

Bill of Materials

MCP3564 4-Ch ADC Evaluation Board V2

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Quantity	Designator	Description	Manufacturer 1	Manufacturer Part Number 1	Supplier 1	Supplier Part Number 1
2	C1, C53	CAP TANT 10uF 20V 10% 2.10mm SMD B	Kyocera AVX	TAJ106K020R1J	Digi-Key	478-1674-1-ND
1	C2	CAP CER 10uF 10V 20% X7R SMD 1206	Wurth Electronics	88501220810	Digi-Key	732-7565-1-ND
41	C3, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C37, C38, C40, C41, C42, C43, C44, C45, C46, C49	CAP CER 0.1uF 16V 10% X7R SMD 0603	Taiyo Yuden	EMK107B7104KAT	Digi-Key	587-1240-1-ND
4	C4, C5, C36, C38	CAP CER 1uF 10V 20% X7R SMD 0603	Samsung	CL10B105KP8NNC	Digi-Key	1276-1946-1-ND
1	C47	CAP CER 10uF 10V 20% X5R SMD 0603	Samsung	CL10A106MP8NNC	Digi-Key	1276-1871-1-ND
2	C48, C52	CAP CER 180pF 50V 5% COG SMD 0603	TDK	C1608COG1H180J080A	Digi-Key	445-1272-1-ND
2	C50, C51	CAP CER 120pF 50V 5% NPO SMD 0603	Kyocera AVX	06035A120JAT2A	Digi-Key	478-1164-1-ND
1	D1	DIO RECT MRA4005 1.1V 1A 600V DO-214AC_SMA	GN Semiconductor	MRA4005T1G	Digi-Key	MRA4005T1G0G0CT-ND
1	J1	CON POWER 2.5mm 5.5mm SWITCH Slotted TH R/A	CLJ	PL002B	Digi-Key	CP-002B-ND
1	J2	CON HDR-2.54 Male 2x2 Tin 5.84MM TH VERT	Amphenol FCJ	67997-404HF	Digi-Key	609-3242-ND
4	J3, J4, J5, J6	CON TERMINAL 5mm 1x4 Female 12-26AWG 18A TH R/A	Phoenix Contact	1935187	Digi-Key	277-1579-ND
4	J7, J8, J9, J10	CON HDR-2.54 Male 2x4 Tin 5.84MM TH VERT	Amphenol FCJ	67996-408HF	Digi-Key	609-3391-ND
1	J11	CON HDR-2.54 Male 1x2 Gold 5.84MM TH VERT	Amphenol ICC	77311-118-02LF	Digi-Key	609-4434-ND
1	J12	CON HDR-2.54 Male 2x8 Tin 5.84MM TH VERT	Amphenol FCJ	67996-416HF	Digi-Key	609-3220-ND
1	J15	CON USB2.0 Micro-B Female SMD R/A	Amphenol FCJ	10118193-0001LF	Digi-Key	609-4616-1-ND
4	J16, J17, J18, J19	CON HDR-1.27 Male 1x25 Gold 5.84MM TH VERT	Amphenol FCJ	68016-108HF	Digi-Key	609-3313-ND
1	J20	CON HDR-2.54 Male 1x6 Gold 5.84MM TH R/A	Amphenol FCJ	68016-108HF	Digi-Key	609-3313-ND
1	L1	FERRITE 150R @100MHz 300mA SMD 1806	Laird	LI1806C151R-10	Digi-Key	240-2418-1-ND
1	LCD1	DISPLAY LCD NHD-C0216CIZ-FSW-FBW-3V3 16x2 Alpha 3.3V TH	Newhaven Display	NHD-C0216CIZ-FSW-FBW	Digi-Key	NHD-C0216CIZ-FSW-FBW-3V3-ND
1	LD1	DIO LED GREEN 2V 30mA 35mcd Clear SMD 0603	Vishay Lite-On	LTST-C191K0KT	Digi-Key	160-1446-1-ND
1	LD2	DIO LED BI RED, GREEN 1.95V, 2.1V 30mA 0603	Kinbright	APH8M012SURKCGKC	Digi-Key	754-1093-1-ND
2	LD3, LD4	DIO LED RED 2V 30mA 2mcd Clear SMD 0603	Vishay Lite-On	LTST-C190EKT	Digi-Key	160-1182-1-ND
19	R2, R7, R8, R9, R10, R11, R12, R13, R14, R24, R28, R29, R34, R35, R40, R41, R43, R44, R45	RES TKF 1k 5% 1/10W SMD 0603	Panasonic	ERJ3GEYJ102V	Digi-Key	P110K0GCT-ND
1	R3	RES TKF 18R 1% 1/10W 0603	Yageo	RC0603FR-0718RL	Digi-Key	311-18.0HRC-ND
12	R4, R5, R6, R15, R17, R18, R19, R20, R21, R22, R23, R39	RES TKF 10R 5% 1/10W SMD 0603	Panasonic	ERJ3GEYJ100V	Digi-Key	P10GCT-ND
2	R16, R48	RES TKF 10k 1% 1/10W SMD 0603	Panasonic	ERJ3EKF1002V	Digi-Key	P1010K0CT-ND
6	R25, R26, R31, R32, R33, R42	RES TKF 4.7k 5% 1/10W SMD 0603	Panasonic	ERJ3GEYJ472V	Digi-Key	P417K0GCT-ND
2	R27, R30	RES TKF 330R 1% 1/10W SMD 0402	KOA Speer	RK73H1ETTP3300F	Mouser	680-RK73H1ETTP3300F
1	R36	RES TKF 150k 1% 1/8W SMD 0603	KOA Speer	SG73S1JTD1503F	Farnell	1627808
2	R37, R38	RES TF 2.2k 1% 1/8W SMD 0603	Vishay Bevschlag	MCT0603C2201FP500	Digi-Key	MCT0603C-2.20K-CFTR-ND
1	R49	RES TKF 0R 1/10W SMD 0603	Panasonic	ERJ-3GEYR00V	Digi-Key	P0.0GTR-ND
4	SW1, SW2, SW3, SW4	SWITCH TACT SPST 12V 50mA P1S645SM3SMTR92 LFS SMD	Wurth Electronics	430150043818	Digi-Key	732-7034-1-ND
1	TP1	MSC, TEST POINT MULTI-PURPOSE MINI-BLACK	Keystone Electronics	5001	Digi-Key	36-5001-ND
1	U2	MCHP ANALOG LDO 3.3V MCP1825ST-3302E/DB SOT-223-3			Microchip	MCP1825ST-3302E/DB
1	U3	MCHP ANALOG LDO 3.3V MCP1754ST-3302E/DB SOT-223-3			Microchip	MCP1754ST-3302E/DB
1	U6	MCHP ANALOG ADC-DELTA SIGMA 24-bit MCP3564T-ENC UOFN-20			Microchip Techn	MCP3564T-ENC
1	U7	IC SWITCHER ADG839 SC-70-6	Rochester Electronics	ADG839K5Z-REEL7	Digi-Key	ADG839K5Z-REEL7CT-ND
1	X1	RESONATOR 12MHz 0.1% SMD CSTCE-G	Murata	CSTCE12MG01S199-R0	Digi-Key	490-7848-1-ND
1	X2	CRYSTAL 32.768kHz 12.5pF RAD P1.1D3.1H8.2			CAMtech	CSC0019
1	X3	CRYSTAL 8MHz 18pF SMD ABMM2	Abricon	ABMM2-8.000MHZ-E2-T	Digikey	636-9628-1-ND

Microchip Parts listed below

1	U1	MCHP ANALOG LDO 5V MC39100-5.0VS SOT-223-3	Microchip Mzeel	MC39100-5.0VS	Digi-Key	576-1173-ND
1	U4	MCHP ANALOG VREF 2.5V MCP1501-25E/SN SOIC-8	Microchip	MCP1501-25E/SN	Digi-Key	MCP1501-25E/SN-ND
1	U5	MCHP ANALOG DIGIPOT 1-Ch 10k MCP41010-1SN SOIC-8	Microchip	MCP41010-1SN	Digi-Key	MCP41010-1SN-ND
1	U8	MCHP ANALOG OPAMP 1-Ch 10MHz MCP6V91UT-ELTYCT-ND SC-70-5	Microchip	MCP6V91UT-ELTY	Digi-Key	MCP6V91UT-ELTYCT-ND
1	U9	MCHP INTERFACE USB UART MCP2200-ISS SSCP-20	Microchip	MCP2200-ISS	Digi-Key	MCP2200-ISS-ND

Mechanical Parts to be added in the package

1	CBL1	MECH HW CABLE USB Male-A to Male Micro-B Clear 4'			DongGuan Zhar	A006Z0027
10	JP1, JP2, JP3, JP4, JP5, JP6, JP7, JP8, JP9, JP10	MECH HW JUMPER 2.54mm 1x2 Handle Gold	TE Connectivity	881545-2	Digi-Key	A26242-ND
1	LABEL1	LABEL NEED HELP WITH ASSY/SERIAL				
5	PAD1, PAD2, PAD3, PAD4, PAD5	MECH HW RUBBER PAD CYLINDRICAL D9.53xH5.97	3M	SJ61A2	Digi-Key	SJ6748-0-ND
1	PM1	PC32MX USB/CAN PFM MA320003			Microchip Techn	02-02145

PCB

1	PCB1	Printed Circuit Board		04-11005-R1		
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Do Not Populate Parts listed below

0	J13	CON USB2.0 Micro-B Female SMD R/A	Amphenol FCJ	10118193-0001LF	Digi-Key	609-4616-1-ND
0	J14	CON USB2.0 STD-A FEMALE TH R/A	AMP - TE CONNECTIVITY	202030-1	Digi-Key	A31726-ND
0	R50	RES TKF 10R 5% 1/10W SMD 0603	Panasonic	ERJ3GEYJ100V	Digi-Key	P10GCT-ND

Approved	Notes	Description