

# Bill of Materials

TI DESIGNS

TIDM-MINI-DC

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	1	C1		Capacitor, 1000pF, 2kV, 20%, X7R,	Kemet	C1210C102MGRACTU			EK-TM4C1294XL
2	26	C3, C4, C5, C10, C11, C12, C13, C16, C17, C18, C19, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C40, C41, C42, C43, C46		Capacitor, 0.1uF 16V, 10% 0402 X7R	Taiyo Yuden	EMK105B7104KV-F			EK-TM4C1294XL
3	1	C31		Capacitor, 4700pF, 2kV, 10%, X7R, 1812	AVX	1812GC472KAT1A			EK-TM4C1294XL
4	2	C32, C33		Capacitor, 3300pF, 50V, 10%, X7R, 0603	TDK	C1608X7R1H332K			EK-TM4C1294XL
5	2	C6, C14		Capacitor, 1uF , X5R, 10V, Low ESR, 0402	Johanson Dielectrics Inc	100R07X105KV4T			EK-TM4C1294XL
6	3	C7, C15, C20		Capacitor, 2.2uF, 16V, 10%, 0603, X5R	Murata	GRM188R61C225KE15D			EK-TM4C1294XL
7	6	C8, C9, C44, C45, C47, C48		Capacitor, 12pF, 50V 5%, 0402, COG	Murata	GRM1555C1H120JZ01D			EK-TM4C1294XL
8	5	D0, D1, D2, D3, D4		Green LED 0603	Everlight	19-217/G7C-AL1M2B/3T			EK-TM4C1294XL
9	7	J1, J2, J3, J4, J5, J6, J7		Jumper, 0.100, Gold, Black, Open	3M	969102-0000-DA			EK-TM4C1294XL
10					Kobiconn	151-8000-E			EK-TM4C1294XL
11	1	JP1		Header, 2x3, 0.100, T-Hole, Vertical Unshrouded, 0.230 Mate, gold	FCI	67996-206HLF			EK-TM4C1294XL
12	2	JP2, JP3		Header, 1x2, 0.100, T-Hole, Vertical Unshrouded, 0.220 Mate	3M	961102-6404-AR			EK-TM4C1294XL
13					FCI	68001-102HLF			EK-TM4C1294XL
14					Anyone	1x2-head			EK-TM4C1294XL
15	2	JP4, JP5		Header, 2x2, 0.100, T-Hole, Vertical Unshrouded, 0.230 Mate	FCI	67997-104HLF			EK-TM4C1294XL
16					4UCON	00998			EK-TM4C1294XL
17	8	R1, R2, R3, R4, R5, R29, R35, R44		Resistor, 10k ohm, 1/10W, 5%, 0402 Thick Film	Yageo	RC0402FR-0710KL			EK-TM4C1294XL
18	3	R17, R26, R36		100k 5% 0402 resistor smd	Rohm	MCR01MRTJ104			EK-TM4C1294XL
19	2	R18, R51		Resistor 0402 100 ohm 5%	Rohm	MCR1MRTJ101			EK-TM4C1294XL
20	4	R23, R21, R22, R24		Resistor 49.9 ohm 0402. 1 %	Rohm	MCR01MRTF49R9			EK-TM4C1294XL
21	1	R25		Resistor 4.87k 1% 0402 smd	Rohm	MCR01MRTF4871			EK-TM4C1294XL
22	1	R28		Resistor, 5.6k ohm, 1/10W, 5%, resistor 75 ohm 0402 5%	Panasonic	ERJ-2GEJ562X			EK-TM4C1294XL
23	4	R32, R43, R45, R46			Rohm	MCR01MRTJ750			EK-TM4C1294XL
24	2	R34, R52		Resistor, 1M OHM 1/10W 5% 0603	Panasonic	ERJ-3GEYJ105V			EK-TM4C1294XL
25	1	R38		Resistor, 51 ohm, 1/10W, 5%,	Panasonic	ERJ-2GEJ510X			EK-TM4C1294XL
26	1	R42		Resistor, 1M Ohm 1/10W, 5%,	Rohm	MCR01MRTF1004			EK-TM4C1294XL
27	1	R47		RES 1M OHM 5% 1206 TF	Panasonic	ERJ-8GEYJ105V			EK-TM4C1294XL

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28	2	R49, R50		Resistor, 2.0k ohm, 1/10W, 5%,	Panasonic	ERJ-3GEYJ202V			EK-TM4C1294XL
29	12	R6, R7, R8, R10, R11, R15,		Resistor, 0 ohm, 1/10W, 5%, 0402	Panasonic	ERJ-2GEOR00X			EK-TM4C1294XL
30	5	R9, R27, R30, R31, R33		Resistor, 330 ohm, 1/10W, 5%,	Yageo	RC0402FR-07330RL			EK-TM4C1294XL
31	4	RESET, USR SW1,		Switch, Tact 6mm SMT, 160gf	Omron	B3S-1000			EK-TM4C1294XL
32	1	U1		Tiva, MCU TM4C1294NCPDT 128	Texas Instruments	TM4C1294NCPDT			EK-TM4C1294XL
33				QFP with Ethernet MAC + PHY	Texas Instruments	XM4C1294NCPDT			EK-TM4C1294XL
34	1	U10		Transformer, ethernet, 1 to 1.	Pulse Electronics	HX1198FNL			EK-TM4C1294XL
35	1	U13		Diode, 8 chan, +/-15KV, ESD	Semtech	SLVU2.8-4.TBT			EK-TM4C1294XL
36	1	U14		Connector, RJ45 NO MAG,	TE Connectivity	1-406541-5			EK-TM4C1294XL
37	2	U2, U3		IC 4CH ESD SOLUTION W/CLAMP	Texas Instruments	TPD4S012DRYR			EK-TM4C1294XL
38	1	U20		Stellaris TIVA MCU	Texas Instruments	TM4C123GH6PMI			EK-TM4C1294XL
39	1	U22		USB Micro B receptical right angle	FCI	10118194-0001LF			EK-TM4C1294XL
40	1	U4		Fault protected power switch,	Texas Instruments	TPS2052BDRBR			EK-TM4C1294XL
41	1	U5		3.3V LDO TI TPS73733DRV fixed	Texas Instruments	TPS73733DRV			EK-TM4C1294XL
42	1	U6		Header 2x5, 0.050, SM, Vertical	Samtec	SHF-105-01-S-D-SM			EK-TM4C1294XL
43				Shrouded	Don Connex	C44-10BSA1-G			EK-TM4C1294XL
44	1	U7		USB Micro AB receptacle. Right	Hirose	ZX62D-AB-5P8			EK-TM4C1294XL
45	4	X6, X7, X8, X9		Header, 2x10, T-Hole Vertical	Samtec	SSW-110-23-S-D			EK-TM4C1294XL
46				unshrouded stacking	Major League	SSHQ-110-D-08-F-LF			EK-TM4C1294XL
47	1	Y1		Crystal 25 Mhz 3.2 x 2.5 mm	NDK	nx3225ga-25.000m-std-			EK-TM4C1294XL
48	1	Y2		crystal 16 mhz 3.2x2.5 mm 4 pin	NDK	NX3225GA-16.000M-STD-			EK-TM4C1294XL
49	1	Y3		Crystal, 32.768KHz Radial Can	Citizen Finetech	CMR200T-32.768KDZY-UT			EK-TM4C1294XL
50	1	C8	100nF	Cap Ceramic SMT 0603	Murata	GRM188R71H104KA93D		C0603	F28375S_PLC_SOM
51	1	C10	DNP	Cap Ceramic SMT 0402				C0402	F28375S_PLC_SOM
52	2	C12 C66	15pf		MURATA	GRM1555C1H150JZ01D		C0402	F28375S_PLC_SOM
53	28	C43 C78 C80 C81 C82 C83 C86 C87 C89 C97 C102 C103 C105 C106 C108 C116 C118 C119 C121 C123 C124 C125 C142 C144 C159 C160 C163 C164	0.1uF	CAP CER 16V 10% X7R 0402	TDK			C0402	F28375S_PLC_SOM
54	3	C65 C67 C69	10nF	CAP CER 10000PF (10nF) 50V 10% X7R 0402	TDK	C1005X7R1H103K050BB		C0402	F28375S_PLC_SOM
55	1	C70	0.1uF	CAP CER 0.1UF (100nF) 50V 10% X5R 0402	TDK	C1005X5R1H104K050BB		C0402	F28375S_PLC_SOM
56	1	C72	10uF	CAP CER 10UF 50V 10% X5R 1206	TDK	C3216X5R1H106K160AB		C1206	F28375S_PLC_SOM
57	2	C73 C74	22UF	CAP CER 22UF 50V Y5V 2220	TDK	C5750Y5V1H226Z		C2220	F28375S_PLC_SOM
58	2	C76 C139	10UF		Taiyo Yuden	GMK316F106ZL-T		C1206	F28375S_PLC_SOM
59	1	C94	2200pf	CAP CER 2200PF (2.2nF) 10V 5% SL 0402	tdk	C1005SL1A222J		C0402	F28375S_PLC_SOM
60	2	C95 C96	4700pF	CAP CER 4700PF (4.7nF)10V 10% 0402	Taiyo Yuden	LMK105SD472KV-F		C0402	F28375S_PLC_SOM
61	1	C128	3n3F	Cap Ceramic SMT 0402				C0402	F28375S_PLC_SOM
62	2	C129 C130	10nF	Cap Ceramic SMT 0603	AVX	06035C103KAT2A		C0603	F28375S_PLC_SOM
63	2	C131 C136	10nF	Cap Ceramic SMT 0402				C0402	F28375S_PLC_SOM
64	4	C132 C133 C134 C135	0.1uf		MURATA	GRM155R61A104KA01D		C0402	F28375S_PLC_SOM
65	1	C140	4700pF	CAP CER 4700PF(4.7nF) 50V Y5V 0603	Murata	GRM188F51H472ZA01D		C0603	F28375S_PLC_SOM

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66	1	C141	3n9F	CAP CER 3900PF(3.9nF) 50V 10% X7R 0603	Kemet	C0603C392K5RACTU		C0603	F28375S_PLC_SOM
67	2	C143 C145	1nF	CAP CER 16V 10% X7R 0402				C0402	F28375S_PLC_SOM
68	1	C146	DNP	CAP CER 16V 10% X7R 0402				C0402	F28375S_PLC_SOM
69	1	C147	10UF	CAP CERAMIC 10UF 6.3V X5R 0603	Murata	GRM188R60J106ME47D		C0603	F28375S_PLC_SOM
70	1	C148	22UF	CAP CER 22UF 6.3V 20% X5R 0603				C0603	F28375S_PLC_SOM
71	2	C150 C154	10uf	CAP CER 10UF 10V 10% X5R 0805	AVX			C0805	F28375S_PLC_SOM
72	3	C151 C152 C153	10UF	Capacitor,10UF,6.3 V,20 %, X5R,	PANASONIC	ECJ-2FB0J106M		C0805	F28375S_PLC_SOM
73	2	C155 C156	2.2uf	CAP CER 2.2UF 10V 10% X5R 0805	AVX			C0805	F28375S_PLC_SOM
74	2	C157 C158	2.2uf	CAP CER 2.2UF 10V 10% X5R 0603	TDK			C0603	F28375S_PLC_SOM
75	2	C161 C162	2.2uf	CAP CER 2.2UF 16V 10% X7R 0805	Taiyo Yuden	EMK212B7225KG-T		C0805	F28375S_PLC_SOM
76	1	C166	2n2f	CAP CER 2200PF 50V X7R 10% 0603	TDK	C1608X7R1H222K		C0603	F28375S_PLC_SOM
77	1	C167	1500PF	Capacitor,1500PF,50 V,10 %,X7R,0603	AVX	06035C152KATA		C0603	F28375S_PLC_SOM
78	2	D1 D2	LED_SMT_RED_5MA	LED, RED, 3.0 VR, 0.2 IF,SURF. MOUNT	PANASONIC	LNJ208R8ARA		LED0603H35	F28375S_PLC_SOM
79	1	D3	LED_YELLOW	LED YELLOW CLEAR 0603 SMD	Lite-On Inc	LTST-C190EKT		LED0603H35	F28375S_PLC_SOM
80	1	D4	LED_RED_ORANGE	LED RED ORANGE CLEAR 0603 SMD	Lite-On Inc	LTST-C190EKT		LED0603H35	F28375S_PLC_SOM
81	1	J1	SBH31-NBPB-D17-SP-BK	CONN HDR 1.27MM 34POS GOLD SMD	Sullins Connector Solutions	SBH31-NBPB-D17-SP-BK		male	F28375S_PLC_SOM
82	1	J2	DSP JTAG Header	CONN. 2X7 HEADER, SMT, DSP JTAG, Pin 6 removed	SAMTEC	TSM-107-01-S-DV		SAMTSM-107-01-S-DV	F28375S_PLC_SOM
83	1	L1	LB 3218T1ROM		Taiyo Yuden	LB3218T1ROM		IND1207	F28375S_PLC_SOM
84	1	L45	68uH	INDUCTOR WOUND 68UH 190MA 1210	Taiyo Yuden	LBC3225T680KR		1210	F28375S_PLC_SOM
85	1	L46	68uH	Fixed Inductors 1812 68uH 5% 115 mA	Panasonic	ELJ-FB680JF		1812	F28375S_PLC_SOM
86	1	L47	1uH	INDUCTOR POWER 1.0UH 1620MA 1212	MURATA	LQH3NPN1RONJ0L		1212	F28375S_PLC_SOM
87	2	L48 L49	BKP2125HS600-T	Inductor Bead, 600Ohm, 0805, 100MHz	Taiyo Yuden	BKP2125HS600-T		IND0805	F28375S_PLC_SOM
88	2	L50 L51	BLM21PG221SN1D	Inductor Bead, 2200Ohm, 0805, 100MHz	Murata	BLM21PG221SN1D		IND0805	F28375S_PLC_SOM
89	1	L52	220uH	INDUCTOR 220UH 10% 1210	TDK Corporation	NLFV32T-221K-EF		1210	F28375S_PLC_SOM
90	1	L53	150uH	INDUCTOR 150UH 10% 1210	TDK Corporation	NLFV32T-151K-EF		1210	F28375S_PLC_SOM
91	2	MH1 MH2	MH_PL_213	MTG_HOLE,0.213 hole, 0.31 pad, plated	TI	280-00004		MH_213	F28375S_PLC_SOM
92	3	R2 R3 R97	0R	Resistors, 0R, 5% - SMD, 0402				R0402	F28375S_PLC_SOM
93	2	R4 R5	5K49	Resistors 5K49 5% - SMD, 0402				R0402	F28375S_PLC_SOM
94	4	R19 R20 R123 R124	680R	Resistors, 680R, 5% - SMD, 0603				R0603	F28375S_PLC_SOM
95	1	R22	2K2	Resistors 2K2 5% - SMD, 0402				R0402	F28375S_PLC_SOM
96	2	R39 R46	56K	Resistors 56K 5% - SMD, 0402				R0402	F28375S_PLC_SOM

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97	2	R45 R84	56R	Resistors 56R, 5% - SMD, 0402				R0402	F28375S_PLC_SOM
98	2	R60 R61	1K	Resistors,1K,5%, SMD,0402				R0402	F28375S_PLC_SOM
99	6	R71 R72 R73 R74 R77 R78	DNP	Resistors, DNP - SMD, 0402 (do not populate)				R0402	F28375S_PLC_SOM
100	1	R85	10K	Resistors 10K, 5% - SMD, 0603				R0603	F28375S_PLC_SOM
101	1	R89	DNP	Resistors DNP - SMD, 0603 (Do NOT populate)				R0603	F28375S_PLC_SOM
102	5	R94 R95 R104 R105 R120	10K	Resistors, 10K, 5% - SMD, 0402				R0402	F28375S_PLC_SOM
103	1	R96	330R		vishay	CRCW0402330RJNED		R0402	F28375S_PLC_SOM
104	2	R100 R121	200	RESISTOR,200, 0.1W, 5%, 0603	Panasonic	ERJ-3GEYJ201V		R0603	F28375S_PLC_SOM
105	1	R101	1K	RESISTOR,1K, 0.1W, 5%, 0603	Panasonic	ERJ-3GEYJ102V		R0603	F28375S_PLC_SOM
106	1	R106	2K2	Resistors,2K2,5%, SMD,0402				R0402	F28375S_PLC_SOM
107	1	R107	510k	RES 1/16W 5% 0402 SMD				R0402	F28375S_PLC_SOM
108	1	R108	120k	RES 1/10W 1% 0402 SMD				R0402	F28375S_PLC_SOM
109	1	R109	649k	RES 1/10W 1% 0402 SMD				R0402	F28375S_PLC_SOM
110	1	R110	422k	RES 1/10W 1% 0402 SMD				R0402	F28375S_PLC_SOM
111	1	R111	560k	RES 1/10W 1% 0402 SMD				R0402	F28375S_PLC_SOM
112	1	R112	64.9k	RES 64.9K OHM 1/10W 1% 0603 SMD				R0603	F28375S_PLC_SOM
113	1	R113	39.2k	RES 39.2K OHM 1/10W 1% 0603 SMD				R0603	F28375S_PLC_SOM
114	1	R114	178k	RES 178K OHM 1/10W 1% 0402 SMD				R0402	F28375S_PLC_SOM
115	4	R115 R116 R118 R119	100k	RES 100K OHM 1/16W .5% 0603 SMD	Susumu	RR0816P-104-D		R0603	F28375S_PLC_SOM
116	1	R122	10k	RES 10K OHM 1/10W 5% 0402 SMD				R0402	F28375S_PLC_SOM
117	13	TP2 TP6 TP8 TP9 TP10 TP11 TP12 TP13 TP14 TP15 TP16 TP17 TP18	TP_CLIP_5015	PC TEST POINT MINIATURE SMT	TI			TP_5015	F28375S_PLC_SOM
118	1	U15	DNP	IC EEPROM 1MBIT 1MHZ 8TSSOP	Atmel	AT24C1024B-TH-T		TSSOP8	F28375S_PLC_SOM
119	1	U17	AFE032	AFE032	TI	AFE032		RGZ	F28375S_PLC_SOM
120	2	U24 U25	B350A-13-F	DIODE SCHOTTKY 3A 50V SMA	Diodes Inc	B350A-13-F		DO-214AB	F28375S_PLC_SOM
121	1	U26	DNP	TRANSIL 1500W 6.8V BIDIR SMC	STMicroelectronics	SM15T6V8CA		DO-214AB	F28375S_PLC_SOM
122	1	U27	18V ZENER	DIODE ZENER 3W 18V SMB	On Semi	1SMB5931BT3		DO-214AA	F28375S_PLC_SOM
123	1	U32	TMS320F28375S_100pin	Soprano MCU	TI	TMS320F28375SPZPT		PZP-(S-PQFP-G100)	F28375S_PLC_SOM
124	2	U33 U34	TPS3897	IC SUPERVISOR MPU ADJ 6SON	TI	TPS3897-ADRYR		DRY	F28375S_PLC_SOM
125	1	U35	TPS62080	IC REG BUCK SYNC ADJ 1.2A 8WSON	TI	TPS62080DSGT		DSG	F28375S_PLC_SOM
126	1	X1	20Mhz OSC 20ppm		Abracon Corporation	ABM3B-20.000MHZ-10-1-U-T		4-SMD (0.197" L x 0.126" W) Axial 0.591" (15.00mm) Spacing	F28375S_PLC_SOM
127	1	C1	470nF	.47 UF/400VDC METAL POLY CAP Capacitor,1000PF,50 V,10%,X7R,0603	PANASONIC	ECQ-E4474KF			PLC_DOCK
128	1	C2	1000PF	Capacitor,0.33uF,16V,10%,0603,X7R	AVX	06035C102KAT*A		C0603	PLC_DOCK
129	1	C3	0.33UF	Capacitor,0.33uF,16V,10%,0603,X7R	Murata	GRM188R71C334KA01D		C0603	PLC_DOCK

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130	3	C4 C12 C14	4.7uf	CAP CER 4.7UF 6.3V X5R 0402	MURATA	GRM155R60J475ME87D		C0402	PLC_DOCK
131	11	C5 C6 C7 C8 C9 C10 C11 C13 C15 C16 C29	0.1UF	Capacitor,0.1UF, X7R, 16 V, 0402, 10%	KEMET	C0402C104K4RACTU		C0402	PLC_DOCK
132	2	C17 C18	27pf	CAP CERAMIC 27PF 50V NPO 0402	Kemet	C0402C270J5GACTU		C0402	PLC_DOCK
133	1	C19	220uF	CAP ALUM 220UF 35V 20% SMD	PANASONIC	EEE-1VA221UP		Radial	PLC_DOCK
134	2	C20 C21	0.1uF	CAP CER 0.1UF (100nF) 50V Y5V 0603	TDK	C1608Y5V1H104Z		C0603	PLC_DOCK
135	1	C25	2u2F	CAP CER 2.2UF 25V 10% X7R 1210	kemet	C1210C225K3RACTU		C1210	PLC_DOCK
136	1	C30	220uF	Tantalum Capacitors - Solid SMD 220uF 10v 20% Tol ESR = 1300	AVX	TLNT227M010R1300		T3528	PLC_DOCK
137	2	C23 C24	100uF	CAP TANT 100UF 20V 10% 2917	Vishay	293D107X9020D2TE3		C2917P	PLC_DOCK
138	1	C26	100uF	CAP ALUM 100UF 35V 20% SMD	PANASONIC	EEE-1VA101XP		Radial	PLC_DOCK
139	1	D1	200mA	DIODE STANDARD 200mA LL-34	NXP Semi	PMLL4148L,115		LL-34	PLC_DOCK
140	4	D2 D4 D6 D7	LED_RED	LEDs SMD 0805 - Red	Stanley	BR1112H-TR		LED0805	PLC_DOCK
141	1	D5	LED_GRN	LED SMD 0805 - Green	Stanley	PG1112H-TR		LED0805	PLC_DOCK
142	1	J1	SILH-3	3 pin 100mill standard header CONN. 2X7 HEADER, SMT, DSP				HDR_1x3_100MI LL_THRU_HOLE	PLC_DOCK
143	1	J2	DSP JTAG Header	JTAG, Pin 6 removed	SAMTEC	TSM-107-01-S-DV		hdr_14p	PLC_DOCK
144	1	J3	USB-B-mini-smt	CONN RECEPT MINI USB2.0 5POS	Hirose Electric Co Ltd	UX60-MB-5ST		female?	PLC_DOCK
145	1	J4	PWR	CON PWR JCK 2.0 X 6.5MM W/O SW	CUI	PJ-037A		thru-hole	PLC_DOCK
146	1	L1	15uH	INDUCTOR POWER SHIELD 15UH SMD	Coiltronics/Cooper	DR1040-150-R		DR1040	PLC_DOCK
147	1	L2	600nH	COIL POWER CHOKe 600nH 27A SMD	Panasonic - ECG	ETQ-P5LR60XFA		0.571" L x 0.492" W x 0.197" H	PLC_DOCK
148	2	L3 L4	HZ0805E601R-10	FERRITE 500MA 600 OHM 0805 SMD	Laird-Signal Integrity Products	HZ0805E601R-10		805	PLC_DOCK
149	2	L5 L6	BEAD	FERRITE CHIP 70 OHM 0402	MURATA	BLM15AX700SN1D		IND0402	PLC_DOCK
150	1	M1-1	PMP7190_Module	Conn header female 2 pos 0.100 mill, Header for PMP7190 custom module AC/DC				HDR_1x2	PLC_DOCK
151	1	M1-2	PMP7190_Module	Conn header female 2 pos 0.100 mill, Header for PMP7190 custom module AC/DC				HDR_1x2	PLC_DOCK
152	1	M1-3	PMP7190_Module	Conn header female 2 pos 0.100 mill, Header for PMP7190 custom module AC/DC				HDR_1x2	PLC_DOCK
153	1	M1-4	PMP7190_Module	Conn header female 2 pos 0.100 mill, Header for PMP7190 custom module AC/DC				HDR_1x2	PLC_DOCK
154	1	M2	SFH31-NPPB-D17-SP-BK	CONN HDR FMAL 34PS 1.27MM SMD AU	Sullins Connector Solutions	SFH31-NPPB-D17-SP-BK		Female	PLC_DOCK
155	1	M3,P1	EM Module	2x 20P SMT HDR	FCI	87409-110LF		Male	PLC_DOCK
156	1	M3,P2	EM Module	2x 20P SMT HDR	FCI	87409-110LF		Male	PLC_DOCK
157	4	MH1 MH2 MH3 MH4	MH_PL_141	MTG_HOLE,0.141 hole, 0.25 pad, plated	TI	280-00002		MH_141	PLC_DOCK

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
158	1	P1	HV Connector	TERM BLOCK 3POS SIDE ENT 5.08MM	TE Connectivity	282841-3		see datasheet	PLC_DOCK
159	1	R1	4R7	RESISTOR 4.7 OHM 1/8W 5% 0805	Panasonic	ERJ-6GEYJ4R7V		R0805	PLC_DOCK
160	1	R2	1M	RESISTOR,1M,0.125W,5%,0805	AVX	CR21-105J-*		R0805	PLC_DOCK
161	1	R3	270R	Resistors 270R, 0.125W, 5%, 0805	Rohm	MCR10EZPJ271		R0805	PLC_DOCK
162	3	R4 R5 R6	100.0K	RESISTOR,100.0K,0.125 W,1 %,0805	AVX	CR21-1003F-*		R0805	PLC_DOCK
163	1	R7	1.50K	RESISTOR,1.50K,0.125 W,1 %,0805	AVX	CR21-1501F-*		R0805	PLC_DOCK
164	1	R8	240k	Resistors 240K, 0.125W, 1%, 0805	Rohm	MCR10EZPF2403		R0805	PLC_DOCK
165	7	R9 R10 R12 R15 R19 R20	10k	RES 10K OHM 1/10W 5% 0402 SMD	Panasonic	ERJ-2GEJ103X		R0402	PLC_DOCK
166	1	R11	100K	RESISTOR,100K, 0.1W, 5%, 0603	Panasonic	ERJ-3GEYJ104V		R0603	PLC_DOCK
167	3	R13 R16 R27	1k	RES 1.00K OHM 1/10W 1% 0402 SMD	Panasonic	ERJ-2RKF1001X		R0402	PLC_DOCK
168	2	R14 R17	0	RES 0.0 OHM 1/10W 0402 SMD	Panasonic - ECG	ERJ-2GE0R00X		R0402	PLC_DOCK
169	2	R22 R23	0402_NP	NO POP				R0402	PLC_DOCK
170	1	R25	2.21k	RES 2.21K OHM 1/10W 1% 0402 SMD	Panasonic - ECG	ERJ-2RKF2211X		R0402	PLC_DOCK
171	1	R26	680	RES 680 OHM 1/16W 5% 0402 SMD	Rohm Semiconductor	MCR01MZPJ681		R0402	PLC_DOCK
172	1	R28	10.7k	RES 10.7K OHM 1/10W 1% 0402 SMD	panasonic	ERJ-2RKF1072X		R0402	PLC_DOCK
173	3	R31 R33 R34	82R	RES 82 OHM 0402				R0402	PLC_DOCK
174	1	R32	68R	RES 68 OHM 1/10W 5% 0402 SMD	panasonic	ERJ-2GEJ680X		R0402	PLC_DOCK
175	1	R35	1.87k	RES 1.87K OHM 1/10W 1% 0402 SMD	panasonic	ERJ-2RKF1871X		R0402	PLC_DOCK
176	1	R36	0R	RES 0.0 OHM 1/8W 0805 SMD	Yageo	RC0805JR-070RL		R0805	PLC_DOCK
177	1	SW1	3POS_DIPSW	SWITCH DIP TOP SLIDE 3POS SMD	C&K COMPONENTS	SDA03H1SBD		3PDIPSW	PLC_DOCK
178	1	SW2	2POS_DIPSW	SWITCH DIP TOP SLIDE 2POS SMD	C&K COMPONENTS	SDA02H1SBD		2PDIPSW	PLC_DOCK
179	1	SW3	SPDT	toggle switch SPDT	Mountain Switch	108-2AS1T1203-EVX		2 thru-hole	PLC_DOCK
180	1	T1	750510476	Transformer PLC	WURTH ELEKTRONIK	750510476		see datasheet	PLC_DOCK
181	1	TP1	TP_60	60 mil round test point, SMT	TI	TI-TP-60mil		TP_60	PLC_DOCK
182	1	U1	10V	TRANSIL 600W 10V BIDIR SMB	STMicroelectronics	SM6T10CA		DO-214AA, SMB	PLC_DOCK
183	1	U2	FOD817BSD	Optoisolator, 5000Vrms, 70V	Fairchild Opto	FOD817BSD		4-SMD	PLC_DOCK
184	1	U3	BC817	BJT, NPN, Ic=500mA, SOT-23-3	On Semi	BC817-40LT1G		SOT-23-3	PLC_DOCK
185	1	U4	5.6V	DIODE ZENER 500mW 5.6V LL-34	NXP Semi	BZV55-CSV6,115		LL-34	PLC_DOCK
186	1	U5	JTAG/UART	IC USB HS DUAL UART/FIFO 64- LQFP	FTDI	FT2232HL		64-LQFP	PLC_DOCK
187	1	U6	Quad NAND	IC GATE POS-NAND QD 2IN 14- TSSOP	TI	SN74HC03PWR		14-TSSOP	PLC_DOCK
188	1	U7	ESD-PROT	IC ESD-PROT ARRAY 2CH SOT-5	TI	TPD2E001DRLR		SOT-553	PLC_DOCK
189	1	U8	EEPROM	IC EEPROM 2KBIT 3MHZ 8SOIC	micro chip	93LC56C-I/SN		8-SOIC	PLC_DOCK
190	1	U9	LM2941	IC REG LDO ADJ 1A TO-263-5	National Semiconductor	LM2941SX/NOPB		TO-263-5	PLC_DOCK
191	1	U10	PTH08080W	MODULE PIP .9-5.5V 2.25A SMD	TI	PTH08080WAS		PTH_5	PLC_DOCK

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
192	1	X1	12MHz OSC	CRYSTAL 12.000 MHZ 20PF SMD	ECS	ECS-120-20-30B-TR		4-SMD	PLC_DOCK
193	2	C31 C32	0.1uf	CAP CER 0.1UF 25V 10% X7R 0805	Kemet	C0805C104K3RACTU		C0805	PLC_DOCK
194	1	U11	SN74LVC1G57	CONFIGURABLE MULTIPLE- FUNCTION GATE	TI	SN74LVC1G57DBVR		SOT-23-6 (DBV)	PLC_DOCK

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