

Loop Switcher BOM								
Item #	Reference Designator	Qty	Manufacturer	Mfg Part #	Description / Value	Package/Footprint	Type	Instructions / Notes
1	C1 C2 C4 C8 C9 C10 C11 C12 C13 C14	10	KEMET	C320C104K5R5TA7317	0.1 µF ±10% 50V Ceramic Capacitor X7R Radial	2.5mm Radial	THRU-HOLE	
2	C3 C5 C6 C7	3	Panasonic	ECA-1CM100I	10 µF 16 V Aluminum Electrolytic Capacitor Radial	2.5mm Pitch	THRU-HOLE	
3	D1	1	Diotec Semiconductor	1N4001	DIODE STD DO-41 50V 1A	DO-41	THRU-HOLE	
4	D2	1	Kingbright	WP7113ID	LED RED DIFFUSED T-1 3/4 T/H	T-1 3/4	THRU-HOLE	
5	J1 J2 J3 J4 J5 J6 J7 J8 J9 J10 J11 J12 J13 J14 J15 J16 J17 J18 J19 J20 J22 J23 J24 J25 J26 J27 J28 J29 J31 J32 J33 J34 J35	33	JST	B2B-XH-A	CONN HEADER VERT 2POS 2.5MM	2POS	THRU-HOLE	
6	J30	1	Sullins	PREC002SAAN-RC	Connector Header Through Hole 2 position 0.1"	2POS	THRU-HOLE	
7	J21	1	Sullins	PREC003SAAN-RC	Connector Header Through Hole 3 position 0.1"	3POS	THRU-HOLE	
8	J36	1	CUI Devices	PJ-202A	Power Barrel Jack 2.10mm ID, 5.50mm OD	3POS	THRU-HOLE	
9	Q1 Q2	2	Onsemi	2N7000	MOSFET TO92 N 60V 0.2A 50HM 150C	TO-92	THRU-HOLE	
10	R5	1	YAGEO	CFR-25JR-52-120R	RES 120 OHM 5% 1/4W AXIAL	Axial	THRU-HOLE	
11	R6	1	YAGEO	CFR-25JR-52-270R	RES 270 OHM 5% 1/4W AXIAL	Axial	THRU-HOLE	
12	R1 R2 R3 R4 R7 R8 R9	7	YAGEO	CFR-25JR-52-10K	RES 10K OHM 5% 1/4W AXIAL	Axial	THRU-HOLE	
13	U2	1	Renesas	ICL7660SIPAZ	IC REG CHARGE PUMP INV 45MA 8DIP	DIP8	THRU-HOLE	
14	U4	1	Texas Instruments	LM7805CT/NOPB	IC REG LINEAR 5V 1A TO220-3	TO-220	THRU-HOLE	
15	U3	1	Analog Devices/Maxim	MAX3485CPA+	Transceiver Half RS422, RS485 8-PDIP	DIP8	THRU-HOLE	
16	U7	1	Microchip	MCP23017-E/SP	IC XPNDR 1.7MHZ I2C 28SDIP	DIP28	THRU-HOLE	
17	U5 U6	2	Microchip	MT8816AP1	IC ANLG SWITCH ARRAY 8X16 44PLCC	PLCC44	J-LEAD	Use PLCC44 Through Hole sockets (Item 19)
18	U1	2	Sullins	PPTC081LFBN-RC	CONN HDR 8POS 0.1 TIN PCB	8POS	THRU-HOLE	U1 should be populated with two 8 pin headers to let the user plug in an ESP8266 "WeMOS D1 Mini" module. For best alignment, attach two headers to a WeMOS module and use as a jig for soldering placement.
19	Sockets U5 U6	2	Adam Tech	PLCC-44-AT	44 (4 x 11) Pos PLCC Socket Tin Through Hole	PLCC44	THRU-HOLE	Sockets for U5 and U6