

Idn	Reference Designator	Item Type	Item Package	Item Desc	Qty	MFG Name	MFG P/N	Notes
1	TON V1.2	PCB	-	PCB, FR4, 1.6MM, BLUE SOLDERMASK, HASL, WHITE SILKSCREEN	1			TON_GERBERS_V1-2.ZIP
2	C1, C5, C6, C26, C28, C31	CERAMIC-CAP	0603	CAP CER 0.1UF 16V X7R 0603 10%	6	YAGEO	CC0603KRX7R7BB104	
3	C2, C3, C10, C11, C13, C14, C20, C21	CERAMIC-CAP	0402	CAP CER 12PF 50V NP0 0402 5%	8	YAGEO	CC0402JRNPO9BN120	
4	C8, C9, C29	CERAMIC-CAP	0603	CAP CER 2.2UF 6.3V X5R 0603 10%	3	YAGEO	CC0603KRX5R5BB225	
5	C4, C7, C27, C30, C32, C34	CERAMIC-CAP	0603	CAP CER 1UF 6.3V X5R 0603 10%	6	YAGEO	CC0603KRX5R5BB105	
6	C12, C18, C25	CERAMIC-CAP	0402	CAP CER 1UF 6.3V X5R 0402 10%	3	YAGEO	CC0402KRX5R5BB105	
7	C15, C17, C22, C24	CERAMIC-CAP	0402	CAP CER 0.1UF 10V X5R 0402 10%	4	YAGEO	CC0402KRX5R6BB104	
9	C16, C23	CERAMIC-CAP	0402	CAP CER 220PF 50V NP0 0402 5%	2	MURATA	GRM1555C1H221JA01	
10	C19	CERAMIC-CAP	0402	CAP CER 5.6PF 50V NP0 0402	1	MURATA	GRM1555C1H5R6CA01	
11	C33	TANTALUM-CAP	1206	CAP TANT 10UF 1206 16V 10%	1	KEMET	T491A106K016AT	
12	D1	DIODE	SOD-323	DIODE SCHOTTKY 3.0A BAT60JFILM	1	STMICROELECTRONICS	BAT60JFILM	
13	EXT-1, EXT2	HEADER-CONN	PTH-18	CONNECTOR HEADER, FEMALE, 1X18, 2.54 PITCH	2	SULLINS CONNECTOR SOLUTIONS	PPTC181LFBN-RC	
						HARWIN	M20-7821842	
14	J1	USB-CONN	SMD-5	CONNECTOR USB MICRO AB RECEPTACLE	1	MOLEX	47589-0001	
15	J2	CONNECTOR	-	NOT PLACED	0	-	-	NOT PLACED
16	J3	HEADER-CONN	PTH-2	CONNECTOR HEADER, MALE, 1X2, 2.54MM PITCH	1	3M	961102-6404-AR	CAN BE USED SINGLE ROW MALE 2.54MM BREAKABLE PIN HEADER CONNECTOR COMMON
						FCI	77311-818-02LF	
17	L1	FERRITE-CHIP	0603	FERRITE CHIP 120 OHM 500MA 0603	1	MURATA	BLM18AG121SN1D	
						TAIYO YUDEN	BK1608HS121-T	
18	LED	LED-RGB	0606	LED RGB 0606	1	LITE-ON	LTST-C19HE1WT	
19	ON	LED	0603	LED GREEN 0603	1	LITE-ON	LTST-C191KGKT	
20	Q1, Q3	MOSFET	SSOT-3	MOSFET FDN340P P-CHANNEL 20V 2A	2	FAIRCHILD SEMICONDUCTOR	FDN340P	
21	Q2	MOSFET	SOT-23-3	MOSFET BSS123 N-CHANNEL	1	FAIRCHILD SEMICONDUCTOR	BSS123	
22	R1, R3, R4	RESISTOR-DISCRETE	0402	RES 0402 100 OHM 5% 1/16W	3	YAGEO	RC0402JR-07100RL	
23	R2	RESISTOR-DISCRETE	0402	RES 0402 56.0K OHM 1% 1/16W	1	YAGEO	RC0402FR-0756KL	
24	R5	RESISTOR-DISCRETE	0402	RES 0402 12.0K OHM 1% 1/16W	1	YAGEO	RC0402FR-0712KL	
25	R6, R7, R20	RESISTOR-DISCRETE	0603	RES 0603 3.3K OHM 5% 1/10W	3	YAGEO	RC0603JR-073K3L	
26	R8, R11	RESISTOR-DISCRETE	0603	RES 0603 200 OHM 5% 1/10W	2	YAGEO	RC0603JR-07200RL	
27	R9, R10	RESISTOR-DISCRETE	0603	RES 0603 100 OHM 5% 1/10W	2	YAGEO	RC0603JR-07100RL	
28	R12, R14, R15, R19	RESISTOR-DISCRETE	0603	RES 0603 47K OHM 5% 1/10W	4	YAGEO	RC0603JR-0747KL	
29	R13	RESISTOR-DISCRETE	0603	RES 0603 470K OHM 5% 1/10W	1	YAGEO	RC0603JR-07470KL	
30	R16, R17, R21, R22	RESISTOR-DISCRETE	0603	RES 0603 100K OHM 5% 1/10W	4	YAGEO	RC0603JR-07100KL	
31	R18	RESISTOR-DISCRETE	0603	RES 0603 22K OHM 5% 1/10W	1	YAGEO	RC0603JR-0722KL	
32	RESET, USER	TACTILE-SWITCH	SMD-4	TACTILE SWITCH SPST-NO RIGHT ANGLE	2	E-SWITCH	TL3330AF130QG	
33	SWD	CONNECTOR	-	NOT PLACED	0	-	-	NOT PLACED
34	U1	IC	LQFP-64	IC MCU STM32F405RGT6	1	STMICROELECTRONICS	STM32F405RGT6	
35	U2	IC	VFQFN-40	IC BLUETOOTH CC2541F256	1	TEXAS INSTRUMENTS	CC2541F256RHA	
36	U3	MISCELLANEOUS	0805	MATCHED BALUN 2.45 GHZ	1	JOHANSON TECHNOLOGY	2450BM15A0002	
37	U4	IC	QFN-32	IC WI-FI ESP8266EX	1	ESPRESSIF	ESP8266EX	
38	U5	IC	SOIC-8	IC FLASH 16MBIT QUAD SPI	1	WINBOND ELECTRONICS	W25Q16DVSNI	
39	U6	IC	LGA-20	IC IMU 9-AXIS BMX055	1	BOSCH SENSORTIC	BMX055	
40	U7	IC	SOT-23-5	IC CONTROLLER LI-ION MCP73831	1	MICROCHIP TECHNOLOGY	MCP73831T-2ACI/OT	
41	U8	IC	SOT-223-3	IC LDO VOLTAGE REGULATOR 3.3V	1	DIODES INCORPORATED	AP7361C-33E-13	
42	U9	IC	SOT-223-3	IC LDO VOLTAGE REGULATOR 5.0V	1	DIODES INCORPORATED	AZ1117EH-5.0	
43	Y1	CRYSTAL	SMD-4	CRYSTAL ABM3B 8 MHZ	1	ABRACON	ABM3B-8.000MHZ-10-1UT	
44	Y2	CRYSTAL	SMD-4	CRYSTAL FA-20H 32 MHZ	1	EPSON	FA-20H 32.0000MF20X-K3	
45	Y3	CRYSTAL	SMD-2	CRYSTAL 32.768 KHZ	1	ECS	ECS-.327-12.5-34B-TR	
46	Y4	CRYSTAL	SMD-4	CRYSTAL FA-20H 26 MHZ	1	EPSON	FA-20H 26.0000MF10Z-AC3	