

Source: P_2040\PSE_RP2040\PSE_RP2040.kicad_sch

Date: #####

Tool: schema (6.0.4)

Generator: ig\plugins\bom_csv_grouped_by_value_with_fp.py

Component Count: 126

Ref	Qty	Value	Cmp name	Footprint	Description	Vendor
C1,	1	0.1F	C_Polarized	Capacitor_THT:CP_Radial_D10.0mm_P5.00mm	Polarized capacitor	
C2, C5, C20, C21,	4	12p	C	Capacitor_SMD:C_0603_1608Metric	Unpolarized capacitor	
C3, C6, C7, C8, C9, C10, C11, C13, C15, C16, C22, C23, C25, C26, C27, C32, C34,	17	100n	C	Capacitor_SMD:C_0603_1608Metric	Unpolarized capacitor	
C4,	1	10u	C_Polarized	Capacitor_SMD:C_0805_2012Metric	Polarized capacitor	
C12, C14, C18, C29, C30,	5	2u2	C	Capacitor_SMD:C_0603_1608Metric	Unpolarized capacitor	
C17,	1	1u	C	Capacitor_SMD:C_0603_1608Metric	Unpolarized capacitor	
C19, C33,	2	470p	C	Capacitor_SMD:C_0603_1608Metric	Unpolarized capacitor	
C24,	1	10u 16V	C_Polarized	Capacitor_SMD:C_0805_2012Metric	Polarized capacitor	
C28, C31,	2	100n 100v	C	Capacitor_SMD:C_0603_1608Metric	Unpolarized capacitor	
C35,	1	100u	C_Polarized	Capacitor_SMD:C_0805_2012Metric	Polarized capacitor	
D1,	1	BAT54C	BAT54C	Package_TO_SOT_SMD:SOT-23	dual schottky barrier diode, common cathode	
D2, D3,	2	MB1S	D_Bridge_+-AA	Package_SO:SO-4_4.4x3.6mm_P2.54mm	Diode bridge, +ve/-ve/AC/AC	
D4,	1	LED	LED	LED_SMD:LED_0603_1608Metric	Light emitting diode	
D5, D8,	2	S1B	D	Diode_SMD:D_SMA	Diode	
D6, D9,	2	D_Schottky	D_Schottky	Diode_SMD:D_SMA	Schottky diode	
D7,	1	SMAJ56	1.5KExxA	Diode_SMD:D_SMA	1500W unidirectional TRANSZORB [®] Transient Voltage Suppressor, DO-201AE	
E1,	1	SparkGap	SparkGap	PSE2021:SPARK_GAP_TRIANGLE	Spark gap	
F1,	1	Polyfuse_Small: fino a 500ma	Polyfuse_Small	Fuse:Fuse_1812_4532Metric	Resettable fuse, polymeric positive temperature coefficient, small symbol	
H1, H2, H3,	3	MountingHole	MountingHole	MountingHole:MountingHole_3mm	Mounting Hole without connection	
IC1,	1	LAN8742A-CZ	LAN8742A-CZ	Package_DFN_QFN:HVQFN-24-1EP_4x4mm_ P0.5mm_EP2.5x2.5mm_ThermalVias		
IC2,	1	SAM-M8Q-0	SAM-M8Q-0	PSE2021:SAM-M8Q	SAM-M8Q RF Receiver Galileo, GLONASS, GPS 1.575GHz, 1.602GHz -165dBm 400kbps	
J1,	1	USB_B	USB_B	Connector_USB:USB_B_OST_USB-B1HSxx_Horizontal	USB Type B connector	
J2,	1	USB_B_Mini	USB_B_Mini	Connector_USB:USB_Mini-B_ Wuerth_65100516121_Horizontal	USB Mini Type B connector	
J3,	1	8P8C_LED	8P8C_LED	PSE2021:RJ45_Amphenol_RJHSE-5081	RJ connector, 8P8C (8 positions 8 connected), two LEDs, RJ45	
J4,	1	Conn_01x03	Conn_01x03	Connector_PinHeader_2.54mm:PinHeader_1x03_P2.54mm_Ve	Generic connector, single row, 01x03, script generated (kicad-library- utils/schlib/autogen/connector/)	

J5,	1	Screw_Terminal_01x02	Screw_Terminal_01x02	TerminalBlock_Phoenix:TerminalBlock_Phoenix_MKDS-1,5-2-5.08_1x02_P5.08mm_Horizontal	Generic screw terminal, single row, 01x02, script generated (kicad-library-utils/schlib/autogen/connector/)
J6,	1	Conn_01x04_Female	Conn_01x04_Female	Connector_PinHeader_2.54mm:PinHeader_1x04_P2.54mm_Vertical	Generic connector, single row, 01x04, script generated (kicad-library-utils/schlib/autogen/connector/)
JP1,	1	SolderJumper_2_Bridged	SolderJumper_2_Bridged	Jumper:SolderJumper-2_P1.3mm_Bridged_Pad1.0x1.5mm	Solder Jumper, 2-pole, closed/bridged
L1,	1	200mA 120Ohm	L	Inductor_SMD:L_0603_1608Metric	Inductor
L2,	1	25uH	L	Inductor_SMD:L_0603_1608Metric	Inductor
L3,	1	22u	L	Inductor_SMD:L_Vishay_IFSC-1515AH_4x4x1.8mm	Inductor
Q2,	1	IRLML6402	Q_PMOS_GSD	Package_TO_SOT_SMD:SOT-23	P-MOSFET transistor, gate/source/drain
R1, R11, R37,	3	1k	R	Resistor_SMD:R_0603_1608Metric	Resistor
R2,	1	100	R	Resistor_SMD:R_0603_1608Metric	Resistor
R3,	1	R	R	Resistor_SMD:R_0603_1608Metric	Resistor
R4, R5, R10, R14, R15, R17, R18, R19, R20, R21, R35,	11	10k	R	Resistor_SMD:R_0603_1608Metric	Resistor
R6, R7,	2	270	R	Resistor_SMD:R_0603_1608Metric	Resistor
R8, R9, R16,	3	33	R	Resistor_SMD:R_0603_1608Metric	Resistor
R12, R13, R33,	3	27	R	Resistor_SMD:R_0603_1608Metric	Resistor
R22,	1	12k1	R	Resistor_SMD:R_0603_1608Metric	Resistor
R23, R24, R25, R26,	4	49,9	R	Resistor_SMD:R_0603_1608Metric	Resistor
R27,	1	47k	R	Resistor_SMD:R_0603_1608Metric	Resistor
R28,	1	R4 no fit (o 10k)	R	Resistor_SMD:R_0603_1608Metric	Resistor
R29, R31,	2	50k	R	Resistor_SMD:R_0603_1608Metric	Resistor
R30,	1	178k	R	Resistor_SMD:R_0603_1608Metric	Resistor
R32,	1	330	R	Resistor_SMD:R_0603_1608Metric	Resistor
R34,	1	33k	R	Resistor_SMD:R_0603_1608Metric	Resistor
R38, R39,	2	OR NF	R	Resistor_SMD:R_0603_1608Metric	Resistor
SW1, SW2,	2	SW_Push	SW_Push	Button_Switch_THT:SW_PUSH_6mm	Push button switch, generic, two pins
T1,	1	WE749013011	749013011	Transformer_SMD:Transformer_Ethernet_Wuerth_749013011A	
U1,	1	RP2040	RP2040	PSE2021:RP2040-QFN-56	
U2,	1	PCF8563T	PCF8563T	Package_SO:SOIC-8_3.9x4.9mm_P1.27mm	Realtime Clock/Calendar I2C Interface, SOIC-8
U4,	1	USBLC6-4SC6	USBLC6-4SC6	Package_TO_SOT_SMD:SOT-23-6	Very low capacitance ESD protection diode, 4 data-line, SOT-23-6
U5,	1	W25Q16JVUSSQ	W25Q16JVUXIQ	Package_SO:SOIC-8_5.275x5.275mm_P1.27mm	
U6,	1	PAM7Q	PAM7Q-gpsChip	PSE2021:PAM-7Q	
U7,	1	TPS2375-1	TPS2375-1	Package_SO:SOIC-8_5.275x5.275mm_P1.27mm	IEEE802.3af PoE Controller, Auto-Retry
U8,	1	LMR16006YQ	LMR16006YQ	Package_TO_SOT_SMD:SOT-23-6	Simple Switcher Buck Regulator, Vin=4-40V, Iout=600mA, Adjustable output voltage, SOT-23-6 package
Y1,	1	Crystal_GND3	Crystal_GND3	Crystal:Crystal_AT310_D3.0mm_L10.0mm_Horizontal_1EP_style1	Three pin crystal, GND on pin 3
Y2,	1	Crystal_GND24	Crystal_GND24	Crystal:Crystal_SMD_3225-4Pin_3.2x2.5mm	Four pin crystal, GND on pins 2 and 4
Y3,	1	25MHz	Crystal_GND24	Crystal:Crystal_SMD_3225-4Pin_3.2x2.5mm	Four pin crystal, GND on pins 2 and 4