

Bill of Materials

MIC45212 Current Sharing Ref. Design

Document Number: 02-10570
Board Number: 04-10570
Part Number: ARD00777
Revision: 1
Engineer: Catalin Bibirica
Drawn By: Catalin Bibirica



Creation Date: 12:45:31 PM
Print Date: 2:21:20 PM

Quantity	Designator	Description_	Manufacturer 1	Manufacturer Part Number 1	Supplier 1	Supplier Part Number 1
2	C1, C18	CAP ALU 220uF 35V 20% SMD E	Nichicon	UWT1V221MNL1GS	Digi-Key	493-2205-1-ND
6	C2, C3, C36, C42, C50, C51	CAP CER 10uF 50V 20% X7S SMD 1210	TDK	C3225X7S1H106M	Digi-Key	445-4537-1-ND
4	C4, C5, C21, C23	CAP CER 0.1uF 50V 20% X7R SMD 0603	TDK	C1608X7R1H104M	Digi-Key	445-5098-1-ND
8	C6, C7, C8, C9, C24, C25, C26, C32	CAP CER 100uF 10V 20% X5R SMD 1206	TDK Corporation	C3216X5R1A107M160AC	Digi-Key	445-6007-1-ND
5	C10, C12, C35, C44, C45	CAP CER 0.047uF 50V 10% X7R SMD 0603	TDK Corporation	C1608X7R1H473K080AA	Digi-Key	445-1313-1-ND
4	C11, C13, C20, C33	CAP CER 1000pF 50V 20% X7R SMD 0603	TDK Corporation	C1608X7R2A102K080AA	Digi-Key	445-1298-1-ND
3	C14, C19, C28	CAP CER 4700pF 50V 5% NP0 SMD 0603	TDK Corporation	C1608C0G1H472J080AA	Digi-Key	445-7400-1-ND
2	C15, C22	CAP CER 22pF 50V 5% COG SMD 0603	KEMET	C0603C220J5GACTU	Digi-Key	399-1053-1-ND
2	C16, C17	CAP CER 1uF 35V 10% X7R SMD 0805	TDK Corporation	CGA4J3X7R1V105K125AB	Digi-Key	445-6962-1-ND
5	D3, D7, D8, D9, D10	DIO RECT 1N4148 855mV 300mA 75V SOD-323	Diodes Incorporated	1N4148WS-7-F	Digi-Key	1N4148WS-FDICT-ND
8	J1, J2, J3, J4, J5, J6, J7, J8	CON TERMINAL 15A Female 1x1 TH VERT	Keystone Electronics	8195	Digi-Key	36-8195-ND
10	JP1, JP2, JP3, JP4, JP5, JP6, JP7, JP8, JP9, JP10	CON HDR-2.54 Male 1x2 Gold 5.84MH TH VERT	FCI	77311-118-02LF	Digi-Key	609-4434-ND
2	L5, L6	INDUCTOR 1uH 6A 30% SMD L6W6H4.5	TDK Corporation	VLS6045EX-1R0N	Digi-Key	445-173043-1-ND
5	PAD1, PAD2, PAD3, PAD4, PAD5	MECH HW RUBBER PAD CYLINDRICAL D9.53H5.97	3M	SJ61A2	Digi-Key	SJ5748-0-ND

1	Q1	TRANS BJT NPN BC850CLT1 45V 100mA 225mW SOT-23-3	ON Semiconductor	BC850CLT1	Digi-Key	BC850CLT1GOSCT-ND
1	Q2	TRANS FET N-CH 2N7002-7-F 60V 170mA 370mW SOT-23-3	Diodes Inc	2N7002-7-F	Digi-Key	2N7002-FDICT-ND
4	R1, R22, R32, R33	RES TF 100k 1% 1/8W SMD 0603	Vishay	MCT06030C1003FP500	Digi-Key	MCT0603-100K-CFTR-ND
3	R3, R4, R17	RES TKF 3.16k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF3161V	Digi-Key	P3.16KHTR-ND
5	R5, R7, R12, R23, R37	RES TKF 10k 5% 1/10W SMD 0603	Panasonic	ERJ-3GEYJ103V	Digi-Key	P10KGCT-ND
2	R6, R24	RES TKF 30k 5% 1/10W SMD 0603	Panasonic	ERJ-3GEYJ303V	Digi-Key	P30KGCT-ND
2	R8, R13	RES TKF 1.2R 1% 1/10W SMD 0603	Panasonic	CRCW06031R20FNEA	Digi-Key	541-1.20HTR-ND
4	R9, R16, R36, R38	RES TKF 10R 5% 1/10W SMD 0603	Panasonic	ERJ-3GEYJ100V	Digi-Key	P10GCT-ND
2	R10, R15	RES TKF 1.5k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1501V	Digi-Key	P1.50KHTR-ND
1	R14	RES TKF 3.92k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF3921V	Digi-Key	P3.92KHCT-ND
5	R18, R25, R26, R27, R29	RES TKF 5.6k 1% 1/10W SMD 0603	Yageo	RC0603FR-075K6L	Digi-Key	311-5.60KHRCT-ND
4	R20, R28, R31, R34	RES TKF 0R 1/10W SMD 0603	Panasonic	ERJ-3GSY0R00V	Digi-Key	P0.0GTR-ND
Microchip Parts listed below						
2	U1, U2	MCHP ANALOG VOLTAGE REG 0.8V - 5.5V MIC45212-2YMP-T1 QFN-64	Microchip Technology	MIC45212-2YMP-T1	Digi-Key	576-4784-2-ND
1	U3	MCHP ANALOG OPAMP 2MHz MCP6V71T-E/OT SOT-23-5	Microchip Technology	MCP6V71T-E/OT	Digi-Key	MCP6V71T-E/OTCT-ND
1	U4	MCHP ANALOG VREF 10V MIC4043YM4 SOT-143	Microchip Technology	MIC4043YM4-TR	Digi-Key	576-2715-1-ND
1	U5	MCHP ANALOG LDO 5V MCP1804T- 5002I/OT SOT-23-5	Microchip	MCP1804T-5002I/OT	Microchip	MCP1804T-5002I/OT
Do Not Populate Parts listed below						
3	C27, C29, C34	CAP CER 0.1uF 50V 20% X7R SMD 0603	TDK	C1608X7R1H104M	Digi-Key	445-5098-1-ND
4	C31, C37, C40, C41	CAP CER 10uF 50V 20% X7S SMD 1210	TDK	C3225X7S1H106M	Digi-Key	445-4537-1-ND
2	D1, D2	DIO RECT 1N4148 855mV 300mA 75V SOD-323	Diodes Incorporated	1N4148WS-7-F	Digi-Key	1N4148WS-FDICT-ND
2	D5, D6	DIO ZENER BZG03C15G 15V 1.5W SMD DO-214AC SMA	ON Semiconductor	BZG03C15G	Digi-Key	BZG03C15GOSCT-ND
4	R2, R11, R19, R30	RES TKF 0R 1/10W SMD 0603	Panasonic	ERJ-3GSY0R00V	Digi-Key	P0.0GTR-ND