

		Board Name & Rev No	TMDXICE3359 - 2.1A	Date of Release	4/16/2013			
		Revision	7					
		Schematics File & Revision	TMDXICE3359_3H0013_R EV2_1A_SCH.dsn					
Item Num	Quantity	Part Reference	Value	DescriptiveText	Mfr	MfrNum	PCB Footprint	TlntPartnum ber
1	1	A1	OSD-9616	LCD Passive Matrix Monochrome 96x16	OSD Displays	OSD9616P0899-10	-	4P0034
2	83	C1 C2 C3 C5 C9 C10 C11 C12 C15 C34 C35 C36 C37 C43 C46 C56 C68 C69 C98 C106 C108 C109 C110 C111 C112 C113 C114 C116 C119 C120 C123 C124 C125 C130 C131 C132 C134 C135 C137 C139 C142 C143 C148 C149 C150 C151 C152 C155 C157 C160 C163 C164 C166 C169 C170 C171 C172 C173 C175 C177 C181 C182 C187 C189 C190 C192 C193 C194 C196 C197 C201 C202 C203 C204 C218 C219 C229 C236 C240 C254 C264 C275 C277	0.01uF	Capacitor 0.01uF 16V 10% 0402	Panasonic	ECJ-0YB1C103K	SM-7351-CAP-0402	1C0012
3	53	C4 C6 C7 C14 C16 C17 C18 C19 C20 C21 C22 C32 C41 C55 C70 C71 C72 C73 C74 C75 C77 C78 C79 C80 C82 C83 C85 C86 C87 C88 C91 C93 C96 C159 C162 C167 C185 C188 C206 C207 C208 C213 C214 C220 C221 C225 C227 C230 C231 C232 C265 C269 C272	0.1uF	Capacitor 0.1uF 16V 10% 0402 X7R	Kemet	C0402C104K4RACT	SM-7351-CAP-0402	1C0089
4	0	C8	DNI	DNI	DNI	DNI	DNI	DNI
5	0	C13	DNI	DNI	DNI	DNI	DNI	DNI
6	32	C23 C27 C28 C29 C38 C39 C47 C54 C61 C64 C65 C67 C81 C84 C92 C94 C95 C101 C102 C104 C107 C121 C154 C178 C179 C205 C209 C210 C212 C215 C251 C260	10uF	Capacitor 10uF 16V 10% Ceramic 0805	AVX	0805YD106KAT2A	SM-7351-CAP-0805	1C0085
7	2	C24 C191	4.7uF	Capacitor 4.7uF 16V 20% Tantalum Low ESR	Nichicon	F951C475MRAAQ2	sm-7351-cap-0805	1C0109
8	32	C25 C26 C30 C31 C103 C105 C115 C117 C118 C122 C126 C127 C128 C129 C133 C136 C138 C140 C141 C144 C146 C147 C153 C156 C158 C161 C165 C168 C174 C176 C180 C183	0.1uF, 6.3V	Capacitor 0.1uF 6.3V 10% 0201 X5R	Murata	GRM033R60J104KE19D	SMD0201	1C0122
9	3	C33 C216 C273	0.001uF	Capacitor 0.001uF 50V 5% 0402	AVX	04025C102JAT2A	SM-7351-CAP-0402	1C0093
10	2	C40 C42	22pF	Capacitor 22pF 50V 10% 0402	Panasonic	ECJ-0EC1H220J	SM-7351-CAP-0402	1C0020
11	9	C44 C45 C57 C58 C59 C66 C186 C257 C263	4.7uF	Capacitor Ceramic 4.7uF 16V 10% 0603	Taiyo Yuden	EMK107ABJ475KA-T	SM-7351-CAP-0603	1C0103
12	1	C48	47uF	Capacitor 47uF 10V 10% Tantalum 2917	AVX	TAJD476K010RNJ	7343	1C0126
13	0	C49	DNI	DNI	DNI	DNI	DNI	DNI
14	5	C50 C53 C244 C245 C261	2.2uF	Capacitor 2.2uF Ceramic, 6.3V, X5R, 20%	Taiyo Yuden	JMK105BJ225MV-F	SM-7351-CAP-0402	1C0091
15	3	C51 C52 C237	2.2uF, 10V	Capacitor 2.2uF 10V 20% Ceramic 0402	Taiyo Yuden	LMK105BJ225MV-F	SM-7351-CAP-0402	1C0123
16	5	C60 C97 C217 C234 C258	2.2uF	Capacitor 2.2uF 16V 10% 0805	Kemet	C0805C225K4RACTU	SM-7351-CAP-0805	1C0097
17	2	C62 C63	2.2uF	Capacitor 2.2uF 35V 20% Ceramic 0805	TDK	C2012X7R1V225M	SM-7351-CAP-0805	1C0118
18	13	C76 C195 C198 C199 C200 C223 C226 C228 C238 C266 C268 C270 C271	1uF	Capacitor 1uF 10V Ceramic 10% 0402	AVX	04022D105KAT2A	SM-7351-CAP-0402	1C0084
19	4	C89 C90 C211 C222	18pF, 50V	Capacitor NPO 18pF 50V 5% 0402	TDK	CGA2B2C0G1H180J	SM-7351-CAP-0402	1C0119
20	2	C99 C100	24pF	Capacitor 24pF 50V 5% 0402	TDK	C1005C0G1H240J	SM-7351-CAP-0402	1C0128
21	2	C145 C184	100pF25V10%	Capacitor 100pF 25V 10% 0402	Panasonic	ECJ-0EB1E101K	SM-7351-CAP-0402	1C0010
22	1	C224	4.7uF	Capacitor 4.7uF Ceramic, 6.3V, X5R, 20%	Taiyo Yuden	JMK107BJ475KA-T	SM-7351-CAP-0603	1C0092
23	4	C233 C248 C249 C262	10uF	Capacitor 10uF 50V 10% Ceramic 1206	TDK	C3216X5R1H106K	SM-7351-CAP-1206	1C0113
24	0	C235	DNI	DNI	DNI	DNI	DNI	DNI
25	9	C239 C241 C246 C247 C250 C253 C256 C259 C267	0.022uF	Capacitor 0.022uF 16V 10% Ceramic 0402	TDK	C1005X7R1C223K	SM-7351-CAP-0402	1C0125
26	2	C242 C243	0.1uF	Capacitor 0.1uF 50V 10% 0402 X7R	TDK	C1005X7R1H104K	SM-7351-CAP-0402	1C0105
27	1	C252	1uF	Capacitor 1uF 50V 10% Ceramic 0603	Taiyo Yuden	UMK107BJ105KA-T	SM-7351-CAP-0603	1C0114
28	1	C255	10pF	Capacitor 10pF 50V 1% Ceramic 0402	AVX	04025U100FAT2A	SM-7351-CAP-0402	1C0115
29	2	D1 D2	Red_Green_Yellow_LED	LED RedGreenYellow Tricolor 20mA 1.9/2.1V 1210 smd	Bivar	SM1210RGY	LED-SM1210	1F0012
30	10	D3 D6 D7 D8 D9 D10 D12 D14 D15 D16	Green LED	LED Green SMD 20mA 2V 0805	Dialight	598-8170-107F	sm_led_0805	1F0008
31	2	D4 D5	LED Yellow	LED Yellow SMD 20mA 2V	LiteOn	LTST-S220KSKT	LED1TST-S220	1F0000
32	3	D11 D13 D20	MBR0520LT1	Diode 500mA 20V 0.3V Forward Drop	On Semiconductor	MBR0520LT1	mbr0520L	1E0007

33	1	D17	B340A-13-F	Diode Power Rectifier 3A 40V Schottky	Diodes Inc	B340A-13-F	DO157LS_116X2205 MA	1E0024
34	1	D18	MBRS140T	Diode 1A 40V 600mV Forward Drop	On Semiconductor	MBRS140T3G	mbrs140t	1E0017
35	1	D19	SMCJ26CA	Voltage Suppressor 26.0V	LittleFuse	SMCJ26CA	SMCJ36CA	1E0021
36	1	F1	Fuse 4A	Fuse Block with 4A Fuse	Littelfuse	0154004.DRT	smdfuseblk	1P0004
37	7	FB2 FB3 FB9 FB10 FB11 FB12 FB13	150OHM800mA	Ferrite Bead 150 Ohm 800mA	Laird-Signal Integrity Products	LI0805H151R-10	sm-7351-ind-0805	1L0010
38	2	J1 J2	RJ-45 10_100Mb	Connector RJ-45 Jack w/mag_orgLED 10_100Mb AMDIX	Link	LPJ16183A107NL	CNRJ45-1X1WLED	2J0023
39	1	J3	Header 9x2 Female	Header 9x2 0.1in pitch female throughhole	FCI	66953-009LF	HDR2X9VER_335M	2H0069
40	1	J4	Header 15x2 Female	Header 15x2 0.1in pitch female throughhole	FCI	66953-015LF	HDR2X15-344M	2H0067
41	2	J5 J8	TMS-103-01	Header 1.27mm pitch 3pin	Samtec	TMS-103-01-G-S	SIP3_50LS	2H0066
42	3	J6 J7 J10	TMS-102-01	Header 1.27mm pitch 2pin	Samtec	TMS-102-01-G-S	SIP2_50LS	2H0065
43	1	J9	Conn_DB9F	Connector DB9 Female RA SMD	Norcomp	190-009-263R001	NorComp_db9F_SMD	2C0086
44	1	J11	Power Jack RAPC722X	Jack Power Right Angle 2conductor 2.1mm center	Switchcraft	RAPC722X	CNRAPC722	2J0021
45	0	J12	DNI	DNI	DNI	DNI	DNI	DNI
46	1	J13	USB_MicroAB	Connector Micro USB AB RA	Hirose	ZX62-AB-5PA(11)	ZX62-AB-5PA	2C0088
47	1	J14	Header 20x2 Female	Header 20x2 0.1in pitch female throughhole	FCI	66953-020LF	HDR2X20-335M	2H0068
48	0	J15	DNI	DNI	DNI	DNI	DNI	DNI
49	1	J16	SCHA5B0200	Connector compact low-profile Push Type Micro SD	ALPS	SCHA5B0200	SD-MICRO-SCHA5B0300	2C0102
50	1	J17	10051922-1410ELF	Connector 0.5mm pitch, 14 Pin, FPC	FCI	10051922-1410ELF	CON14_P5MM_3P75 X9P5SMD	2C0109
51	2	J18 J19	HEADER 3	Single Line Header 3pin Tin 0.1in pitch	Sullins	PEC03SAAN	header_3x1	2H0001
52	1	L1	DA2304-AL	Power Transformer 45uH RS-485	Coilcraft	DA2304-ALB	DA2304	1L0037
53	1	L2	2.2uH	Inductor 2.2uH smt 1A 20%	TDK	VLF3010AT-2R2M1R0	IND108SMD_110X102	1L0044
54	1	L3	68uH	Inductor 68uH smt 1A 20%	TDK	VLF10040T-680M1R4	IND_354SMD_400SQ	1L0045
55	3	L4 L5 L7	2.2uH	Inductor 2.2uH smt 2.6A, 58 milliohm	TDK	VLCF5020T-2R2N2R6-3	VLCF5020T	1L0025
56	1	L6	ACM2012	Common Mode Filter for USB/HDMI	TDK	ACM2012H-900-2P	ACM2012H	1M0003
57	1	PCB1	AM335x ICE V2.0Board Bare PCB	AM335x ICE V2.0 EVM PCB Bare	TI	3H0013	DNP	3H0013
58	4	Q1 Q2 Q3 Q4	DMC564040R	Dual Transistor NPN 50V 100mA	Panasonic	DMC564040R	SMINI6-F3-B	1Q0023
59	13	R1 R2 R3 R4 R5 R6 R89 R93 R94 R98 R128 R130 R131	330	Resistor 330ohm 1/16W 5% 0402	Stackpole Electronics	RMCF0402JT330R	SM-7351-RES-0402	1R0194
60	25	R7 R8 R15 R16 R18 R19 R61 R90 R92 R95 R97 R110 R112 R113 R114 R124 R129 R135 R145 R174 R196 R205 R207 R243 R244	2.2K	Resistor 2.2Kohm 1/16W 5% 0402	VishayDale	CRCW04022K20JNED	sm-7351-res-0402	1R0169
61	2	R9 R10	4.87K	Resistor 4.87Kohm 1/10W 1% 0402	Panasonic	ERJ-2RKF4871X	SM-7351-RES-0402	-
62	13	R11 R37 R44 R45 R50 R54 R55 R63 R178 R184 R188 R191 R195	10K, 1%	Resistor 10Kohm 1/10W 1% 0402	Panasonic-ECG	ERJ-2RKF1002X	SM-7351-RES-0402	1R0254
63	9	R12 R13 R42 R154 R179 R180 R181 R182 R186	33	Resistor 33ohm 1/16W 5% 0402	Panasonic	ERJ-2GEJ330X	SM-7351-RES-0402	1R0008
64	9	R14 R24 R25 R39 R70 R71 R137 R277 R278	4.7K	Resistor 4.7Kohm 1/16W 5% 0402	Stackpole Electronics	RMCF0402JT4K70	SM-7351-RES-0402	1R0183
65	0	R17 R22 R23 R26 R35 R36 R126 R138 R139 R222 R223 R224	DNI	DNI	DNI	DNI	DNI	DNI
66	0	R20	DNI	DNI	DNI	DNI	DNI	DNI
67	20	R21 R65 R67 R75 R101 R111 R125 R187 R197 R199 R200 R206 R210 R211 R231 R233 R234 R235 R236 R237	10K	Resistor 10Kohm 1/16W 5% 0402	Rohm	MCR01MZPJ103	SM-7351-RES-0402	1R0168
68	0	R27 R28 R29 R30 R31 R32 R33 R34 R134 R148	DNI	DNI	DNI	DNI	DNI	DNI
69	14	R38 R152 R153 R157 R158 R161 R162 R163 R165 R166 R167 R168 R171 R176	100K	Resistor 100Kohm 1/16W 1% 0402	Stackpole Electronics	RMCF0402FT100K	SM-7351-RES-0402	1R0181
70	17	R40 R41 R59 R87 R88 R99 R100 R102 R103 R104 R106 R107 R108 R109 R115 R127 R177	1K	Resistor 1Kohm 1/16W 5% 0402	Panasonic	ERJ-2GEJ102X	SM-7351-RES-0402	1R0027
71	0	R43 R46 R47 R48 R49 R51 R52 R53 R56 R57 R159 R160 R164 R169 R170	DNI	DNI	DNI	DNI	DNI	DNI
72	1	R58	22	Resistor 22 ohm 1/16W 1% 0402	ROHM	MCR01MZPF22R0	SM-7351-RES-0402	1R0175

73	27	R60 R64 R69 R72 R91 R96 R105 R142 R146 R147 R149 R150 R156 R175 R190 R192 R194 R198 R201 R202 R203 R204 R209 R225 R228 R229 R230	0	Resistor Zero ohm Jumper 0402	Panasonic	ERJ-2GE0R00X	SM-7351-RES-0402	1R0098
74	0	R62	DNI	DNI	DNI	DNI	DNI	DNI
75	1	R66	3.24K	Resistor 3.24Kohm 1/10W 1% 0402	Panasonic	ERJ-2RFK3241X	SM-7351-RES-0402	1R0266
76	8	R68 R74 R79 R80 R81 R83 R84 R226	1.2K, MELF	Resistor 1.2Kohm 1/3W 1% MELF0102	Vishay	MMU01020C1201FB300	smd_melf0102	1R0265
77	17	R73 R76 R77 R78 R85 R86 R213 R214 R215 R216 R217 R239 R240 R241 R242 R279 R280	0	Resistor Zero ohm Jumper 0603	Panasonic	ERJ-3GEY0R00V	SM-7351-RES-0603	1R0096
78	1	R82	25K	Resistor 25Kohm 1/10W 0.1% 0603	Vishay	PNM0603E2502BST5	SM-7351-RES-0603	1R0223
79	9	R116 R117 R118 R119 R120 R121 R122 R123 R185	49.9	Resistor 49.9ohm 1/16W 1% 0402	Panasonic	ERA-2AE49R9X	SM-7351-RES-0402	1R0171
80	9	R132 R133 R136 R140 R143 R151 R155 R173 R208	150	Resistor 150ohm 1/16W 5% 0402	Stackpole Electronics	RMCF0402JT150R	SM-7351-RES-0402	1R0179
81	0	R141	DNI	DNI	DNI	DNI	DNI	DNI
82	0	R144	DNI	DNI	DNI	DNI	DNI	DNI
83	0	R172	DNI	DNI	DNI	DNI	DNI	DNI
84	1	R183	240, 1%	Resistor 240 OHM 1/10W 1% 0402 SMD	Panasonic-ECG	ERJ-2RFK2400X	SM-7351-RES-0402	1R0249
85	1	R189	4.75K, 1%	Resistor 4.75KOHM 1/10W 1% 0402 SMD	Panasonic-ECG	ERJ-2RFK4751X	SM-7351-RES-0402	1R0250
86	1	R193	12.1K, 1%	Resistor 12.1K OHM 1/16W 1% 0402 SMD	Yageo	RC0402FR-0712K1L	SM-7351-RES-0402	1R0247
87	2	R212 R219	0.05ohm1% Sense	Resistor 0.05ohm 0.5W Sense 1% 1206	Ohmite	LVK12R050FER	SM_RES_LVK12	1R0189
88	0	R218	DNI	DNI	DNI	DNI	DNI	DNI
89	1	R220	1.62M	Resistor 1.62Mohm 1/16W 1% 0402	Vishay/Dale	CRCW04021M62FKED	SM-7351-RES-0402	1R0210
90	1	R221	180K	Resistor 180Kohm 1/16W 1% 0402	Stackpole Electronics	RMCF0402JT180K	SM-7351-RES-0402	1R0209
91	1	R227	49.9	MELF Resistor 49.9ohm 1/3W 1% MELF0102	Vishay	MMU01020C4999FB300	smd_melf0102	1R0243
92	1	R232	392K	Resistor 392Kohm 1/10W 1% 0402	Panasonic	ERJ-2RFK3923X	SM-7351-RES-0402	1R0267
93	1	R238	120	Resistor 120ohm 1/16W 1% 0402	Vishay_Dale	CRCW0402120RFKED	SM-7351-RES-0402	1R0244
94	3	RP1 RP2 RP3	33x8	Resistor 33ohmx8 1/16W 5% Array SMD	Panasonic	EXB-2HV330JV	EXB-2HV330JV	1R0196
95	1	S1	SwitchTactile3Pos	Tactile switch 3 position smd	Omron	B3U-1100P	SW3_4X2P5	2W0022
96	1	SW1	Rotary Switch	Rotary Switch, Screw Driver Actuated	Nikkai	ND3FR10P	SW-ND3FR10	2W0021
97	4	TP17 TP18 TP19 TP20	TP		Keystone Electronics	5002	TH_TP_5002	2H0026
98	1	U1	M29W160EB	Flash Memory 16Mbit (2Mx8/1Mx16) 70ns	Micron	M29W160EB70ZA6E	TFBGA48	1A0328
99	1	U13	SN74AUP2G08	Low Power Dual AND Gate	TI	SN74AUP2G08DCU	U_8_DCU	1A0249
100	1	U14	AM335X_15x15		TI	AM33592CZ	am33xx_15x15	1A0242
101	2	U2 U3	TLK110	Industrial Ethernet 10/100 Mb/s PHY Transceiver	TI	TLK110PT	HTQFP_48pin	1A0291
102	1	U4	SN74CB3Q3306APWR	Dual FET Bus Switch	TI	SN74CB3Q3306APWR	PW8	1A0331
103	1	U5	SN74LVC1G08	Single logic AND Gate	TI	SN74LVC1G08DCK	sm-so-sc70-5	1A0257
104	1	U6	CAT24C256W	EEPROM 256Kb I2C SOIC8	On Semiconductor	CAT24C256WI-G	soic8_208	1A0225
105	2	U7 U8	SN74LVC1G32DCK	Single Zinput positive OR gate	TI	SN74LVC1G32DCK	SC70-5-43M	1A0334
106	2	U9 U11	SN74CBTLV3257RGY	4bit 1-4 FET Mux/Demux	TI	SN74CBTLV3257RGY	QFN4X3P5-16-39M	1A0332
107	1	U10	SN74LVC1G06DCK	Single inverter buffer/driver w/open drain output	TI	SN74LVC1G06DCK	DCK5	1A0333
108	1	U12	CDCE913	Programmable 1-PLL VCXO Clock Synthesizer	TI	CDCE913PWR	TSSOP5X4-14-47M	1A0326
109	1	U15	MT41J128M16JT-125	DDR3 SDRAM 2Gb (128Mx16) 1.5V	Micron	MT41J128M16JT-125	BGA14X10-96	1A0317
110	1	U16	ISO1050	Isolated CAN Transceiver	TI	ISO1050DUB	so8_w_dub	1A0214
111	1	U17	W25Q64	Flash Memory SPI 64Mb	Winbond	W25Q64CVSSIG	SOIC8_265	1A0223
112	1	U18	FT232HL	USBHS Dual UART/FIFO	FTDI	FT232HL-REEL	LQFP64_10X10	1A0294
113	1	U19	LM94022	Multi-Gain Analog Temperature Sensor	TI	LM94022QBIMG/NOPB	SC70-5	1A0327
114	1	U20	SN74LVC1G07	Driver Open Drain output	TI	SN74LVC1G07DCK	DCK5	1A0269
115	1	U21	TPS5420D	Step down power switch converter,2A	TI	TPS5420D	SOIC-8	-
116	1	U22	TPS65910A3	Integrated Power Management Unit for DDR3	TI	TPS65910A3A1RSL	U_48_RSL	1A0303
117	1	U23	TPD4S012	ESD 4channel USB Interface	TI	TPD4S012DRY	U_6_DRY	1A0233
118	1	U24	TPD6E001	ESD Protection Array 6Chan +-15kV	TI	TPD6E001RSE	U_10_RSE	1A0248
119	1	U25	PCA9536DGK	I2C to IO Expander 4 bit	TI	PCA9536DGK	MSOP3X3-8-43M	1A0329
120	1	U26	SN74ALVCH16374DGV	16-Bit Edge-Triggered D- TYPE Flip-Flop	TI	SN74ALVCH16374DGV	TVSOP-48	1A0330
121	1	U27	TPS76650	Low Dropout Voltage Regulator 250mA Low Q Current	TI	TPS76650D	soic_8	1A0284
122	1	U28	ISO1176T	Isolated Profibus RS-485 Transceiver	TI	ISO1176TDW	u_16_dw	1A0239

123	1	U29	TPS51200	DDR Termination Regulator SinkSource	TI	TPS51200DRC	drcpso_10pin	1A0297
124	1	U30	TPS71718	Low Dropout 1.8V 150mA Linear Regulator	TI	TPS71718DCK	smdsc70-5	1A0262
125	1	U31	TPIC2810	8bit LED Driver with I2C Interface	TI	TPIC2810D	u_16_d	1A0282
126	1	U32	TPS78633	Linear Power Regulator 3.3V 1.5A	TI	TPS78633DCQ	sot223_6pin	1A0094
127	1	U33	93LC56B	2K Microwire-Compatible Serial EEPROM	Microchip	93LC56B-I/OT	SOT23-6	1A0298
128	1	U34	TPS61041	DC to DC Boost Converter 1.8V to 6.0V Input Range	TI	TPS61041DBV	DBV5	1A0343
129	1	U35	SN65HVS882	Industrial 8digit Input Serializer	TI	SN65HVS882PWP	u_28_pwp	1A0234
130	2	U37 U38	SN74LV244A	Octal Line Buffer	TI	SN74LV244APWRG3	TSSOP4X6-20	1A0368
131	1	Y1	25MHz	Crystal 25MHz	Abracon	ABM3-25.000MHz-B2-T	SM_OSC_ABM3	1Y0030
132	1	Y2	12MHz,+/-50ppm	CRYSTAL 12.000 MHZ 20PF SMD	ECS Inc	ECS-120-20-30B-TR	XTAL4_3P2X5SMD	
133	1	Y3	24MHz	Crystal 24MHz 30ppm load cap 18pF	Citizen	CS325-24.000MABJ-UT	XTAL4_3P2X2P5_SM D	1Y0039
134	1	Y4	32.768KHz MC-306	Crystal 32.768KHz	Epson	MC-30632.7680k-A	MC-306	1Y0029

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