Component	Description	Part	References	Value	Footprint	Quantity Per	Datasheet	DigiKey Part Number	Manufacturer Part Number	Mouser Price/Stock	Mouser Part	Manufacturer	Arrow Part N	Height	Arrow Price/Stock
1	Unpolarized capacitor, small symbol	C_Small	C19 C20	27p	C_0402_1005Metric	2		399-1016-2-ND	C0402C270J5GACTU						
2	Unpolarized capacitor, small symbol	C_Small	C22 C23	1000p	C_0402_1005Metric	2		490-4761-2-ND	GCM155R71H102KA37D						
3	Unpolarized capacitor, small symbol	C_Small	C1 C2 C7 C8 C9 C10 C11 C12 C13 C15 C17 C18	0.1u	C_0402_1005Metric	12		490-6328-2-ND	GRM155R71C104KA88J						
4	Unpolarized capacitor, small symbol	C_Small	C6	1u	C_0603_1608Metric	1		587-1241-2-ND	EMK107B7105KA-T						
5	Unpolarized capacitor, small symbol	C_Small	C3 C4 C14 C16	4.7u	C_0603_1608Metric	4		1276-1044-2-ND	CL10A475KP8NNNC						
6	Unpolarized capacitor, small symbol	C_Small	C21 C24 C25 C26 C27	10u	C_0805_2012Metric	5		490-5523-2-ND	GRM218R61E106KA73L						
7	Unpolarized capacitor, small symbol	C_Small	C5	100u	C_1210_3225Metric	1		1276-3399-2-ND	CL32X107MQVNNNE						
8	Schottky diode	D_Schottky	D3	BAT30F4	D_0201_0603Metric	1		497-15253-2-ND	BAT30F4						
9	Schottky diode	D_Schottky	D2 D10	ESDA25P35-1U1M	D_0603_1608Metric	2		497-16913-2-ND	ESDA25P35-1U1M						
10	Light emitting diode	LED	D4 D6	GREEN	LED_0603_1608Metric	2		160-1446-2-ND	LTST-C191GKGKT						
11	Light emitting diode	LED	D5 D7	RED	LED_0603_1608Metric	2		160-1447-2-ND	LTST-C191KRKT						
12	Schottky diode	D_SchottkyP	D1 D8 D9	SS14	D_SMA	3		SS14TR-ND	SS14						
13	Generic connector, single row, 01x03, script generated	Conn_01x03	J4	Conn_01x03	PinHeader_1x03_P2.54mm_Vertical	1		S1011EC-40-ND	PRPC040SAAN-RC						
14	Generic connector, double row, 02x13, odd/even pin numbering	Conn_02x13_Odd_Even	J2	Conn_02x13	PinHeader_2x13_P2.54mm_Vertical	1		S2011EC-40-ND	PRPC040DAAN-RC						
15	Generic connector, double row, 02x13, top/bottom pin	Conn_02x13_Top_Bottom	J6	Conn_02x13	PinHeader_2x13_P2.54mm_Vertical	1		S2011EC-40-ND	PRPC040DAAN-RC						
16	Micro SD Card Socket	Micro_SD_Card	J3	Micro_SD_Card	microSD_HC_Molex_104031-0811	1	http://katalo	WM6357TR-ND	1040310811						
17	USB 2.0-only Type-C Receptacle connector	USB_C_Receptacle_USB2.0	J1	USB_C_Receptacle_USB2.0	USB_C_Receptacle_GCT_USB4085	1	https://www	2073-USB4085-GF-ATR-ND	USB4085-GF-A						
18	Inductor, small symbol	L_Small	L1 L2	1K@100MHz	L_0603_1608Metric	2		732-4670-2-ND	742792662						
19	50V Vds, 0.22A Id, N-Channel MOSFET, SOT-23	BSS138	Q1 Q2	BSS138	SOT-23	2	https://www	BSS138LT1GOSTR-ND	BSS138LT1G						
20	0.7A Ic, 20V Vce, Low Voltage High Current NPN Transi	S8050	Q3 Q4 Q5	S8050	SOT-23	3	http://www	MMBT3904-FDITR-ND	MMBT3904-7-F						
21	Resistor, US symbol	R_US	R14 R23 R25 R31	0	R_0603_1608Metric	4		311-0.0GRTR-ND	RC0603JR-070RL						
22	Resistor, US symbol	R_0P	R2 R29 R30	0	R_0603_1608Metric	3		311-0.0GRTR-ND	RC0603JR-070RL						
23	Resistor, US symbol	R_US	R10 R11 R12	33	R_0402_1005Metric	3		311-33.0LRTR-ND	RC0402FR-0733RL						
24	Resistor, US symbol	R_US	R15 R16 R26 R27	64.9	R_0402_1005Metric	4		RMCF0402FT64R9CT-ND	RMCF0402FT64R9						
25	Resistor, US symbol	R_US	R6 R24 R32	1K	R_0402_1005Metric	3		311-1.0KLRTR-ND	RC0402JR-071KL						
26	Resistor, US symbol	R_US	R13	2.2K	R_0402_1005Metric	1		P2.20KLTR-ND	ERJ-2RKF2201X						
27	Resistor, US symbol	R_US	R4	2.7K	R_0402_1005Metric	1		311-2.70KLRTR-ND	RC0402FR-072K7L						
28	Resistor, US symbol	R_US	R3 R7 R8 R9 R17 R18 R19 R20 R21 R22 R28	10K	R_0402_1005Metric	11		311-10.0KLRTR-ND	RC0402FR-0710KL						
29	Resistor, US symbol	R_US	R1 R5	12K	R_0402_1005Metric	2		311-12.0KLRTR-ND	RC0402FR-0712KL						
30	Resistor, US symbol	R_US	R33 R34 R35	100K	R_0402_1005Metric	3		RMCF0402JT100KCT-ND	RMCF0402JT100K						
31	Push button switch, generic, two pins	SW_Push	SW1	BOOT	SW_Tactile_SPST_Angled_PTS645Vx83-2LFS	1		CKN9121-ND	PTS645VH83-2 LFS						
32	Push button switch, generic, two pins	SW_Push	SW2	EN	SW_Tactile_SPST_Angled_PTS645Vx83-2LFS	1		CKN9121-ND	PTS645VH83-2 LFS						
33	1A Low Dropout regulator, positive, 3.3V fixed output	AP7361C-33E	U8 U9	AP7361C-33E	SOT-223-3_TabPin2	2	https://www	AP7361C-33E-13DITR-ND	AP7361C-33E-13						
34	Common Mode Filter & ESD Prot. USB uQFN6 STMicro	ECMF02-2AMX6	U6	ECMF02-2AMX6	ST_UQFN-6L_1.5x1.7mm_Pitch0.5mm	1	http://www	497-10773-2-ND	ECMF02-2AMX6	https://www.mouser.co.uk/Prod	511-ECMF02	STMicroelectr	ECMF02-2AM	0.55	https://www.arrow.com/en/products/ecmf02-2amx6/stmicroelectronics
35		ESP32-WROOM	U1	ESP32-WROOM	ESP32-WROOM-32	1		1904-1023-2-ND	ESP32-WROOM-32D						
36	Hi Speed Double Channel USB UART/FIFO, LQFP-64	FT2232HL	U2	FT2232HL	LQFP-64_10x10mm_P0.5mm	1		768-1024-2-ND	FT2232HL-REEL						
37	Serial EEPROM, 93 Series, 5.0V, DIP-8/SOIC-8	93CxxA	U5	93C46	SOIC-8_3.9x4.9mm_P1.27mm	1	http://ww1	497-8590-5-ND	M93C46-WMN6P						
38	STMicroelectronics STL6N3LLH6 N-channel MOSFET Tr	STL6N3LLH6	U3	STL6N3LLH6	POWERFLAT-2X2	1	https://www	497-13651-2-ND	STL6N3LLH6	https://www.mouser.co.uk/Prod	511-STL6N3L	STMicroelectr	STL6N3LLH6		https://www.arrow.com/en/products/stl6n3llh6/stmicroelectronics
39	USB type-C port protection	TCPP01-M12	U4	TCPP01-M12	QFN-12-1EP_3x3mm_P0.5mm_EP1.65x1.65mm	1	https://www	497-TCPP01-M12TR-ND	TCPP01-M12	https://www.mouser.co.uk/Prod	511-TCPP01	STMicroelectr	TCPP01-M12	1	https://www.arrow.com/en/products/tcpp01-m12/stmicroelectronics
40	6 channel EMI filters with integrated ESD protection	TPD6F003	U7 U10 U11 U12 U13	TPD6F003	Texas_R-PWSON-N12_EP0.4x2mm	5	http://www	296-25802-2-ND	TPD6F003DQDR						
41	Two pin crystal	Crystal	Y1	12MHz	Crystal_SMD_HC49-SD	1		535-9869-2-ND	ABLS2-12.000MHZ-D4Y-T						

Component Groups:	41
Component Count:	100
Fitted Components:	100
Number of PCBs:	1
Total components:	100
Schematic Version:	v1.0
Schematic Date:	2020-08-05
PCB Variant:	default
BoM Date:	2020-08-09 19:41
Schematic Source:	BlueRetroCore.sch
KiCad Version:	Eeschema (5.1.6)-1