

Bill of Materials

MIC28516 Evaluation Board

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Drawn By: Sergiu Gheorghe
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Quantity	Designator	Description_	Manufacturer 1	Manufacturer Part Number 1	Supplier 1	Supplier Part Number 1
1	C1	CAP CER 4700pF 50V 10% X7R SMD 0603	KEMET	C0603C472K5RACTU	Digi-Key	399-1087-1-ND
1	C3	CAP CER 0.01uF 25V 10% X7R SMD 0603	Samsung Electro-Mechan	CL10B103KA8NNNC	Digi-Key	1276-1132-1-ND
2	C4, C8	CAP CER 2.2uF 16V 10% X5R SMD 0603	TDK	C1608X5R1C225K	Digi-Key	445-5157-1-ND
1	C5	CAP CER 1uF 100V 10% X7S SMD 0805	TDK Corporation	C2012X7S2A105K125AE	Digi-Key	445-5205-1-ND
3	C7, C10, C17	CAP CER 0.1uF 100V 10% X7R SMD 0603	Murata Electronics North	GRM188R72A104KA35D	Digi-Key	490-3285-1-ND
1	C9	CAP CER 4.7uF 25V 10% X5R SMD 0805	Murata	GRM21BR61E475KA12L	Digi-Key	490-3335-1-ND
3	C12, C13, C14	CAP CER 47uF 16V 20% X5R SMD 1210	Yageo	CC1210MKX5R7BB476	Digi-Key	311-2054-1-ND
1	C15	CAP ALU 1000uF 16V 20% SMD G	Panasonic Electronic Cor	16SVPF1000M	Digi-Key	P16478CT-ND
1	C16	CAP CER 0.1uF 16V 10% X7R SMD 0603	Taiyo Yuden	EMK107B7104KA-T	Digi-Key	587-1240-1-ND
4	C18, C19, C20, C21	CAP CER 2.2uF 100V 10% X7R SMD 1210	AVX Corporation	12101C225KAT2A	Digi-Key	478-7974-1-ND
1	C22	CAP ALU 100uF 100V 20% TH P5D12.5H20	United Chemi-Con	EKZE101ELL101MK16S	Digi-Key	565-1736-ND
9	J1, J2, J3, J4, J7, J8, J9, J11, J12	CON HDR-2.54 Male 1x2 Gold 5.84MH TH VERT	FCI	77311-118-02LF	Digi-Key	609-4434-ND
2	J5, J6	CON HDR-2.54 Male 1x3 Gold 5.84MH TH VERT	FCI	68000-103HLF	Digi-Key	609-3461-ND
1	J10	CON HDR-2.54 Male 2x6 Gold 5.84MH TH VERT	Samtec	TSW-106-07-G-D	Digi-Key	SAM1028-06-ND
4	J13, J14, J15, J16	CON TERMINAL 15A Female 1x1 TH VERT	Keystone Electronics	8195	Digi-Key	36-8195-ND

1	L1	INDUCTOR 6.8uH 21.5A 20% SMD L11.6W10.5H8.8	WUERTH ELEKTRONIK	74439369068	Digi-Key	732-10712-1-ND
1	R1	RES TKF 100k 5% 1/10W SMD 0603 (Don't Use, Duplicate, Use RSMT0026)	Panasonic	ERJ-3GEYJ104V	Digi-Key	P100KGCT-ND
1	R2	RES TKF 30k 1% 1/10W SMD 0603	Stackpole Electronics Inc	RMCF0603FT30K0	Digi-Key	RMCF0603FT30K0TR-ND
4	R3, R4, R8, R10	RES TF 10k 1% 1/8W SMD 0603	Vishay Beyschlag	MCT06030C1002FP500	Digi-Key	MCT0603-10.0K-CFTR-ND
1	R5	RES TKF 3.16k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF3161V	Digi-Key	P3.16KHTR-ND
1	R6	RES TKF 2.2k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF2201V	Digi-Key	P2.20KHCT-ND
1	R7	RES TKF 20k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF2002V	Digi-Key	P20.0KHCT-ND
1	R9	RES TKF 2R 1% 1/4W SMD 0603	Vishay Dale	CRCW06032R00FKEAH	Digi-Key	541-2.00SCT-ND
1	R11	RES TKF 2.21k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF2211V	Digi-Key	P2.21KHCT-ND
1	R12	RES TKF 0R 1/10W SMD 0603	Panasonic	ERJ-3GSY0R00V	Digi-Key	P0.0GTR-ND
2	R13, R14	RES TKF 1R 1% 1/10W SMD 0603	Yageo	RC0603FR-071RL	Digi-Key	311-1.00HRCT-ND
1	R15	RES TKF 16.2k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1622V	Digi-Key	P16.2KHCT-ND
1	R17	RES TKF 49.9R 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF49R9V	Digi-Key	P49.9HCT-ND
1	R18	RES TKF 1.37k 1% 1/10W SMD 0603	Yageo	RC0603FR-071K37L	Digi-Key	311-1.37KHRCT-ND
1	R19	RES TKF 536R 1% 1/10W SMD 0603	Yageo	311-536HRCT-ND	Digi-Key	311-536HRCT-ND
1	R20	RES TKF 15R 1% 1/16W SMD 0603	Stackpole Electronics Inc	RMCF0603FT15R0	Digi-Key	RMCF0603FT15R0CT-ND

Microchip Parts listed below

1	U1	MCHP ANALOG SWITCHER Buck 0.6V to 32V 8A MIC28516T-E/PHA VQFN-32	Microchip Technology	MIC28516T-E/PHA	Microchip Tech	MIC28516T-E/PHA

Mechanical Parts to be added in the package

1	HS1	MECH HW HEATSINK ADHESIVE TAPE L19W19H6.3	CTS Corporation	APF19-19-06CB/A01	Digi-Key	294-1146-ND
1	LABEL1	LABEL, NEED HELP WITH ASSY/SERIAL				
4	SCR1, SCR2, SCR3, SCR4	MECH HW SCREW #6-32 x 1/4" PanHead PHIL Nylon	B&F Fastener Supply	NY PMS 632 0025 PH	Digi-Key	H554-ND
3	SH5, SH6, SH10	MECH HW JUMPER 2.54mm 1x2 Phosphor Bronze w/ Handle	JAMECO VALUEPRO	2012JH-R	Jameco	152671
4	STANDOFF1, STANDOFF2, STANDOFF3, STANDOFF4	MECH HW STAND-OFF #6-32 x 3/8" F HEX NYLON	Keystone Electronics	1903B	Digi-Key	36-1903B-ND

PCB

1	PCB1	Printed Circuit Board		04-10825-R1		
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Do Not Populate Parts listed below

0	C2	CAP CER 10pF 50V 0.5pF COG SMD 0603	TDK	C1608C0G1H100D	Digi-Key	445-1269-1-ND
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0	C11	CAP CER 1000pF 50V 20% X7R SMD 0603	TDK Corporation	C1608X7R2A102K080A	Digi-Key	445-1298-1-ND
0	R16	RES TKF 1R 1% 1/10W SMD 0603	Yageo	RC0603FR-071RL	Digi-Key	311-1.00HRCT-ND

Approved	Notes	Description