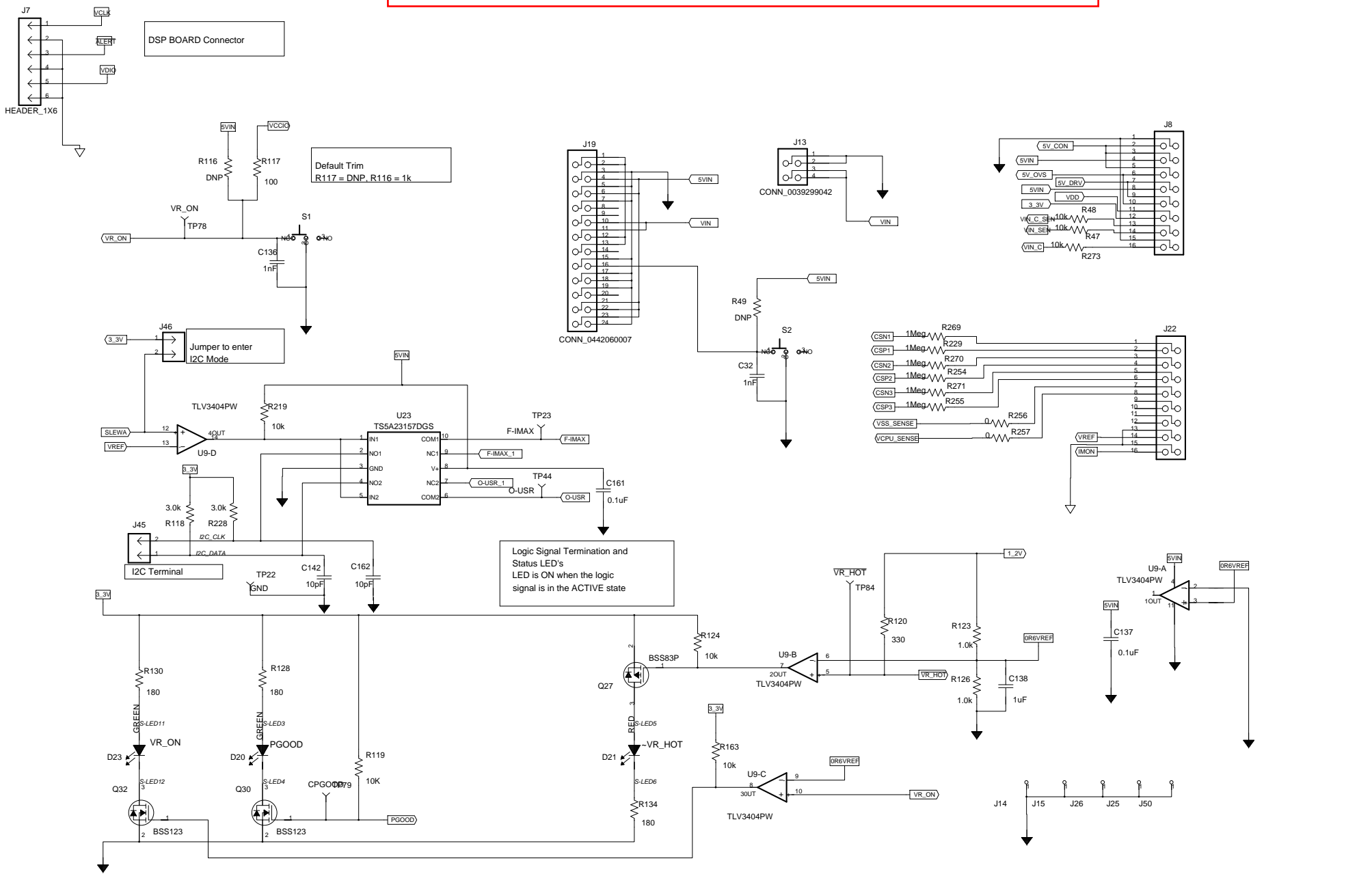


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Size	Number	Rev
C		A

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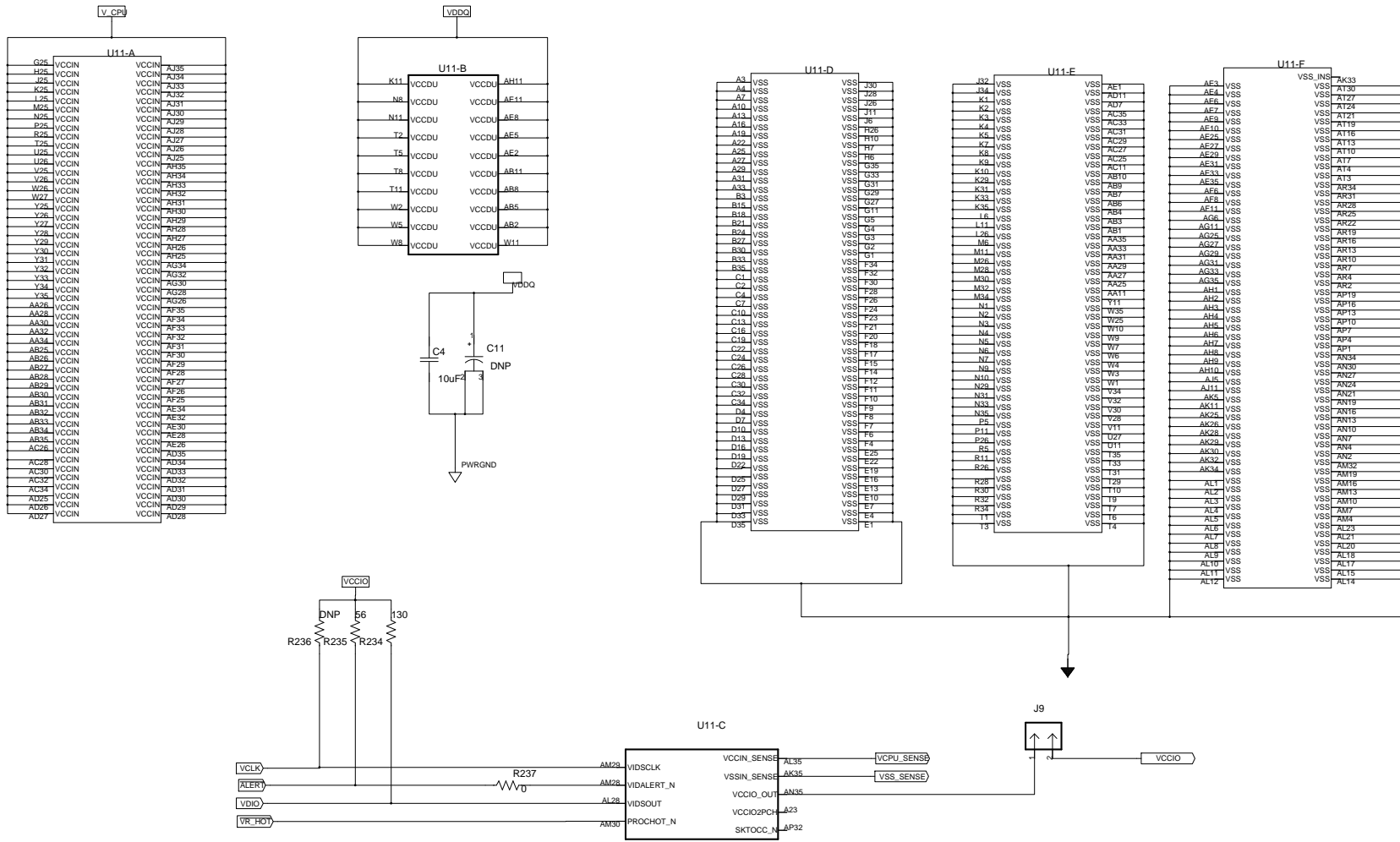
Logic Signal Termination and Status LED's LED is ON when the logic signal is in the ACTIVE state

Default Trim  
R117 = DNP, R116 = 1k

Logic Signal Termination and Status LED's LED is ON when the logic signal is in the ACTIVE state

Size		Number		Rev
C				A
Date	5/6/2015			Drawn by
Bo Wang	Bo Wang			

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Size	C	Number		Rev	A
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Date	5/6/2015	Drawn by	Bo Wang
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Engineer	Bo Wang	PR2110_TPS53625_EVM_Schematic_VCCP_Avoton-Rangleley.sch6	of 7
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Note: ONLY TEST CIRCUITRY, NOT PART OF REFERENCE DESIGN

U11-G		
A2	RSVD	RSVD E20
A6	RSVD	RSVD E18
A8	RSVD	RSVD E17
A8	RSVD	RSVD E15
A8	RSVD	RSVD E14
A11	RSVD	RSVD E12
A12	RSVD	RSVD E11
A14	RSVD	RSVD E9
A15	RSVD	RSVD E8
A17	RSVD	RSVD E5
A18	RSVD	RSVD E5
A20	RSVD	RSVD E2
A21	RSVD	RSVD E3
A24	RSVD	RSVD D34
A28	RSVD	RSVD D32
A30	RSVD	RSVD D28
A32	RSVD	RSVD D26
A34	RSVD	RSVD D23
A35	RSVD	RSVD D23
B2	RSVD	RSVD D21
B4	RSVD	RSVD D18
B6	RSVD	RSVD D17
B8	RSVD	RSVD D14
B8	RSVD	RSVD D12
B10	RSVD	RSVD D11
B11	RSVD	RSVD D9
B12	RSVD	RSVD D8
B14	RSVD	RSVD D5
B14	RSVD	RSVD D3
B17	RSVD	RSVD D2
B18	RSVD	RSVD D1
B20	RSVD	RSVD C35
B22	RSVD	RSVD C33
B23	RSVD	RSVD C31
B24	RSVD	RSVD C29
B26	RSVD	RSVD C27
B26	RSVD	RSVD C25
B28	RSVD	RSVD C23
B31	RSVD	RSVD C21
B32	RSVD	RSVD C20
B33	RSVD	RSVD C18
B34	RSVD	RSVD C17
C5	RSVD	RSVD C15
C5	RSVD	RSVD C14
C6	RSVD	RSVD C12
CF	RSVD	RSVD C11

U11-H		
E21	RSVD	RSVD T86
E21	RSVD	RSVD T87
E24	RSVD	RSVD T85
E24	RSVD	RSVD T84
E24	RSVD	RSVD T83
E28	RSVD	RSVD T82
E28	RSVD	RSVD T81
E31	RSVD	RSVD T35
E31	RSVD	RSVD T34
E31	RSVD	RSVD T33
E31	RSVD	RSVD T32
E31	RSVD	RSVD T31
E31	RSVD	RSVD T30
E31	RSVD	RSVD T29
F1	RSVD	RSVD T28
F2	RSVD	RSVD T27
F3	RSVD	RSVD T26
F11	RSVD	RSVD T10
F11	RSVD	RSVD T8
F11	RSVD	RSVD T7
F21	RSVD	RSVD T5
F21	RSVD	RSVD T4
F21	RSVD	RSVD T2
F31	RSVD	RSVD T1
F31	RSVD	RSVD T34
F31	RSVD	RSVD T32
G6	RSVD	RSVD T30
G6	RSVD	RSVD T28
G6	RSVD	RSVD T27
G6	RSVD	RSVD T26
G10	RSVD	RSVD T6
G26	RSVD	RSVD T35
G30	RSVD	RSVD T33
G32	RSVD	RSVD T31
G32	RSVD	RSVD T29
G32	RSVD	RSVD T27
G32	RSVD	RSVD T10
H2	RSVD	RSVD T9
H4	RSVD	RSVD T8
H6	RSVD	RSVD T5
H6	RSVD	RSVD T7
H8	RSVD	RSVD T4
H8	RSVD	RSVD T2
H17	RSVD	RSVD T1
H27	RSVD	RSVD T4
H27	RSVD	RSVD T35
H27	RSVD	RSVD T34
H37	RSVD	RSVD T33
H37	RSVD	RSVD T32

U11-J		
M6	RSVD	RSVD T79
M16	RSVD	RSVD T78
M22	RSVD	RSVD T77
M28	RSVD	RSVD T76
M31	RSVD	RSVD T75
M31	RSVD	RSVD T74
M32	RSVD	RSVD T73
N26	RSVD	RSVD T72
N27	RSVD	RSVD T71
N28	RSVD	RSVD T70
N31	RSVD	RSVD T69
N31	RSVD	RSVD T68
N31	RSVD	RSVD T67
N31	RSVD	RSVD T66
N31	RSVD	RSVD T65
N31	RSVD	RSVD T64
N31	RSVD	RSVD T63
N31	RSVD	RSVD T62
N31	RSVD	RSVD T61
N31	RSVD	RSVD T60
N31	RSVD	RSVD T59
N31	RSVD	RSVD T58
N31	RSVD	RSVD T57
N31	RSVD	RSVD T56
N31	RSVD	RSVD T55
N31	RSVD	RSVD T54
N31	RSVD	RSVD T53
N31	RSVD	RSVD T52
N31	RSVD	RSVD T51
N31	RSVD	RSVD T50
N31	RSVD	RSVD T49
N31	RSVD	RSVD T48
N31	RSVD	RSVD T47
N31	RSVD	RSVD T46
N31	RSVD	RSVD T45
N31	RSVD	RSVD T44
N31	RSVD	RSVD T43
N31	RSVD	RSVD T42
N31	RSVD	RSVD T41
N31	RSVD	RSVD T40
N31	RSVD	RSVD T39
N31	RSVD	RSVD T38
N31	RSVD	RSVD T37
N31	RSVD	RSVD T36
N31	RSVD	RSVD T35
N31	RSVD	RSVD T34

U11-J		
Y10	RSVD	RSVD TM25
AA1	RSVD	RSVD TM24
AA2	RSVD	RSVD TM23
AA3	RSVD	RSVD TM22
AA4	RSVD	RSVD TM21
AA5	RSVD	RSVD TM20
AA6	RSVD	RSVD TM18
AA7	RSVD	RSVD TM17
AA8	RSVD	RSVD TM16
AA9	RSVD	RSVD TM15
AA10	RSVD	RSVD TM14
AA11	RSVD	RSVD TM12
AC1	RSVD	RSVD TM11
AC2	RSVD	RSVD TM9
AC3	RSVD	RSVD TM8
AC4	RSVD	RSVD TM6
AC5	RSVD	RSVD TM5
AC6	RSVD	RSVD TM3
AC7	RSVD	RSVD TM2
AC8	RSVD	RSVD TM1
AC9	RSVD	RSVD AL34
AC10	RSVD	RSVD AL33
AD1	RSVD	RSVD AL32
AD2	RSVD	RSVD AL31
AD3	RSVD	RSVD AL30
AD4	RSVD	RSVD AL29
AD5	RSVD	RSVD AL27
AD6	RSVD	RSVD AL26
AD7	RSVD	RSVD AL25
AD8	RSVD	RSVD AL24
AD9	RSVD	RSVD AL22
AD10	RSVD	RSVD AL21
AF1	RSVD	RSVD AL19
AF2	RSVD	RSVD AL16
AF3	RSVD	RSVD AL13
AF4	RSVD	RSVD AL31
AF5	RSVD	RSVD AK27
AF6	RSVD	RSVD AK10
AF7	RSVD	RSVD AK9
AF8	RSVD	RSVD AK8
AF9	RSVD	RSVD AK7
AG1	RSVD	RSVD AK6
AG2	RSVD	RSVD AK4
AG3	RSVD	RSVD AK3
AG4	RSVD	RSVD AK2
AG5	RSVD	RSVD AK1
AG6	RSVD	RSVD J10
AG7	RSVD	RSVD J9
AG10	RSVD	RSVD J8
AJ1	RSVD	RSVD J7
AJ2	RSVD	RSVD J6
AJ3	RSVD	RSVD J4

U11-K		
AM6	RSVD	RSVD AT35
AM7	RSVD	RSVD AT34
AM8	RSVD	RSVD AT33
AM9	RSVD	RSVD AT32
AM10	RSVD	RSVD AT31
AM11	RSVD	RSVD AT29
AM12	RSVD	RSVD AT28
AM13	RSVD	RSVD AT26
AM14	RSVD	RSVD AT25
AM15	RSVD	RSVD AT23
AM16	RSVD	RSVD AT22
AM17	RSVD	RSVD AT20
AM18	RSVD	RSVD AT18
AM19	RSVD	RSVD AT15
AM20	RSVD	RSVD AT14
AM21	RSVD	RSVD AT12
AM22	RSVD	RSVD AT11
AM23	RSVD	RSVD AT9
AM24	RSVD	RSVD AT8
AM25	RSVD	RSVD AT6
AM26	RSVD	RSVD AT5
AM27	RSVD	RSVD AT2
AM28	RSVD	RSVD AT1
AM29	RSVD	RSVD AR35
AM30	RSVD	RSVD AR33
AM31	RSVD	RSVD AR32
AM32	RSVD	RSVD AR30
AM33	RSVD	RSVD AR29
AM34	RSVD	RSVD AR27
AM35	RSVD	RSVD AR26
AM36	RSVD	RSVD AR24
AM37	RSVD	RSVD AR23
AM38	RSVD	RSVD AR21
AM39	RSVD	RSVD AR20
AM40	RSVD	RSVD AR18
AM41	RSVD	RSVD AR17
AM42	RSVD	RSVD AR15
AM43	RSVD	RSVD AR14
AM44	RSVD	RSVD AR12
AM45	RSVD	RSVD AR11
AM46	RSVD	RSVD AR9
AM47	RSVD	RSVD AR8
AM48	RSVD	RSVD AR6
AM49	RSVD	RSVD AR5
AM50	RSVD	RSVD AR3
AM51	RSVD	RSVD AR1
AP27	RSVD	RSVD AP35
AP28	RSVD	RSVD AP34
AP29	RSVD	RSVD AP33
AP30	RSVD	RSVD AP31

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Size C	Number	Rev A
Date	5/6/2015	Drawn by Bo Wang
Engineer	Bo Wang	PR2110_TPS53625_EVM_Schematic_VCCP_Avoton-Rangley.sch of 7

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