

Bill of Materials

MCP19111 PMBus-Enabled POL Board

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Part Number: ARD00609
Revision: 1
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Drawn By: George Popescu



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Quantity	Designator	Description_	Manufacturer 1	Manufacturer Part Number 1	Supplier 1	Supplier Part Number 1
1	BT1	SWITCH TACT SPST 24V 50mA B3S-1100 SMD	Omron Electronics Inc-EI	B3S-1100	Digi-Key	SW971-ND
3	C1, C3, C4	CAP CER 4700pF 50V 10% X7R SMD 0603	KEMET	C0603C472K5RACTU	Digi-Key	399-1087-1-ND
4	C2, C5, C6, C14	CAP CER 0.1uF 25V 20% X7R SMD 0603	KEMET	C0603C104M3RACTU	Digi-Key	399-1283-2-ND
4	C7, C8, C13, C16	CAP CER 1uF 25V 10% X7R SMD 0805	AVX	08053C105K4Z2A	Digi-Key	478-6357-2-ND
4	C9, C10, C11, C12	CAP CER 10uF 25V 20% X5R SMD 1210	Panasonic	ECJ-4YB1E106M	Digi-Key	PCC2243CT-ND
1	C15	CAP CER 2.2uF 16V 10% X7R SMD 0805	Murata	GRM21BR71C225KA12L	Digi-Key	490-3906-1-ND
2	C17, C18	CAP CER 0.47uF 25V 10% X7R SMD 0603	Murata	GRM188R71E474KA12D	Digi-Key	490-3291-1-ND
1	C19	CAP ALU 1000uF 16V 20% RAD P5D10H13	Panasonic Electronic Cor	16SEPF1000M	Digi-Key	P16300-ND
4	C20, C21, C22, C23	CAP CER 100uF 10V 20% X5R SMD 1210	Taiyo Yuden	LMK325BJ107MM-T	Digi-Key	587-1965-1-ND
1	J1	CON USB MINI-B Female SMD R/A	Hirose	UX60-MB-5ST	Digi-Key	H2959CT-ND
2	J2, J3	CON HDR-2.54 Male 1x6 Tin 5.84MH TH VERT	Sullins	PEC06SAAN	Digi-Key	S1012E-06-ND
1	J4	CON TERMINAL 5.08mm 15A Female 1x2 TH R/A	On Shore Technology Inc	EDZ250/2	Digi-Key	ED1973-ND
1	L1	INDUCTOR 470nH 26A 20% SMD L12.1W11.4H9.5	Würth Electronics Inc	7443320047	Digi-Key	732-2135-1-ND
1	LD1	DIO LED RED 2V 30mA 0805	Lumex	SML-LXF0805SIC-TR	Mouser	696-SML-F0805SICTR
6	R3, R4, R5, R9, R16, R21	RES TKF 10k 5% 1/10W SMD 0603	Panasonic	ERJ-3GEYJ103V	Digi-Key	P10KGCT-ND
4	R6, R24, R25, R31	RES TKF 0R 1/10W SMD 0603	NIC Components	NRC06Z0TRF	NIC Componen	NRC06Z0TRF
2	R8, R13	RES TKF 510k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF5103V	Digi-Key	P510KHTR-ND
2	R10, R12	RES TKF 5.1k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF5101V	Digi-Key	P5.10KHCT-ND

6	R11, R18, R19, R23, R26, R27	RES TKF 4.7k 1% 1/10W SMD 0603	ROHM	MCR03EZPFX4701	Digi-Key	RHM4.70KHCT-ND
2	R15, R20	RES TKF 1k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1001V	Digi-Key	P1.00KHCT-ND
1	R17	RES TKF 47k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF4702V	Digi-Key	P47.0KHCT-ND
1	R22	RES TKF 820R 5% 1/10W SMD 0603	Panasonic	ERJ-3GEYJ821V	Digi-Key	P820GTR-ND
1	R28	RES TKF 10R 5% 1/10W SMD 0603	Panasonic	ERJ-3GEYJ100V	Digi-Key	P10GCT-ND
1	R29	RES TKF 51R 5% 1/10W SMD 0603	Panasonic	ERJ-3GEYJ510V	Digi-Key	P51GCT-ND
1	R30	RES TKF 220R 5% 1/10W SMD 0603	ROHM	MCR03EZPJ221	Digi-Key	RHM200GCT-ND
8	TP5, TP6, TP7, TP8, TP9, TP11, TP13, TP17	CON TP LOOP SILVER 3.4x5 SMD	Components Corporation	TP-107-2	Components C	TP-107-2
2	TP15, TP16	CON TERMINAL 30A Female 1x1 TH VERT	Keystone	8197	Digi-Key	8197K-ND

Microchip Parts listed below

1	Q1	MCHP ANALOG MOSFET N-CH 25V 100A 0.006R MCP87050-U/MF PDFN-8	Microchip	MCP87050T-U/MF	Microchip	MCP87050T-U/MF
1	Q2	MCHP ANALOG MOSFET N-CH 25V 100A 0.0022R MCP87018T-U/MF PDFN-8	Microchip	MCP87018T-U/MF	Microchip	MCP87018T-U/MF
1	U1	MCHP ANALOG OPAMP 1-Ch 730kHz MCP6061T-E/OT SOT-23-5	Microchip Technology	MCP6061T-E/OT	Digi-Key	MCP6061T-E/OTCT-ND
1	U2	MCHP ANALOG TEMPERATURE SENSOR -40C to +150C MCP9700AT-E/TT SOT-23-3	Microchip	MCP9700AT-E/TT	Microchip	MCP9700AT-E/TT
1	U3	MCHP INTERFACE USB I2C UART MCP2221-I/SL SOIC-14	Microchip Technology	MCP2221-I/SL	Digi-Key	MCP2221-I/SL-ND
1	U4	MCHP ANALOG PWM CONTROLLER 1.6Mhz MCP19111-E/MQ QFN-28	Microchip	MCP19111-E/MQ	Digi-Key	MCP19111-E/MQ-ND

Mechanical Parts to be added in the package

1	LABEL1	LABEL, ASSY W/REV LEVEL (SMALL MODULES) PER MTS-0002				
1	CBL1	MECH HW CABLE USB-A Male to Mini USB-B Male 3ft Black	Katerno	10UM-02103BK	Katerno	10UM-02103BK

PCB

1	PCB1	Printed Circuit Board		04-10337-1		
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Do Not Populate Parts listed below

4	R1, R2, R7, R14	RES TKF 10k 5% 1/10W SMD 0603	Panasonic	ERJ-3GEYJ103V	Digi-Key	P10KGCT-ND

Approved	Notes	