



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

## Product Tree

ASSEMBLY NUMBER: 114-00250      REV: 1      LAST ECO: None      Part No: MCP3421DM-WS

ASSEMBLY NAME:      MCP3421 Weight Scale Demo Board

Part Number	Rev	Type	Description
111-00250	1	B	CM ASSY, MCP3421 Weight Scale Demo Board
102-00250	1	B	PCB ASSY, MCP3421 Weight Scale Demo Board
102-00250-D	1	D	PCB ASSY DWG, MCP3421 Weight Scale Demo Board
103-00250	1	D	SCHEMATIC, MCP3421 Weight Scale Demo Board
104-00250-D	1	D	PCB FABRICATION DWG, MCP3421 Weight Scale Demo Board
105-00250	1	D	GERBER FILES, MCP3421 Weight Scale Demo Board
113-00250	1	D	TEST PROCEDURE, MCP3421 Weight Scale Demo Board
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	Drawing
CS: Consign	BOM
PL: Pack List	Part
RoHS: Lead Free	: Label

**Bill of Materials**

ASSEMBLY NUMBER: 102-00250 REV: 1 Part No: MCP3421DM-WS  
 ASSEMBLY NAME: MCP3421 Weight Scale Demo Board

Qty	Reference	Description	Mfgr.	Part Number	Distributor	Vendor/Part Number	R o H S	Rev	C C	PL	Type	
1	1	-	-	102-00250-D	-	-	-	1	N	N	N	D
2	1	-	-	103-00250	-	-	-	1	N	N	N	D
3	1	-	-	104-00250-D	-	-	-	1	N	N	N	D
4	1	-	-	105-00250	-	-	-	1	N	N	N	D
5	1	-	-	113-00250	-	-	-	1	N	N	N	D
6	1	-	-	108-00004	-	-	-	2	N	N	N	LBL
7	1	PCB	-	104-00250	-	-	-	1	Y	N	N	P
8	6	C4, C7, C9, C11, C12, C13	Johanson Dielectrics Inc	6R3X14W104MV4T	Digi-Key	709-1009-1-ND	Y	1	Y	N	N	P
9	1	C6	Panasonic - ECG	ECJ-1VB0J334K	Digi-Key	PCC1909CT-ND	Y	1	Y	N	N	P
10	3	C18, C19, C20	Murata Electronics North America	GRM188R60J105KA01D	Digi-Key	490-1550-1-ND	Y	1	Y	N	N	P
11	2	C10, C17	Murata Electronics North America	GRM188R71H103KA01D	Digi-Key	490-1512-1-ND	Y	1	Y	N	N	P
12	2	C8, C14	Murata Electronics North America	GRM188R60J106ME47D	Digi-Key	490-3896-1-ND	Y	1	Y	N	N	P
13	2	C15, C16	Murata Electronics North America	GRM1885C1H180JA01D	Digi-Key	490-1409-1-ND	Y	1	Y	N	N	P
14	2	C69, C70	Kemet	B45196H1476K209	Digi-Key	495-2189-1-ND	Y	1	Y	N	N	P
15	3	R38, R36, R39	Panasonic - ECG	ERJ-3EKF1001V	Digi-Key	P1.00KHCT-ND	Y	1	Y	N	N	P
16	8	R19, R32, R33, R34, R13, R14, R15, R27	Yageo	RC0603FR-071K5L	Digi-Key	311-1.50KHRCT-ND	Y	1	Y	N	N	P
17	2	R29, R30	Panasonic - ECG	ERJ-3EKF2201V	Digi-Key	P2.20KHCT-ND	Y	1	Y	N	N	P
18	1	R25	Panasonic - ECG	ERJ-3EKF4701V	Digi-Key	P4.70KHCT-ND	Y	1	Y	N	N	P
19	2	R17, R18	Panasonic - ECG	ERJ-3EKF1002V	Digi-Key	P10.0KHCT-ND	Y	1	Y	N	N	P



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**Bill of Materials**

ASSEMBLY NUMBER: 102-00250 REV: 1 Part No: MCP3421DM-WS  
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Qty	Reference	Description	Mfgr.	Part Number	Distributor	Vendor/Part Number	R o H S	Rev	C C	PL	Type		
20	2	R21, R22	RES 24.9 OHM 1/10W 1% 0603 SMD	Panasonic - ECG	ERJ-3EKF24R9V	Digi-Key	P24.9HCT-ND	Y	1	Y	N	N	P
21	2	R26, R28	RES 47.0K OHM 1/10W 1% 0603 SMD	Panasonic - ECG	ERJ-3EKF4702V	Digi-Key	P47.0KHCT-ND	Y	1	Y	N	N	P
22	3	R31, R35, R37	RES 220 OHM 1/10W 1% 0603 SMD	Panasonic - ECG	ERJ-3EKF2200V	Digi-Key	P220HCT-ND	Y	1	Y	N	N	P
23	1	R20	RES 332 OHM 1/10W 1% 0603 SMD	Panasonic - ECG	ERJ-3EKF3320V	Digi-Key	P332HCT-ND	Y	1	Y	N	N	P
24	1	R24	RES 523 OHM 1/10W 1% 0603 SMD	Panasonic - ECG	ERJ-3EKF5230V	Digi-Key	P523HCT-ND	Y	1	Y	N	N	P
25	1	D5	DIODE SS HI COND100V 200MA DO-35	Fairchild Semiconductor	1N914BTR	Digi-Key	1N914BCT-ND	Y	1	Y	N	N	P
26	4	D6, D7, D8, D9, D14, D11, D12, D13	LED GREEN CLEAR THIN 0805 SMD	Lite-On Inc	LTST-C171GKT	Digi-Key	160-1423-1-ND	Y	1	Y	N	N	P
27	1	J1	CONN POWERJACK MINI .08" R/A T/H	Switchcraft Inc.	RAPC722X	Digi-Key	SC1313-ND	Y	1	Y	N	N	P
28	1	P2	6way pins MCU programming	Tyco Electronics/Amp	3-644456-6	Digi-Key	A31116-ND	Y	1	Y	N	N	P
29	1	L1	INDUCTOR 10UH 450MA 0806 SMD	Taiyo Yuden	BRC2016T100K	Digi-Key	587-2177-1-ND	Y	1	Y	N	N	P
30	2	L5, L6	INDUCTOR 10UH 450MA 1210	Murata Electronics North America	LQH32CN100K53L	Digi-Key	490-4059-1-ND	Y	1	Y	N	N	P
31	2	J4, J5	CONN HEADER VERT 2POS .100 TIN	Tyco Electronics/Amp	3-644695-3	Digi-Key	A30917-ND	Y	1	Y	N	N	P
32	1	USB1	CONN RECEPT MINI USB2.0 5POS	Hirose Electric Co Ltd	UX60-MB-5ST	Digi-Key	H2959CT-ND	Y	1	Y	N	N	P
33	1	LCD1	16X2 LCD Character Display	Fema	CG1626-SGR1	Fema	CG1626-SGR1	Y	1	Y	N	N	P
34	1	LC2	Load cell AMA-2kg	Kuanyi	AMA-2			Y	1	Y	N	N	P
35	1	U5	MCP6V02 SOIC8 Linear High Precision Op Amps-Auto Zero	Microchip Technology Inc.	MCP6V02-E/SN	Microchip Technology Inc.	MCP6V02-E/SN	Y	1	N	Y	N	P
36	1	U4	MCP1702 SOT23A 5V CMOS low dropout positive voltage regulator	Microchip Technology Inc.	MCP1701T-5002I/CB	Microchip Technology Inc.	MCP1701T-5002I/CB	Y	1	N	Y	N	P
37	1	U1	MCP3421 SOT-23 .6L A0	Microchip Technology Inc.	MCP3421A0T-E/CH	Microchip Technology Inc.	MCP3421A0T-E/CH	Y	1	N	Y	N	P
38	1	U2	PIC18F4550 TQFP44	Microchip Technology Inc.	PIC18F4550-I/PT	Microchip Technology Inc.	PIC18F4550-I/PT	Y	1	N	Y	N	P





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**PACK LIST**

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**ASSEMBLY NAME:** MCP3421 Weight Scale Demo Board

111-00250 CM ASSY, MCP3421 Weight Scale Demo Board				Rev: 1	Check Off
Qty	Part Number		Description		
1	1	102-00250	PCB ASSY, MCP3421 Weight Scale Demo Board		
2	1	-	DOC, 'IMPORTANT INFORMATION' For MCP3421 Weight Scale Demo Board		