



Microchip Technology Incorporated
2355 W. Chandler Blvd.
Chandler, AZ 85224-6199

Product Tree

ASSEMBLY NUMBER: 114-00310 REV: 4 LAST ECO: None Part No: ADM00310

ASSEMBLY NAME: MCP3903 Eval Board for 16-bit MCU

Part Number	Rev	Type	Description
111-00310	4	B	CM ASSY, MCP3903 Eval Board for 16-bit MCU
102-00310	4	B	PCB ASSY, MCP3903 Eval Board for 16-bit MCU
102-00310-D	3	D	PCB ASSY DWG, MCP3903 Eval Board for 16-bit MCU
103-00310	3	D	SCHEMATIC, MCP3903 Eval Board for 16-bit MCU
104-00310-D	3	D	PCB FABRICATION DWG, MCP3903 Eval Board for 16-bit MCU
105-00310	3	D	GERBER FILES, MCP3903 Eval Board for 16-bit MCU
113-00310	1	D	TEST PROCEDURE, MCP3903 Eval Board for 16-bit MCU
108-00004	2	LBL	LABEL, AIPD ASSEMBLY AND MANUFACTURING CODE NUMBERS, VERY SMALL
108-00001	3	LBL	LABEL, AIPD PRODUCT LABEL WITH BARCODE, SMALL (Refer to SPI 47209)
108-00006	2	LBL	AIPD Evaluation Board Kit "Inspection" Label

KEY
D: Drawing
B: BOM
LBL: Label



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KEY	
CR: Cross	D: Drawing
CS: Consign	B: BOM
PL: Pack List	P: PART
	LBL: Label
DOC: DOCUMENT	

Bill of Materials

ASSEMBLY NUMBER: 111-00310 REV: 4 Part No: ADM00310
 ASSEMBLY NAME: MCP3903 Eval Board for 16-bit MCU

Qty	Part Number	Rev	Description	Manufacturer	Vendor/ Part No	C C P			Type	
						R	S	L		
1	1	DS51278	-	DOC, DEVELOPMENT SYSTEMS SLIP CASE (MPLAB CERTIFIED)	-	-	N	Y	N	P
2	1	N/A	1	DOC, 'IMPORTANT INFORMATION For' MCP3903 Eval Board for 16-bit MCU 5.0 x 7.0 paper	-	-	N	Y	Y	DOC
3	1	108-00006	2	AIPD Evaluation Board Kit "Inspection" Label	-	-	N	Y	N	LBL
4	1	N/A	-	ANTI-STATIC BAG SHIELD METAL-OUT 5X8 NOTE: Place Board Assembly (102-00310) Inside Anti-Static Bag	Desco	13035	Y	N	N	P
5	1	02-01863-02	*	(MA330011) * Use Rev 4 or Later dsPIC33 GP 100P to 100P QFP Plug in Module	Microchip	Microchip	N	Y	N	P
6	1	02-01863-01	*	(MA240011) * Use Rev 3 or Later PIC24F 100P to 100P QFP Plug in Module	Microchip	Microchip	N	Y	N	P
7	1	Mini-USB Cable	-	USB A Male to Mini USB B 5 pin Cable - 3ft http://www.store.yahoo.com/ktusasys/usbtomib5pin.html	http://www.store.ya hoo.com/ktusasys/ usbtomib5pin.html	KT143-3ft	Y	N	N	P
8	1	AC162039	-	9.0 Volt, HES10 Series, universal Desktop Power Supply Adaptor	http://www.hitron- e.com/	HES10-09007-0-7	Y	N	N	P
9	1	YP-12	-	Power Cable	http://www.hitron- e.com/	YP-12	Y	N	N	P



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ASSEMBLY NUMBER: 102-00310 REV: 4 Part No: ADM00310
 ASSEMBLY NAME: MCP3903 Eval Board for 16-bit MCU

Qty	Reference	Description	Mfgr.	Part Number	Distributor	Vendor/Part Number	R S	H Rev	C R	C S	P L	P Type
1	1	-	-	102-00310-D	-	-		1	N	N	N	D
2	1	-	-	103-00310	-	-		1	N	N	N	D
3	1	-	-	104-00310-D	-	-		1	N	N	N	D
4	1	-	-	105-00310	-	-		1	N	N	N	D
5	1	-	-	113-00310	-	-		1	N	N	N	D
6	1	-	-	108-00004	-	-		2	N	N	N	LBL
7	1	PCB	-	104-00310	-	-		1	Y	N	N	P
8	6	C31,C32 C37,C38 C41,C42	Murata Electronics North America	GRM1885C1H180JA01D	Digi-Key	490-1409-1-ND	Y	1	Y	N	N	P
9	30	C11<>C22 C24<>C30 C33,C34 C35,C36 C39,C40 C43,C47 C48,C49 C50	Murata Electronics	GRM188R71E104KA01D	Digi-Key	490-1524-1-ND	Y	1	Y	N	N	P
10	2	C2,C6	Murata Electronics	GRM21BR61E475KA12L	Digi-Key	490-3335-1-ND	Y	1	Y	N	N	P
11	2	C1,C4	Murata Electronics	GRM21BR61C106KE15L	Digi-Key	490-3886-1-ND	Y	1	Y	N	N	P
12	5	C3,C5,C44 C45,C46	Murata Electronics	GRM21BR71E104KA01L	Digi-Key	490-1673-1-ND	Y	1	Y	N	N	P
13	4	C7,C8,C9 C10	Murata Electronics	GRM31C5C1H683JA01L	Digi-Key	490-3360-1-ND	Y	1	Y	N	N	P
14	1	C23	Kemet	T491A476M006AT	Digi-Key	399-3700-1-ND	Y	1	Y	N	N	P
15	1	LCD2	TianMa	TM162JCAWG1	TianMa	TM162JCAWG1	Y	1	Y	N	N	P



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Qty	Reference	Description	Mfgr.	Part Number	Distributor	Vendor/Part Number	R o H S	Rev	C R	C S	P L	P Type
16	3	R15,R22,R26 R14,R20 R24,R31 R32,R33	Rohm	MCR03EZPJ000	Digi-Key	RHM0.0GCT-ND	Y	1	Y	N	N	P
17	8	R36,R37	Rohm	MCR03EZPFX1001	Digi-Key	RHM1.00KHCT-ND	Y	1	Y	N	N	P
18	3	R34,R40 R51	Rohm	MCR03EZPFX1004	Digi-Key	RHM1.00MHCT-ND	Y	1	Y	N	N	P
19	2	R27,R28	Rohm	MCR03EZPFX2201	Digi-Key	RHM2.20KHCT-ND	Y	1	Y	N	N	P
20	4	R13,R19 R23,R30	Rohm	MCR03EZPFX4701	Digi-Key	RHM4.70KHCT-ND	Y	1	Y	N	N	P
21	2	R21 R73	Rohm	MCR03EZPFX1002	Digi-Key	RHM10.0KHCT-ND	Y	1	Y	N	N	.
22	28	R38,R39,R41 R42,R43,R45 R46,R47,R48 R49,R50 R53,R54,R55 R56,R58 R63,R64 R65,R66,R67 R68,R69,R77	Rohm	MCR03EZPFX1000	Digi-Key	RHM100HCT-ND	Y	1	Y	N	N	P
23	7	R44,R70,R71 R72,R74,R75 R76	Rohm	MCR03EZPFX1003	Digi-Key	RHM100KHCT-ND	Y	1	Y	N	N	P
24	4	R5,R7,R11 R12	Susumu Co Ltd	RGH2012-2E-P-102-B	Digi-Key	RGH20P1.0KBCT-ND	Y	1	Y	N	N	P
25	2	R59,R60	Rohm	MCR10EZH10R0	Digi-Key	RHM10.0CCT-ND	Y	1	Y	N	N	P
26	1	X2	Abracon Corporation	ABLS-3.579545MHZ-B2-T	Digi-Key	535-9081-1-ND	Y	1	Y	N	N	P



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27	1 X3	CRYSTAL 7.3728MHZ 18PF FUND SMD	Abracon Corporation	ABLS-7.3728MHZ-B2-T	Digi-Key	535-9088-2-ND	Y	1	Y	N	N	P
28	1 U1	IC REG LDO 800MA 5.0V SOT-223	National Semiconductor	LM1117MP-5.0/NOPB	Digi-Key	LM1117MP-5.0CT-ND	Y	1	Y	N	N	P
29	1 U2	IC PIC USB MCU FLASH 48KX16 80TQFP	Microchip	PIC18F86J55-I/PT	Microchip	PIC18F86J55-I/PT	Y	1	Y	N	N	P
30	1 U3	IC REG LDO 800MA 3.3V SOT-223	National Semiconductor	LM1117MP-3.3/NOPB	Digi-Key	LM1117MP-3.3CT-ND	Y	1	Y	N	N	P
31	1 U4	IC ENERGY METER 24SSOP	Microchip	MCP3901AO-I/SS	Microchip	MCP3901AO-I/SS	Y	1	Y	N	N	P
32	1 U5	IC SRAM 4MB ASYNC 44-TSOPII	ISSI Integrated	IS61LV5128AL-10TLI	Digi-Key	706-1038-ND	Y	1	Y	N	N	P
33	1 U6	IC DRVR/RCVR MLTCH RS232 20TSSOP	Texas Instruments	SN75C3223PW	Digi-Key	SN75C3223PW-ND	Y	1	Y	N	N	P
34	1 U8	2.7V Voltage Supervisor SOT-23-3	Microchip	MCP130T-270I/TT	Microchip	MCP130T-270I/TT	Y	1	Y	N	N	P
35	1 P3	CONN TERM BLK PLUG 6A 3.5MM 2POS	Keystone Electronics	8722	Digi-Key	8722K-ND	Y	1	Y	N	N	P
36	1 P3	TERM BLK PIN HEADER 24Pin Pos One 24 Pin Header is enough for 3 BoARDS	Keystone Electronics	8724	Digi-Key	8724K-ND	Y	1	Y	N	N	P
37	1 J1	CONN POWERJACK MINI .08" R/A T/H	Switchcraft Inc.	RAPC722X	Digi-Key	SC1313-ND	Y	1	Y	N	N	P
38	1 J2	Mini USB Type B Surface Mount	SAMTEC	MUSB-05-S-B-SM-A	SAMTEC	MUSB-05-S-B-SM-A	Y	1	Y	N	N	P
39	1 J3	CONN D-SUB RCPT R/A 9POS 15GOLD	Tyco Electronic	1734354-2	Digi-Key	A35108-ND	Y	1	Y	N	N	P
40	1 P1, P2	CONN TERM BLK PLUG 6A 3.5MM 3POS	Keystone Electronics	8723	Digi-Key	8723K-ND	Y	1	Y	N	N	P
41	3 JP1,JP2 JP3	3 X 2 Header 2.54mm on center 6 mm/2.5mm	SAMTEC	TSW-103-07-G-D	SAMTEC	TSW-103-07-G-D	Y	1	Y	N	N	P
42	1 JP5,P8,JP6	11 X 2 Header 2.54mm on center 6 mm/2.5mm	SAMTEC	TSW-111-07-G-D	SAMTEC	TSW-111-07-G-D	Y	1	Y	N	N	P
43	1 JP4	4 X 2 Header 2.54mm on center 6 mm/2.5mm	SAMTEC	TSW-104-07-G-D	SAMTEC	TSW-104-07-G-D	Y	1	Y	N	N	P
44	1 P5	10 X 2 Header 2.54mm on center 6 mm/2.5mm	SAMTEC	TSW-110-07-G-D	SAMTEC	TSW-110-07-G-D	Y	1	Y	N	N	P
45	4 MOD1	25 X 1 Header 1.27mm on center	SAMTEC	MTMS-125-01-G-S-230	SAMTEC	MTMS-125-01-G-S-230	Y	1	Y	N	N	P



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PACK LIST

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111-00310 CM ASSY, MCP3903 Eval Board for 16-bit MCU				Rev: 4	Check Off	
Qty	Part Number	Description				
1	1	102-00310	PCB ASSY, MCP3903 Eval Board for 16-bit MCU			
2	1	-	DOC, 'IMPORTANT INFORMATION' For MCP3903 Eval Board for 16-bit MCU			
3	1	02-01863-02 *	(MA330011) * Use Rev 4 or Later dsPIC33 GP 100P to 100P QFP Plug in Module			
4	1	02-01863-01 *	(MA240011) * Use Rev 3 or Later PIC24F 100P to 100P QFP Plug in Module			
5	1	KT143-3ft	USB A Male to Mini USB B 5 pin Cable - 3ft http://www.store.yahoo.com/ktusasys/usbtomib5pin.html			
6	1	AC162039	9.0 Volt, HES10 Series, universal Desktop Power Supply Adaptor			
7	1	YP-12	Power Cable			