

Saintcon Minibadge Holder 8 2024 BOM

Reference	Qty	Value	Footprint	Description	Link				
C1,C2,C7	3	10uF	Capacitor_SMD:C_0603_1608Metric	Ceramic Capacitor	https://www.digikey.com/en/products/detail/cal-chip-electronics-inc/GMC10X5R106M10NT/18151101				
C3,C4,C6	3	0.1uF	Capacitor_SMD:C_0603_1608Metric	Ceramic Capacitor	https://www.digikey.com/en/products/detail/samsung-electro-mechanics/CL10B104KB8NNWC/3887593				
C5	1	1uF	Capacitor_SMD:C_0603_1608Metric	Ceramic Capacitor	https://www.digikey.com/en/products/detail/samsung-electro-mechanics/CL10B105KP8NFNC/3887603				
D1	1	LED Tester Pads	GiantLEDTester	LED Tester Pads	N/A				
D2	1	LED	LED_SMD:LED_0603_1608Metric_Pad1.05x0.95mm_HandSolder	0603 LED	https://www.digikey.com/en/products/detail/ams-osram-usa-inc/LS-Q976-01-N1Q2-1/21556498				
J1,J2,J3,J4,J5,J6,J7,J8	8	SAINTCON-Minibadge	minibadge_kicad:SAINTCON-Minibadge-Shiny	Minibadge Slot - 2x 8-Pin Female Header, 0.1" Pitch (16 total headers)	https://www.aliexpress.us/item/2251832231088676.html				
J9	1	USB_C_Receptacle_USB2.0	Connector_USB:USB_C_Receptacle_XKB_U262-16XN-4BVC11	USB-C Port	https://www.mouser.com/ProductDetail/640-USB4105-GF-A				
R1,R2	2	5.1k	Resistor_SMD:R_0603_1608Metric	0603 Resistor	https://www.digikey.com/en/products/detail/bourns-inc/CR0603-FX-5101ELF/3784064				
R3	1	20k	Resistor_SMD:R_0603_1608Metric	0603 Resistor	https://www.digikey.com/en/products/detail/bourns-inc/CR0603-JW-203ELF/3741006				
R4	1	8.45k	Resistor_SMD:R_0603_1608Metric	0603 Resistor	https://www.digikey.com/en/products/detail/stackpole-electronics-inc/RMCF0603FT8K45/1761242				
R5	1	150	Resistor_SMD:R_0603_1608Metric	0603 Resistor	https://www.digikey.com/en/products/detail/walsin-technology-corporation/WR06X151-JTL/13238810				
R6	1	1k	Resistor_SMD:R_0603_1608Metric	0603 Resistor	https://www.digikey.com/en/products/detail/walsin-technology-corporation/WR06X102-JTL/13241138				
U1	1	TLV1117LV33DCYR	Package_TO_SOT_SMD:SOT-223-3_TabPin2	Voltage Regulator - 3.3V, 1A	https://www.mouser.com/ProductDetail/595-TLV1117LV33DCYR				
U2	1	74LV4060D,118	Package_SO:SOIC-16_3.9x9.9mm_P1.27mm	14-bit Binary Ripple Counter with Oscillator (generates CLK signal)	https://www.mouser.com/ProductDetail/771-74LV4060D-T				
U3	1	TPM8837C	Package_SO:SOIC-8_3.9x4.9mm_P1.27mm	Motor Driver (for driving the CLK pins)	https://www.digikey.com/en/products/detail/3peak/TPM8837C-SO1R/22229382				
U5	1	AP22816BKAWT	Package_TO_SOT_SMD:SOT-23-5	USB Load Switch (overcurrent/short circuit protection)	https://www.mouser.com/ProductDetail/Diodes-Incorporated/AP22818BKAWT-7?qs=7D1LiPJG0i00w4y0p06PMw%3D%3D				
X1	1	Conn_02x10_Odd_Even	Pin_Headers:Pin_Header_Straight_2x10_Pitch2.54mm	20Pin Minibadge Expansion Connector	https://www.digikey.com/en/products/detail/cvilux-usa/CH87202V201/15519176				