




Title: Raspberry Pi Interface Board			Drawn by: William Rigby * * * *	
Size: A3	Number: 2	Revision: A		
Date: 10/05/2024	Time: 12:36:05 PM	Sheet 1 of 1		
File: Interface Board.SchDoc				

Designator	Quantity	Supplier Part Number	Manufacturer Part Number	Manufacturer	Supplier	Description
C1, C4, C6, C7, C8	5	311-1140-1-ND		YAGEO	Digi-Key Electronics	Capacitor
C2, C5	2	1276-6454-1-ND		Samsung Electro-Mechanics	Digi-Key Electronics	Capacitor
C3	1	1276-CL21A226MAYNNNECT-ND		Samsung Electro-Mechanics	Digi-Key Electronics	Capacitor
D1	1	S5DC-FDICT-ND		Diodes Incorporated	Digi-Key Electronics	Diode Standard 200 V 5A Surface Mount SMC
D2	1	F6271CT-ND		Littelfuse Inc.	Digi-Key Electronics	TVS Diode
D3	1	S5GC-FDICT-ND		Diodes Incorporated	Digi-Key Electronics	Diode
J1	1					2 Pin Jumper
P1, P3	2	732-10955-ND		Würth Elektronik	Digi-Key Electronics	2 Position Wire to Board Terminal Block Horizontal with Board 0.197" (5.00mm) Through Hole
P2	1					2 Pin Header
Q1	1	SSM3K123TULFCT-ND	SSM3K123TU,LF	Toshiba Semiconductor and Storage	Digi-Key Electronics	N-Channel 20 V 4.2A (Ta) 500mW (Ta) Surface Mount UFM
R1	1	311-10.2KCRCT-ND		YAGEO	Digi-Key Electronics	Standard Resistor
R2	1	311-1.62KCRCT-ND		YAGEO	Digi-Key Electronics	Standard Resistor
R3	1	311-2.55MCRCT-ND		YAGEO	Digi-Key Electronics	Standard Resistor
R4	1	311-107KCRCT-ND		YAGEO	Digi-Key Electronics	Standard Resistor
R5, R6, R7	3	311-10KARCT-ND		YAGEO	Digi-Key Electronics	Standard Resistor
R8	1	P1MDACT-ND		Panasonic Electronic Components	Digi-Key Electronics	Standard Resistor
R9, R10	2	541-4129-1-ND		Vishay Dale	Digi-Key Electronics	Standard Resistor
RPI1	1					Raspberry Pi 40 Pin Header
U1	1	MCP3021A5T-E/OTCT-ND		Microchip Technology	Digi-Key Electronics	10 Bit Analog to Digital Converter 1 Input 1 SAR SOT-23-5
U2	1	2725-K7805-3AR3-ND		Mornsun America, LLC	Digi-Key Electronics	Non-Isolated Pol Module DC DC Converter 1 Output 5V 3A 8V - 36V Input
U3	1	505-LT6700CS6-2#TRMPBFCT-ND		Analog Devices Inc.	Digi-Key Electronics	Comparator with Voltage Reference Open-Collector TSOT-23-6
U4	1	MCP9808T-E/MSCT-ND		Microchip Technology	Digi-Key Electronics	Temperature Sensor Digital, Local -40°C ~ 125°C 12 b 8-MSOP
U5	1	150-MCP96L01T-E/MXCT-ND		Microchip Technology	Digi-Key Electronics	Thermocouple EMF to Temperature Converter, ±1.5°C Maximum Accuracy