Saintcon Badge 2024 BOM

Reference	Qty	Value	Footprint	Description	Link
BT1	1	Battery_Cell	Battery-WireConn:JST-2-SMD	Battery Connector	https://www.digikey.com/en/products/detail/jst-sales-america-inc/S2B-PH-SM4-TB/926655
C1,C7,C17,C20	4	1uF	Capacitor_SMD:C_0603_1608Metric	Ceramic Capacitor	https://www.digikey.com/en/products/detail/samsung-electro-mechanics/CL10B105KP8NFNC/3887603
C2,C6,C14,C16,C19	5	0.1uF	Capacitor_SMD:C_0603_1608Metric	Ceramic Capacitor	https://www.digikey.com/en/products/detail/samsung-electro-mechanics/CL10B104KB8NNWC/3887593
C3,C5,C8,C9,C10,C11,C12	9	10uF	Capacitor_SMD:C_0603_1608Metric	Ceramic Capacitor	https://www.digikey.com/en/products/detail/cal-chip-electronics-inc/GMC10X5R106M10NT/18151101
C4	1	47nF	Capacitor_SMD:C_0603_1608Metric	Ceramic Capacitor	https://www.digikey.com/en/products/detail/walsin-technology-corporation/0603B473K250CT/9354945
C15,C21	2	4.7uF	Capacitor_SMD:C_0603_1608Metric	Ceramic Capacitor	https://www.digikey.com/en/products/detail/samsung-electro-mechanics/CL10A475KP8NNNC/3886702
D1,D2	2	LED	LED_SMD:LED_0603_1608Metric	0603 LED	https://www.mouser.com/ProductDetail/859-LTST-S220GKT
D31	1	IR_LED	IR-LED:IR-LED-RA_IR12-21C-TR8	IR LED	https://www.digikey.com/en/products/detail/everlight-electronics-co-ltd/IR12-21C-TR8/2675842
J1,J3	2	Conn_01x02	SpringContact:2060-2	Wire Connector	https://www.aliexpress.com/item/3256806863845133.html
J2	1	USB_C_Receptacle_USB2.0	Connector_USB:USB_C_Receptacle_XKB_U262-16XN-4BVC11	USB-C Connector	https://www.mouser.com/ProductDetail/GCT/USB4105-GF-A
J5	1	Conn_01x06	FPC-Conn:FPC_6_F3311A7H121006E200	Touch Screen Ribbon Connector	https://www.digikey.com/en/products/detail/amphenol-cs-fci/F3311A7H121006E200/15287503
L2	1	L	Inductor_SMD:L_1210_3225Metric	Inductor	https://www.digikey.com/en/products/detail/inpaq-technology-co-ltd/WIP322512A-1R0MLDG/15222592
Q1	1	Q_NMOS_GSD	Package_TO_SOT_SMD:SOT-723	Mosfet	https://www.mouser.com/ProductDetail/Toshiba/SSM3K35AMFVL3F
R1,R6,R8,R11,R13	5	10k	Resistor_SMD:R_0603_1608Metric	599 Resistor	https://www.digikey.com/en/products/detail/walsin-technology-corporation/WR06X103-JTL/13239132
R2,R3	2	100k	Resistor_SMD:R_0603_1608Metric	600 Resistor	https://www.digikey.com/en/products/detail/walsin-technology-corporation/WR06X1003FTL/13241340
R4	1	10	Resistor_SMD:R_0603_1608Metric	601 Resistor	https://www.digikey.com/en/products/detail/walsin-technology-corporation/WR06X100-JTL/13240753
R5	1	317	Resistor_SMD:R_0603_1608Metric	602 Resistor	https://www.digikey.com/en/products/detail/stackpole-electronics-inc/RMCF0603FT316R/1760802
R7	1	910k	Resistor_SMD:R_0603_1608Metric	0603 Resistor	https://www.digikey.com/en/products/detail/stackpole-electronics-inc/RMCF0603FT910K/1760950
R9,R10,R12	3	2k	Resistor_SMD:R_0603_1608Metric	604 Resistor	https://www.digikey.com/en/products/detail/stackpole-electronics-inc/RMCF0603FT2K00/1761334
RN1,RN2,RN3,RN4	4	4.7k	Resistor_SMD:R_Array_Convex_4x0603	Resistor Array	https://www.digikey.com/en/products/detail/stackpole-electronics-inc/RAVF164DJT4K70/1744166
SW1	1	SW_SPDT	C&KSlideSwitches:JS202011JAQN	Power Switch	https://www.mouser.com/ProductDetail/CK/JS202011JAQN
U1	1	TCA9544A	Package_SO:TSSOP-20_4.4x6.5mm_P0.65mm	I2C Bus Switch	https://www.digikey.com/en/products/detail/texas-instruments/TCA9544APWR/4866975
U2	1	ESP32-S3-WROOM-1	Espressif:ESP32-S3-WROOM-1	ESP32S3 Module	https://www.mouser.com/ProductDetail/356-ESP32S3WRM1N16R2
U3	1	AP7361C	Package_SOT_Strange:SOT-89-5-vreg	Voltage Regulator - 3.3V, 1A	https://www.mouser.com/ProductDetail/Diodes-Incorporated/AP7361C-33Y5-13
U4	1	LCD-2_8-ST7789	FPC-Conn:FPC_40_CF31401D0R0-05-NH	LCD Ribbon Connector	https://www.mouser.com/ProductDetail/640-FFC2B35-40-G
U5	1	TSOP752xx	IR-Receiver:TSOP752xx-RA	IR Receiver	https://www.mouser.com/ProductDetail/Vishay-Semiconductors/TSOP75238TR
U6	1	AP22816BKAWT	Package_TO_SOT_SMD:SOT-23-5	USB Load Switch (overcurrent/short circuit protection)	https://www.mouser.com/ProductDetail/Diodes-Incorporated/AP22816BKAWT-7
U7	1	TPM8837C-SO1R	Package_DFN_QFN:DFN-8-1EP_2x2mm_P0.5mm_EP0.9x1.6mm	Motor Driver (for driving the CLK pins)	https://www.digikey.com/en/products/detail/TPM8837C-SO1R/5503-TPM8837C-SO1RCT-ND/22229802
U8	1	PI5USB30216C	Package_QFN_Strange:X2-QFN1616-12	USB-C Interface Controller	https://www.digikey.com/en/products/detail/diodes-incorporated/PI5USB30216CXUAEX/6202102
U9	1	BQ24296M	Package_DFN_QFN:QFN-24-1EP_4x4mm_P0.5mm_EP2.7x2.7mm_Therm	Battery Charger/Power Management/USB OTG	https://www.digikey.com/en/products/detail/texas-instruments/BQ24296MRGER/4972137
U11	1	MC3419	Package_LGA:LGA-12_2x2mm_P0.5mm	Accelerometer	https://www.mouser.com/ProductDetail/MEMSIC/MC3419
STANDOFF 1-4	4	4884	4-40 Standoff, 3/8" Tall	Threaded Standoff	https://www.mouser.com/ProductDetail/534-4884
LCD	1	LCD-2.8in		2.8in TFT, IPS w/Capacitive Touch	https://www.aliexpress.com/item/3256804475906292.html
Battery	1	Battery-1500mAh LiPo		1500mAh LiPo, 504050, JST 2.0mm Plug	https://www.aliexpress.us/item/2251832647619268.html