

# Bill of Materials For Variant [ADM00523 MCP3914] of Project [ADM00461-R4 MCP3913-14 Eval Board.PRJPCB]

Project: ADM00461-R4 MCP3913-14 Eval Board.PRJPCB

Source Data FC:\ALTIUM\_WORK\00461\_MCP3913-14 Eval Board\REV4\ADM00461-R4 MCP3913-14 Eval Board.PRJPCB

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Quantity	Designator	Description_	Manufacturer 1	Manufacturer Part Number 1	Supplier 1	Supplier Part Number 1
50	C1, C2, C3, C4, C5, C8, C9, C10, C11, C12, C14, C16, C18, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C64, C65, C66, C67	CAP CER 0.1uF 16V 10% X7R 0603	TDK	C1608X7R1C104K	Digi-Key	445-1317-1-ND
2	C6, C7	CAP CER 15pF 50V 5% NP0 SMD 0603	Yageo	CC0603JRNPO9BN150	Digi-Key	311-1060-1-ND
3	C13, C44, C45	CAP CER 10uF 10V 20% X7R SMD 1206	TDK	C3216X7R1A106M	Digi-Key	445-1602-1-ND
1	C15	CAP TANT 10uF 20V 10% 2.1 Ohm Size B	AVX	TAJB106K020RNJ	Digi-Key	478-1674-1-ND
1	C17	CAP CER 10uF 10V X7R 20% 1206	TDK	C3216X7R1A106M	Digi-Key	445-1602-1-ND
2	C25, C26	CAP CER 22pF 50V 5% C0G 0603	TDK	C1608C0G1H220J	Digi-Key	445-1273-1-ND
2	C62, C63	CAP CER 1uF 10V X7R 20% 0603	TDK	C1608X7R1A105M	Digi-Key	445-5139-1-ND
1	D1	DIODE STD REC 1A 600V SMA	ON Semiconductor	MRA4005T3G	Digi-Key	MRA4005T1GOSCT-ND
9	J1, J3, J4, J7, J21, J23, J25, J27, J29	CONN HDR Male .100 2x3POS VERT	FCI	67996-206HLF	Digi-Key	609-3210-ND
8	J2, J5, J20, J22, J24, J26, J28, J30	CONN TERM BLK PLUG 6A 3.5MM 3POS (Mates with 8724 HDR-24pin)	Keystone Electronics	8723	Digi-Key	8723K-ND
4	J6, J12, J13, J19	CONN HDR Male .100 1x2POS VERT	FCI	77311-118-02LF	Digi-Key	609-4434-ND
1	J8	CONN HDR Male .100 2x8 Pos VERT	FCI	68602-116HLF	Digi-Key	609-3364-ND
1	J9	CONN HDR Male .100 2x2 Pos VERT	FCI	68602-204HLF	Digi-Key	609-3369-ND
1	J10	CONN POWER JACK MALE 2.5MM CLSD	CUI Inc	PJ-002B	Digi-Key	CP-002B-ND
1	J11	CON HDR-2.54 Male 1x6 TH R/A	FCI	68016-106HLF	Digi-Key	609-3313-ND
1	J14	CONN D-SUB RCPT R/A 9POS 15GOLD	TE Connectivity	1734354-2	Digi-Key	A35108-ND
1	J15	CONN RECEPT MINI SMD R/A 5POS	Hirose Electric Co Ltd	UX60-MB-5ST	Digi-Key	H2959CT-ND

1	J16	CONN HDR Male .100 1x3POS VERT	FCI	68000-103HLF	Digi-Key	609-3461-ND
1	J17	Mini Edge Card Socket 1mm Pitch Vertical	Samtec	MEC1-160-02-L-D-A	Samtec	MEC1-160-02-L-D-A
1	L1	FERRITE 300MA 500 mOhm 1806 SMD	Laird	LI1806C151R-10	Digi-Key	240-2418-1-ND
1	LCD1	LCD COG CHAR 2X16 TRANSFL	Multisight Display CO. LT	NHD-C0216CIZ-FSW-FB	Digi-Key	NHD-C0216CIZ-FSW-FBW-3V3-ND
2	LD1, LD2	LED SMARTLED GREEN 570nm 0603	OSRAM	LG L29K-G2J1-24-Z	Digi-Key	475-2709-1-ND
1	LD3	LED SMARTLED RED 630nm 0603	OSRAM Opto Semicondu	LS L29K-G1J2-1-0-2-R18	Digi-Key	475-2506-1-ND
2	LD4, LD5	LED 5mm RED 640nm 20mcd 2mA	Kingbright Corp	WP7113LSRD	Digi-Key	754-1267-ND
1	LD6	LED 2X1.2mm RD/GN WTR CLR SMD	Kingbright Corp	APHBM2012SURKCGKC	Digi-Key	754-1093-1-ND
1	Q1	MOSFET P 12V 850mA 290mW SC-70-3	Vishay/Siliconix	SI1307EDL-T1-GE3	Digi-Key	SI1307EDL-T1-GE3CT-ND
32	R3, R4, R11, R13, R15, R16, R18, R19, R21, R22, R65, R67, R68, R69, R71, R73, R74, R75, R77, R79, R80, R81, R83, R85, R86, R87, R89, R91, R92, R93, R95, R97	RES TKF 1k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1001V	Digi-Key	P1.00KHTR-ND
1	R5	RES 100 Ohm 1/10W 5% 0603 SMD	Panasonic - ECG	ERJ-3GEYJ101V	Digi-Key	P100GCT-ND
9	R6, R7, R8, R9, R10, R12, R14, R17, R54	RES 10 Ohm 1/10W 5% 0603 SMD	Panasonic - ECG	ERJ-3GEYJ100V	Digi-Key	P10GCT-ND
2	R20, R42	RES 1M Ohm 1/10W 1% 0603 SMD	Panasonic - ECG	ERJ-3EKF1004V	Digi-Key	P1.00MHCT-ND
20	R25, R26, R29, R30, R35, R37, R45, R46, R47, R49, R50, R51, R52, R55, R56, R57, R59, R60, R63, R98	RES 1k Ohm 1/10W 5% 0603 SMD	Panasonic - ECG	ERJ-3GEYJ102V	Digi-Key	P1.0KGCT-ND
2	R27, R32	RES 0 Ohm 1/10W 0603 SMD	Panasonic - ECG	ERJ-3GEY0R00V	Digi-Key	P0.0GCT-ND
2	R28, R62	RES 10k Ohm 1/10W 5% 0603 SMD	Panasonic - ECG	ERJ-3GEYJ103V	Digi-Key	P10KGCT-ND
6	R33, R36, R44, R48, R53, R58	RES 4.7k Ohm 1/10W 5% 0603 SMD	Panasonic - ECG	ERJ-3GEYJ472V	Digi-Key	P4.7KGCT-ND
2	R38, R39	RES 2.2k Ohm 1/10W 5% 0603 SMD	Panasonic - ECG	ERJ-3GEYJ222V	Digi-Key	P2.2KGCT-ND
4	SW1, SW2, SW3, SW4	SWITCH TACT 6MM 160GF H=4.3MM	Omron Electronics Inc-EM	B3S-1000P	Digi-Key	SW836CT-ND
1	U4	IC REG LDO 800MA 5V SOT-223	National Semiconductor	LM1117MPX-5.0/NOPB	Digi-Key	LM1117MPX-5.0CT-ND
2	U6, U7	Photocoupler TRANS OUT 4-MINIPAK	Avago Technologies	HCPL-181-00CE	Digi-Key	516-1788-1-ND
1	U8	IC LINE DRVR/RCVR RS232 20-TSSOP	Texas Instruments	SN75C3223PWR	Digi-Key	296-13501-1-ND
1	U10	Four 25 X 1 Header 1.27mm pitch ( 100 pin socket)	SAMTEC	MTMS-125-01-G-S-230	Arrow	43124853
1	U11	IC VOLT-LEVEL TRANSLATOR US-8	Texas Instruments	TXS0102DCUR	Digi-Key	296-21931-1-ND
1	X1	CRYSTAL 10 MHz 18pF HC49-SMD-B	Abracon Corporation	ABLS-10.000MHZ-B4-T	Digi-Key	535-10215-1-ND
1	X2	CRYSTAL 7.3728 MHz 18pF HC49-SMD-B	Abracon Corporation	ABLS-7.3728MHZ-B4-T	Digi-Key	535-10211-1-ND
1	X3	RESONATOR 12MHz 0.1% SMD CSTCE-G	Murata	CSTCE12M0G15L99-R0	Mouser	81-CSTCE12M0G15L99R0

#### Microchip Parts listed below

1	U2	IC LDO REG 500MA 3.3V SOT-223-3	Microchip	MCP1825S-3302E/DB	Digi-Key	MCP1825S-3302E/DB-ND
1	U3	IC REG LDO 150mA 3.3V SOT-223-3	Microchip	MCP1754ST-3302E/DB	Digi-Key	MCP1754ST-3302E/DB-ND
1	U5	IC ADC 16 Ch Delta Sigma MCP3914 QFN-40	Microchip	MCP3914		
1	U9	IC USB TO UART SSOP-20	Microchip	MCP2200-I/SS	Digi-Key	MCP2200-I/SS-ND

4	U12, U13, U14, U15	IC SRAM SPI 1024K 2.5V TSSOP-8	Microchip	23LC1024-I/ST	Digi-Key	23LC1024-I/ST-ND

**Mechanical Parts to be added in the package**

5	PAD1	MECH HW RUBBER PAD Bumpon Hemisphere 0.44" x 0.20" Black	3M	SJ-5003 (BLACK)	Digi-Key	SJ5003-0-ND
2	Shunts	CONN SHUNT DUAL BEAM 15AU PCB	TE Connectivity	390088-2	Digi-Key	390088-2-ND

**Do Not Populate Parts listed below**

0	C19, C20, C21, C22, C23, C24	CAP CER 0.1uF 16V 10% X7R 0603	TDK	C1608X7R1C104K	Digi-Key	445-1317-1-ND
0	R1, R2, R23, R24, R64, R66, R70, R72, R76, R78, R82, R84, R88, R90, R94, R96	RES TKF 1k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1001V	Digi-Key	P1.00KHTR-ND
0	R31, R34	RES 10 Ohm 1/10W 5% 0603 SMD	Panasonic - ECG	ERJ-3GEYJ100V	Digi-Key	P10GCT-ND
0	R40, R41	RES 1k Ohm 1/10W 5% 0603 SMD	Panasonic - ECG	ERJ-3GEYJ102V	Digi-Key	P1.0KGCT-ND
0	R43	RES 1M Ohm 1/10W 1% 0603 SMD	Panasonic - ECG	ERJ-3EKF1004V	Digi-Key	P1.00MHCT-ND
0	U1	PIC24FJxxxGA110	Microchip	PIC24FJ256GA110		

Approved	Notes