

Bill of Materials

TI DESIGNS

TIDM-SOMPLC-INDUSTRIAL_CENELEC

Item Number	Quantity	Part Number	Part Type	Part Reference	Vendor	Vendor PN	Description	Value	PCB Footprint	Tolerance	Voltage	Distributor	Distributor Part Number	CrossRef
1	2	300-00017	CAP	C2 C40			Cap Ceramic SMT 0402	3.3nF	C0402	0	10V			
2	2	100-00003	CAP	C3 C43	AVX	0603YC104KAT*A	Capacitor,0.1uF,16 V,10 %,X7R,0603	0.1uF	C0603	10%	16V	Digikey	478-1239-2-ND	
3	1	300-00038	CAP	C4	PANASONIC	ECH-U1H332JX5	CAP .0033uF 50V PPS FILM 1206 5%	3.3nF	C1206	0	50V	digikey	PCF1334CT-ND	
4	2	300-00057	CAP	C5 C6			Cap Ceramic SMT 0402	DNP	C0402	0				
5	1	300-00013	CAP	C7			Cap Ceramic SMT 0402	10nF	C0402	0	10V			
6	2	300-00085	CAP	C8 C9	yageo	CC0805KRX7R9BB681	CAP 680pF 50V CERAMIC X7R 0805	680pF	C0805	0	50V	digikey	311-1126-1-ND	
7	5	300-00040	CAP	C10 C12 C21 C22 C23	MURATA	GRM188R71C103KA01D	CAP CER 10000pF 16V 10% X7R 0603	10nF	C0603	0	16V	digikey	490-1525-2-ND	
8	2	300-00036	CAP	C11 C13	Taiyo Yuden	UMK107B105KA-T	Cap Ceramic SMT 0603	1uF	C0603	0	50V	digikey	587-2400-1-ND	
9	2	300-00041	CAP	C14 C15	MURATA	GRM155F51E104ZA01D	CAP CER .1uF (100nF) 25V Y5V 0402	100nF	C0402	0	25V	digikey	490-3271-1-ND	
10	2	300-00043	CAP	C16 C17	MURATA	GRM188R71E103KA01D	CAP CER 10000pF (10nF) 25V 10% X7R 0603	10nF	C0603	0	25V	digikey	490-1520-1-ND	
11	2	300-00039	CAP	C18 C28	Taiyo Yuden	GMK316F106ZL-T	Cap Ceramic SMT 1206	10uF	C1206	0	35V	digikey	587-1352-1-ND	
12	1	300-00042	CAP	C19	TDK	C5750V5V1E476Z	CAP CER 47uF 25V Y5V 2220	47uF	C2220	0	25V	digikey	445-3486-2-ND	
13	1	300-00014	CAP	C20	Kemet Electronics Corporation	C0402C104K8PACTU	Cap Ceramic SMT 0402	100nF	C0402	0	10V	Digikey	399-3027-2-ND	
14	1	300-00008	CAP	C24	PANASONIC	ECI-2FB0J106M	Capacitor,10uF,6.3 V,20 %,X5R,	10uF	C0805	0.2	6.3V			
15	1	300-00037	CAP	C25	AVX	0603S5C103KAT2A	Cap Ceramic SMT 0603	10nF	C0603	0	50V	digikey	478-1227-1-ND	
16	1	300-00028	CAP	C26			Cap Ceramic SMT 0402	33nF	C0402	0				
17	1	300-00026	CAP	C27			Cap Ceramic SMT 0402	22nF	C0402	0				
18	2	300-00011	CAP	C29 C33	PANASONIC	ECI-1VB0J106M	CAP CERAMIC 10uF 6.3V X5R 0603	10uF	C0603	20%	10V	Digikey	rPCC2395CT-ND	
19	2	300-00012	CAP	C30 C34	Vishay	298D476X0010P2T	CAP TANT 47uF 10V 20% 0805	47uF	C0805P	0	10V	Digikey	718-1608-1-ND	
20	4	300-00044	CAP	C31 C32 C35 C36	MURATA	GRM155R61A104KA01D	CAP CER .1uF 10V 10% X5R 0402	0.1uF	C0402	0	10V	digikey	490-1318-1-ND	
21	1	300-00063	CAP	C37	TDK	C1005X5R0G475K	CAP CER 4.7uF 4.0V X5R 10% 0402	4.7uF	C0402	0	4V	digikey	445-5949-1-ND	
22	1	300-00062	CAP	C38	Johanson Dielectrics Inc	250R07S330JV4T	CAP CER 33pF 25V S 0402 UH1 Q	33pF	C0402	0	25V	digikey	712-1298-1-ND	
23	1	300-00064	CAP	C39	TDK	C1608X5R0J106M	CAP CER 10uF 6.3V X5R 20% 0603	10uF	C0603	0	6.3	digikey	445-4112-1-ND	
24	2	300-00056	CAP	C41 C42	MURATA	GRM1555C1H150JZ01D	CAP CER 15pF 50V 5% COG 0402	15pF	C0402	0	50V	digikey	490-1280-1-ND	
25	2	200-00010	FET_DIODE	D1 D2	PANASONIC	LNJ208R8ARA	LED, RED, 3.0 VR, 0.2 IF,SURF. MOUNT	LED_RED_5MA_SMT	LED0603H35					
26	1	320-00013	CONN	J1	Sullins Connector Solutions	SBH31-NBPB-D17-SP-BK	CONN HDR 1.27MM 34POS GOLD SMD	SBH31-NBPB-D17-SP-BK	male	0		digikey	S9108-ND	
27	1	120-00068	CONN	J2	SAMTEC	TSM-107-01-S-DV	CONN. 2X7 HEADER, SMT, DSP JTAG, Pin 6 removed	DSP JTAG Header	hdr_14p	0				
28	1	330-00009	MAGNETICS	L1	Panasonic - ECG	ELJ-EA331KF	INDUCTOR 330uH 10% 1210 SMD	330uH	IND1210	0		Digikey	PCD1432CT	
29	1	330-00010	MAGNETICS	L2	Taiyo Yuden	CB2518T471K	INDUCTOR POWER 470uH 1007	470uH	IND0805	0		Digikey	PCD1432CT	
30	1	330-00011	MAGNETICS	L3	Taiyo Yuden	LB3218T1R0M	INDUCTOR 1.0uH 1.075A 20% SMD	LB 3218T1R0M	IND0805	0		Digikey	587-2194-1	
31	1	330-00021	MAGNETICS	L4	TDK	GLCR2012T2R2M-HC	INDUCTOR 2.2uH 350MA 20% 0805	2u2H	IND0805	0	350ma	Digikey	445-3625-1-ND	
32	1	490-00002	Heat_Sink	P1			Heat slug for PLC Module V4	HS	custom	0				
33	1	310-00043	RES	R3			Resistors 2K 5% - SMD, 0402	2kΩ	R0402	0				
34	2	310-00044	RES	R4 R6			Resistors 57K6 5% - SMD, 0402	57.6kΩ	R0402	0				
35	2	310-00041	RES	R5 R34			Resistors 56R, 5% - SMD, 0402	56Ω	R0402	0.05				
36	3	310-00045	RES	R7 R8 R11			Resistors 2K2 5% - SMD, 0402	2.2kΩ	R0402	0				
37	4	310-00029	RES	R12 R27 R32 R33			Resistors, 0R, 5% - SMD, 0402	0Ω	R0402	0				
38	7	310-00049	RES	R13 R14 R15 R16 R17 R20 R22			Resistor 10K 5% - SMD,0402	10kΩ	R0402	0				
39	2	310-00102	RES	R18 R19	Panasonic - ECG	ERJ-2GEOR00X	RES 0.0 OHM 1/10W 0402 SMD	0Ω	R0402	0		digikey	P0.0JCT-ND	
40	1	310-00067	RES	R21			Resistor 33K 5% - SMD,0402	33kΩ	R0402	0				
41	1	310-00063	RES	R23	Vishay	CRCW0402330RJNED	RES 330 OHM 1/16W 5% 0402 SMD	330Ω	R0402	0		digikey	541-330/CT-ND	
42	2	310-00051	RES	R24 R25			Resistor 150R 5% - SMD,0402	150Ω	R0402	0				
43	2	140-00179	RES	R26 R28	Panasonic	ERJ-3GEYJ104V	RESISTOR,100K, 0.1W, 5%, 0603	100kΩ	R0603	0.05	0.1W	Digikey	P100KGTR-ND	
44	2	310-00030	RES	R29 R37			Resistors, DNP - SMD, 0402 (do not populate)	DNP	R0402	0				
45	1	310-00090	RES	R30	Panasonic	ERJ-2RKF3573X	RES 357K OHM 1/10W 1% 0402 SMD	357kΩ	R0402	0		digikey	P357KLCCT-ND	
46	1	310-00091	RES	R31	Panasonic	ERJ-2RKF1653X	RES 165K OHM 1/10W 1% 0402 SMD	165kΩ	R0402	0		digikey	P165KLCCT-ND	
47	1	310-00104	RES	R35	Panasonic	ERJ-2GEJ103X	RES 10K OHM 1/10W 5% 0402 SMD	10kΩ	R0402	0		digikey	P10KJTR-ND	
48	2	310-00011	RES	R38 R39			Resistors, 680R, 5% - SMD, 0603	680Ω	R0603	0.05				
49	1	206-00010	SWITCH	SW1	CTS	218-2LPST	SWITCH DIP HALF PITCH 2POS	2POS DIPSW	SMT218LP_2POS	0				CT2182LPST-ND
50	8	280-00005	MTG_HOLE_TP	TP1 TP2 TP3 TP4 TP5 TP6 TP7 TP8	TI	5015	PC TEST POINT MINIATURE SMT	TP_CLIP_5015	TP_5015	0				
51	1	402-00052	IC	U1	TI	TMX320F28035RSHS	Piccolo B 56 pin	F2803x-56pin	PQFP56-RSH	0				
52	1	402-00005	IC	U11	TI	SN74LVC2G07DBV	IC,Dual Buffer/Driver With Open-Drain Outputs, SOT23-6	SN74LVC2G07D-BVR	DBV6	0				296-13494-2
53	1	203-00037	POWER	U3	TI	TPS3828-330BV	Reset Supervisor, SOT23-5	TPS3828	DBV5	0		Digikey	296-2638-1	
54	1	400-00007	FET_DIODE	U4	On Semi	15MB5931BT3	DIODE ZENER 3W 18V SMB	18V	DO-214AA	0		Digikey	15MB5931BT3GOSCT-ND	
55	1	402-00028	IC	U5	TI	AFE031	AFE031 TI PLC Integrated AFE, 48 pin QFN RGZ	AFE031	RGZ	0				

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56	2	400-00003	FET_DIODE	U6 U7	Diodes Inc	B350A-13-F	DIODE SCHOTTKY 3A 50V SMA	B350A-13-F	DO-214AB	0		digkey	B350A-FDICT-ND	
57	2	400-00004	FET_DIODE	U8 U9	STMicroelectronics	STPS1L40A	DIODE SCHOTTKY PWR 40V 1A SMA	STPS1L40A	DO-214AC	0		digkey	497-3753-1-ND	
58	1	402-00037	IC	U10	TI	TPS62240	2.25 MHz 300 mA Step Down Converter	TPS62240	DCC	0				402-00036
59	1	405-00014	OSC_XTAL	X1	Abracon Corporation	ABM3B-20.000MHZ	Crystal 20.000MHz	20Mhz OSC 20ppm	4-SMD			Digikey	300-8214-1-ND	

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