

Bill of Materials

MCP9984 Evaluation Board

Document Number: 02-02-00951

PCB Number: 04-12024

Part Number: EV23P16A

Revision: 1

Engineer: Eric Staples

Drawn By: Eric Staples



Creation Date: 8/23/2023

Creation Time: 10:39 AM

Quantity	Designator	Description_	Manufacturer 1	Manufacturer Part Number 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Price / 1 Board
1	C1	CAP CER 0.47uF 10V 10% X5R SMD 0603	KEMET	C0603C474K8PACTU	Digi-Key	399-3114-1-ND		\$0.0000
5	C2, C4, C5, C7, C9	CAP CER 0.1uF 10V 10% X7R SMD 0603	KEMET	C0603C104K8RACTU	Digi-Key	399-1095-1-ND		\$0.0000
2	C3, C6	CAP CER 4.7uF 10V 10% X5R SMD 0805	WURTH ELEKTRONIK	885012107009	Digi-Key	732-7619-1-ND		\$0.0000
1	C8	CAP CER 200pF 50V 5% C0G SMD 0603	Murata	GRM1885C1H201JA01D	Digi-Key	490-1434-2-ND		\$0.0000
1	C10	CAP CER 2200pF 16V 10% X7R SMD 0603	AVX	0603YC222KAT2A	Digi-Key	478-6210-1-ND		\$0.0000
1	J1	CON USB2.0 MICRO-B FEMALE TH/SMD R/A	FCI	10118194-0001LF	Digi-Key	609-4618-1-ND		\$0.0000
1	J2	CON HDR-2.54 Male 1x4 Gold 5.84MH TH R/A	Samtec Inc	TSW-104-08-S-S-RA	Digi-Key	SAM1047-04-ND		\$0.0000
2	J3, J4	CON TERMINAL 5mm 1x2 Female 12-26AWG 18A TH R/A	Phoenix Contact	1935161	Digi-Key	277-1667-ND		\$0.0000
1	J5	CON HDR-2.54 Male 2x6 Tin 5.84MH TH VERT	Amphenol FCI	67996-412HLF	Digi-Key	609-3219-ND		\$0.0000
2	LD1, LD2	DIO LED GREEN 3.2V 20mA 430mcd Clear SMD 0603	Würth Electronics Inc	150060GS75000	Digi-Key	732-4971-1-ND		\$0.0000
2	LD3, LD4	DIO LED RED 2V 20mA 250mcd Clear SMD 0603	Würth Electronics Inc	150060RS75000	Digi-Key	732-4978-1-ND		\$0.0000
1	Q1	TRANS BJT NPN MMBT3904-7-F 40V 0.2A SMD SOT23-3	Diodes Incorporated	MMBT3904-7-F	Digi-Key	MMBT3904-FDICT-ND		\$0.0000
1	R1	RES TKF 10k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1002V	Digi-Key	P10.0KHCT-ND		\$0.0000
3	R2, R3, R12	RES TKF 6.8k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF6801V	Digi-Key	P6.80KHCT-ND		\$0.0000
3	R4, R5, R8	RES TKF 10k 1% 1/8W SMD 0805	Panasonic	ERJ-6ENF1002V	Digi-Key	P10.0KCTR-ND		\$0.0000
1	R6	RES TKF 4.7k 1% 1/8W SMD 0805	Yageo	RC0805FR-074K7L	Digi-Key	311-4.70KCRCT-ND		\$0.0000
1	R7	RES 6.8K OHM 1% 1/8W 0805	Yageo	RC0805FR-076K8L	Digi-Key	311-6.80KCRTR-ND		\$0.0000
1	R9	RES TKF 15k 1% 1/8W SMD 0805	Yageo	RC0805FR-0715KL	Digi-Key	311-15.0KCRCT-ND		\$0.0000
1	R10	RES TKF 22k 1% 1/8W SMD 0805 AEC-Q200	Stackpole Electronics Inc	RMCF0805FT22K0	Stackpole Elect	RMCF0805FT22K0		\$0.0000
1	R11	RES TKF 33k 1% 1/16W SMD 0805	Stackpole Electronics Inc	RMCF 1/10 33K 1% R	Digi-Key	RMCF1/1033KFRCT-ND		\$0.0000
1	TP1	CON TP LOOP Red TH	Keystone	5010	Digi-Key	36-5010-ND		\$0.0000
1	TP2	CON TP LOOP Black TH	Keystone	5011	Digi-Key	36-5011-ND		\$0.0000
2	TP3, TP4	CON TP LOOP White TH	Keystone	5012	Digi-Key	36-5012-ND		\$0.0000

Microchip Parts listed below								
1	U1	MCHP INTERFACE USB I2C UART MCP2221A-I/ST TSSOP-14	Microchip Technology	MCP2221A-I/ST	Microchip Tech	MCP2221A-I/ST		\$0.0000
1	U2	MCHP ANALOG LDO 3.3V MCP1703T-3302E/DB SOT-223-3	Microchip	MCP1703T-3302E/DB	Microchip	MCP1703T-3302E/DB		\$0.0000
1	U3	MCP9984-AE/E3 2-Wire ±1°C Accuracy Remote Diode Temperature Monitor MSOP-10	Microchip Technology	MCP9984-AE/E3	Microchip Tech	MCP9984-AE/E3		\$0.0000
								\$0.0000
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Mechanical Parts to be added in the package								
1	CBL2	MECH HW CABLE USB Male A TO USB Male Micro-B 0.91M	DongGuan ZanXin	A006ZX028	DongGuan Zan	A006ZX028		\$0.0000
1	JP1	MECH HW JUMPER 2.54mm 1x2 Handle Gold	TE Connectivity	881545-2	Digi-Key	A26242-ND		\$0.0000
1	LABEL1	LABEL PCBA 18x6mm Datamatrix Assy# / Rev / Serial / Date	ACT Logimark AS	505462	ACT Logimark	505462		\$0.0000
2	Q3, Q4	TRANS BJT NPN 2N3904TA 40V 0.2A 0.625W TO-92-3	Fairchild Semiconductor	2N3904TA	Digi-Key	2N3904TAFSCT-ND		\$0.0000
								\$0.0000

PCB								
1	PCB1	Printed Circuit Board		04-12024-R1				\$0.0000
								\$0.0000

Do Not Populate Parts listed below								
								\$0.0000

Approved	Notes	Description