

Electronic BOM

Reference	Qty	Value	DNP	LCSC part #	Exclude from BOM	Footprint	Datasheet
C1,C2,C3,C12	4	1u				Capacitor_SMD:C_0402_1005Metric	
C4,C5,C6,C7,C8,C10,C11,C13,C14,C17	10	100n				Capacitor_SMD:C_0402_1005Metric	~
C9	1	4.7u				Capacitor_SMD:C_0402_1005Metric	~
C15,C16	2	15p				Capacitor_SMD:C_0402_1005Metric	~
C18,C19	2	0.1u				Capacitor_SMD:C_0402_1005Metric	~
D1,D2,D3,D4,D5,D6,D7,D8,D9,D10,D11,D12,D33,D34,D35,D36,D37,D38,D39,D40	20	1N4148W		C241939		Diode_SMD:D_SOD-123	~
D13,D14,D17,D18,D19,D21,D22,D23,D25,D26,D27,D29,D30,D31,D32,D41,D42,D43,D45,D46,D47,D48	22	WS2812B-2020		C965555		LED_SMD:LED_WS2812B-2020_PLCC4_2.0x2.0mm	https://cdn-shop.adafruit.com/product-files/4684/4684_WS2812B-2020_V1.3_EN.pdf
H1,H2,H3,H4	4	MountingHole		C2915308	Excluded from BOM	Mounting_Wuerth:Mounting_Wuerth_WA-SMSI-M3_H4mm_9774040360	~
H5,H10,H11,H12	4	MountingHole	~		Excluded from BOM	MountingHole:MountingHole_3.2mm_M3_DIN965	~
H6,H7,H8,H9	4	MountingHole	~		Excluded from BOM	MountingHole:MountingHole_2.2mm_M2_DIN965	~
J1	1	JTAG		C41376037		Connector_PinHeader_1.27mm:PinHeader_2x05_P1.27mm_Vertical_SMD	http://infocenter.arm.com/help/topic/com.arm.doc.ddi0314h/DDI0314H_coresight_components_trm.pdf
J2	1	USB_C		C3197899		Connector_USB:USB_C_Receptacle_Amphenol_12401948E412A	https://www.usb.org/sites/default/files/documents/usb_type-c.zip
J3	1	Display		C88360		Connector_FFC-FPC:Hirose_FH12-12S-0.5SH_1x12-1MP_P0.50mm_Horizontal	~
Q2	1	SS8050		C2914407		Package_TO_SOT_SMD:SOT-23	http://www.secosgmbh.com/datasheet/products/SSMPTransistor/SOT-23/SS8050.pdf
R1,R4,R13	3	10k				Resistor_SMD:R_0402_1005Metric	~
R2,R3,R5,R6	4	27,4				Resistor_SMD:R_0402_1005Metric	~
R7	1	33				Resistor_SMD:R_0402_1005Metric	~
R11	1	10				Resistor_SMD:R_0402_1005Metric	~
R12	1	1k				Resistor_SMD:R_0402_1005Metric	~
SW1,SW2,SW3,SW4,SW5,SW6,SW7,SW8,SW9,SW12,SW13,SW14,SW16,SW17,SW18,SW19,SW20,SW21,SW22,SW23	20	Kailh choc v2				PCM_Switch_Keyboard_Hotswap_Kailh:SW_Hotswap_Kailh_Choc_V2	~
DISPLAY	1	HS HS20HS072RX		C5329582			
SW10,SW11	2	RotaryEncoder_Switch		C18164805		Rotary_Encoder:RotaryEncoder_Bourns_Vertical_PEC12R-3x17F-Sxxxx	~
SW15	1	RESET		C221678		Button_Switch_SMD:SW_Push_1P1T_NO_CK_KMR2	~
SW24,SW25	2			C42416244		Button_Switch_THT:SW_PUSH_6mm	~
U1	1	AP2112K-3.3		C51118		Package_TO_SOT_SMD:SOT-23-5	https://www.diodes.com/assets/Datasheets/AP2112.pdf
U2	1	RP2040		C2040		Package_DFN_QFN:QFN-56-1EP_7x7mm_P0.4mm_EP3.2x3.2mm	https://datasheets.raspberrypi.com/rp2040/rp2040-datasheet.pdf
U4	1	SN74LV1T34DBV		C100024		Package_TO_SOT_SMD:SOT-23-5	https://www.ti.com/lit/ds/symlink/sn74lv1134.pdf
U5	1	W25Q128JVP		C190862		Package_SON:WSON-8-1EP_6x5mm_P1.27mm_EP3.4x4.3mm	https://www.winbond.com/resource-files/w25q128jv_dtr%20revc%2003272018%20plus.pdf
Y1	1	12MHz		C20625731		Crystal:Crystal_SMD_Abraccon_ABM8AIG-4Pin_3.2x2.5mm	~