

Part_Number	Quantity	Designator	Description	Manufacturer1	Manufacturer_Part_Number
100-00023	1	100-00023	PCB, EC Driver, HP		
590-00006	1	AT1	Antenna, Bluetooth, 2.4	Johanson Technology	2450AT43B100E
510-00090	9	C1, C2, C33, C178, C17	Cap, Alum, 100µF, +/-2%	United Chemi-Con (Nippon)	EMVE630ADA101MJA0
510-00001	46	C3, C4, C5, C6, C7, C8,	Cap, Cer, 0.1uF, 50V, +	Murata Electronics	GRM155R61H104KE14
510-00100	2	C11, C83	Cap, Cer, 2.2pF, 50V, +	Murata Electronics	GRM1555C1H2R2BA01
510-00084	7	C12, C13, C20, C21, C3	Cap, Cer, 0.1uF, 100V,	Murata Electronics	GRM155R62A104KE14
510-00072	7	C18, C154, C196, C200	Cap, Cer, 27pF, 50V, +	Murata Electronics	GRM1555C1H270JA01
510-00104	10	C22, C23, C24, C25, C1	Cap, Cer, 10uF, 100V, +	AVX Corp	22201C106MAT2A
510-00024	2	C26, C31	Cap, Cer, 0.047uF, 50V	Murata Electronics	GRM155R71H473KE14
510-00047	1	C27	Cap, Cer, 2200pF, 100V	Murata Electronics	GCM155R72A222KA37
510-00111	1	C28	Cap, Cer, 220pF, 100V,	Kemet	C0402C221J1GAC7867
510-00016	1	C30	Cap, Cer, 4.7uF, 50V, +	TDK Corp	CGA4J3X5R1H475K125
510-00044	1	C34	Cap, Cer, 0.047uF, 100V	Kemet	C0603C473K1RACAUT
510-00031	3	C35, C62, C63	Cap, Cer, 0.22uF, 50V,	AVX Corp	08055C224KAT2A
510-00009	5	C38, C39, C40, C41, C8	Cap, Cer, 0.01uF, 50V,	Murata Electronics	GRM155R71H103KA88
510-00107	42	C42, C43, C94, C95, C9	Cap, Cer, 10pF, 50V, +	Murata Electronics	GRM0335C1H100JA01
510-00015	1	C57	Cap, Cer, 2.2uF, 16V, +	TDK Corp	C1005X5R1C225M050
510-00014	1	C58	Cap, Cer, 4.7uF, 100V,	TDK Corp	C3225X7S2A475M200
510-00056	4	C59, C61, C185, C191	Cap, Cer, 1000PF, 50V,	Kemet	C0402C102K5RACTU
510-00022	3	C60, C85, C87	Cap, Cer, 10uF, 6.3V, +	Kemet	C0603C106M9PACTU
510-00055	2	C64, C65	Cap, Cer, 22uF, 25V, +	Murata Electronics	GRM21BR61E226ME44
510-00004	1	C66	Cap, Cer, 1uF, 50V, +/-	Samsung Electro-Mech	CL10A105KB8NNNC
510-00013	1	C67	Cap, Cer, 10uF, 50V, +	Murata Electronics	GRM32ER71H106KA12
510-00008	4	C68, C91, C93, C203	Cap, Cer, 10pF, 50V, +	Murata Electronics	GRM1555C1H100JA01
510-00023	1	C71	Cap, Cer, 2.2uF, 35V, +	Murata Electronics	GRM188R6YA225KA12
510-00018	1	C74	Cap, Cer, 2200pF, 50V,	Murata Electronics	GRM155R71H222KA01
510-00003	6	C75, C77, C86, C146, C	Cap, Cer, 1uF, 25V, +/-	Murata Electronics	GRM155R61E105MA12
510-00040	2	C78, C79	Cap, Cer, 18pF, 50V, +	Murata Electronics	GRM1555C1H180JA01
510-00108	2	C82, C84	Cap, Cer, 1.2pF, 50V, +	Murata Electronics	GRM1555C1H1R2BA01
510-00019	1	C90	Cap, Cer, 0.22uF, 16V,	Samsung Electro-Mech	CL05B224KO5NNNC
510-00017	1	C92	Cap, Cer, 100pF, 50V, +	Murata Electronics	GRM1555C1H101JA01
510-00083	4	C140, C141, C162, C16	Cap, Cer, 1uF, 100V, +	Murata Electronics	GRJ21BC72A105KE11L
510-00112	2	C142, C143	Cap, Alum, 100µF, +/-2%	Cornell Dubilier Electr	AFK107M63G24T-F
510-00026	3	C184, C190, C207	Cap, Cer, 10uF, 35V, +	Murata Electronics	GRM21BR6YA106KE43
510-00051	1	C233	Cap, Cer, 4.7uF, 25V, +	Murata Electronics	GRM21BR61E475KA12
630-00068	6	D1, D30, D34, D35, D3	Diode, TVS, 78V, 400W	Littelfuse	SMAJ78CA
610-00028	1	D2	LED, RGB, Clear, 0404	Lumex	SML-LX0404SIUPGUSE
630-00058	2	D3, D5	Diode, TVS, 5.5V, SOT-	Diodes Inc	DRTR5V0U2SR-7
610-00001	1	D6	LED, Yellow/Clear, 590	Lumex	SML-LX0402SYC-TR
610-00003	3	D7, D10, D17	LED, Green/Clear, 574	Lumex	SML-LX0402SUGC-TR
610-00021	1	D8	LED, White/Diffused 2	Rohm Semiconductor	SCMP13WBC8W1
610-00002	3	D9, D11, D14	LED, Red/Clear, 636nm	Lumex	SML-LX0402SIC-TR
630-00046	2	D18, D19	Diode, Schottky, 100V,	Diodes Inc	B2100-13-F
630-00002	1	D20	Diode, Schottky, 60V, 2	Rohm Semiconductor	RB060M-60TR
630-00008	6	D21, D22, D23, D26, D	Diode, Switching, 100V	Micro Commercial Cor	1N4148W-TP
630-00042	2	D25, D29	Diode, Schottky, 40V, 1	STMicroelectronics	STPS1L40A

150-00009	1	J1	Screw, Terminal, Snap-	Keystone Electronics	7774
320-00047	1	J4	Conn, Term Block HDR	Molex	39512-1002
320-00048	1	J5	Conn, Term Block HDR	Metz Connect	31382108
320-00004	1	J7	Conn, Microcoaxial RF	Molex	73412-0110
560-00077	1	L1	Inductor, Fixed, 4.7nH,	Murata Electronics	LQP15MN4N7B02D
560-00050	1	L17	Inductor, Multilayer, 1	Murata Electronics	LQM21PN1R0MCO0D
560-00067	1	L18	Inductor, Fixed, 8.2μH,	Abracon Corp	ASPI-7318-8R2M-T
560-00068	1	L19	Inductor, Fixed, 22μH,	Eaton	HCM1103-220-R
560-00063	1	L20	Inductor, Shielded, Co	Coilcraft	LPD6235-682MRB
560-00061	2	L22, L23	Inductor, Chip, 3.6nH,	Coilcraft	0402HP-3N6XGEU
560-00007	5	L26, L27, L28, L29, L30	Ferrite Bead, 120 Ohm	Würth Elektronik	7427927311
560-00039	2	L31, L32	Inductor, Fixed, 10μH,	Coilcraft	XAL1010-103MEB
560-00026	1	L33	Ferrite Bead, 220 ohm,	Murata Electronics	BLM21PG221SN1D
120-00013	4	LP1, LP2, LP3, LP5	Light Pipe, 3mm, RA, S	Bivar	SLP3-200-100-F
630-00026	11	Q1, Q2, Q3, Q4, Q5, Q	Mosfet, N-CH, 50V, 20	ON Semiconductor	BSS138LT1G
630-00007	3	Q9, Q12, Q15	Mosfet, P-CH, 30V, 4.3	Alpha & Omega Semi	AO3407A
630-00081	2	Q13, Q14	Mosfet, N-CH, 100V, 8	Infineon	BSC070N10NS5ATMA
630-00070	4	Q19, Q20, Q21, Q22	Mosfet, N-CH, 80V, 60	Vishay	SIR880ADP-T1-GE3
630-00065	4	Q42, Q43, Q44, Q45	Mosfet, N-CH, 60V, 30	Infineon	BSC014N06NSATMA1
630-00004	1	Q51	Mosfet, P-CH, 100V, 2	Vishay	SI7489DP-T1-GE3
520-00078	1	R1	Res, TkF, 499 Ohm, +/-	Rohm Semiconductor	MCR01MRTF4990
520-00237	1	R2	Res, TkF, 226 Ohm, +/-	Stackpole Electronics I	RMCF0402FT226R
520-00238	1	R3	Res, TkF, 137 Ohm, +/-	Stackpole Electronics I	RMCF0402FT137R
520-00011	30	R4, R5, R6, R13, R14, R	Res, TkF, 100K Ohm, +	KOA Electronics	RK73H1ETTP1003F
520-00185	1	R7	Res, TkF, 402 Ohm, +/-	Samsung Electro-Mech	RC1005F4020CS
520-00211	2	R8, R10	Res, TkF, 324 Ohm, +/-	Stackpole Electronics I	RMCF0402FT324R
520-00083	1	R9	Res, TkF, 220 Ohm, +/-	KOA Electronics	RK73H1ETTP2200F
520-00189	2	R11, R12	Res, TkF, 806 Ohm, +/-	Samsung Electro-Mech	RC1005F8060CS
520-00202	1	R15	Res, TkF, 118K Ohm, +	Samsung Electro-Mech	RC1005F1183CS
520-00104	2	R16, R57	Res, TkF, 49.9K Ohm, +	Rohm Semiconductor	MCR01MRTF4992
520-00284	3	R17, R62, R63	Res, TkF, 383K Ohm, +	Samsung Electro-Mech	RC1005F3833CS
520-00283	2	R18, R19	Res, TkF, 294K Ohm, +	Samsung Electro-Mech	RC1005F2943CS
520-00287	1	R20	Res, TkF, 2.4M Ohm, +	Rohm Semiconductor	KTR03EZPF2404
520-00004	7	R21, R22, R129, R130,	Res, TnF, 10K Ohm, +/-	Panasonic Electronic C	ERA-2AEB103X
520-00178	6	R23, R24, R31, R32, R3	Res, TkF, 49.9 Ohm, +/-	Samsung Electro-Mech	RC1005F49R9CS
520-00052	1	R27	Res, TkF, 39.2K Ohm, +	KOA Electronics	RK73H1JTDD3922F
520-00290	3	R29, R30, R144	Res, TkF, 0.11 Ohm, +/-	TE Connectivity	RLP73K3AR11FTDF
520-00319	1	R35	Res, TkF, 0.003 Ohm, +	Rohm Semiconductor	PMR18EZPFV3L00
520-00256	1	R36	Res, TkF, 22K Ohm, +/-	Samsung Electro-Mech	RC1005F223CS
520-00311	1	R37	Res, TkF, 887K Ohm, +	Samsung Electro-Mech	RC1005F8873CS
520-00265	1	R38	Res, TkF, 665K Ohm, +	Stackpole Electronics I	RMCF0402FT665K
520-00197	1	R39	Res, TkF, 487K Ohm, +	Samsung Electro-Mech	RC1005F4873CS
520-00282	1	R40	Res, TkF, 2.2K Ohm, +/-	Stackpole Electronics I	RHC2512FT2K20
520-00333	1	R41	Res, TkF, 7.5K Ohm, +/-	Stackpole Electronics I	RMCF0402FT7K50
520-00002	10	R42, R49, R127, R133,	Res, TkF, 10K Ohm, +/-	KOA Electronics	RK73H1ETTP1002F
520-00012	5	R44, R50, R54, R56, R1	Res, TkF, 0.0 Ohm Jum	Samsung Electro-Mech	RC1005J000CS
520-00107	3	R45, R124, R131	Res, TkF, 60.4K Ohm, +	Rohm Semiconductor	MCR01MRTF6042

520-00293	2	R46, R51	Res, TkF, 26.1K Ohm, +	Samsung Electro-Mech	RC1005F2612CS
520-00296	2	R47, R52	Res, TkF, 40.2K Ohm, +	Samsung Electro-Mech	RC1005F4022CS
520-00294	1	R48	Res, TkF, 1.18K Ohm, +	Samsung Electro-Mech	RC1005F1181CS
520-00295	1	R53	Res, TkF, 37.4K Ohm, +	Stackpole Electronics I	RMCF0402FT37K4
520-00272	3	R55, R166, R173	Res, TkF, 2.2 Ohm, +/-	Stackpole Electronics I	RMCF1206FT2R20
520-00044	1	R60	Res, TkF, 100K Ohm, +	KOA Electronics	RK73H1JTTD1003F
520-00103	2	R64, R65	Res, TkF, 1.0M Ohm, +	Rohm Semiconductor	MCR01MRTF1004
520-00030	2	R66, R67	Res, TkF, 845K Ohm, +	KOA Electronics	RK73H1ETTP8453F
520-00171	2	R68, R69	Res, TkF, 470 Ohm, +/-	Rohm Semiconductor	MCR01MRTF4700
520-00228	1	R120	Res, TkF, 274K Ohm, +	Stackpole Electronics I	RMCF0402FT274K
520-00199	1	R121	Res, TkF, 32.4K Ohm, +	Samsung Electro-Mech	RC1005F3242CS
520-00141	1	R122	Res, TkF, 649 Ohm, +/-	Samsung Electro-Mech	RC1005F6490CS
520-00084	2	R123, R125	Res, TkF, 10.7K Ohm, +	Rohm Semiconductor	MCR01MRTF1072
520-00105	1	R126	Res, TkF, 191K Ohm, +	KOA Electronics	RK73H1ETTP1913F
520-00023	1	R128	Res, TkF, 1K Ohm, +/-	KOA Electronics	RK73H1ETTP1001F
520-00085	1	R132	Res, TkF, 35.7K Ohm, +	Rohm Semiconductor	MCR01MRTF3572
520-00183	1	R134	Res, TkF, 0.0 Ohm Jumb	Rohm Semiconductor	MCR18ERTJ000
520-00157	1	R142	Res, TkF, 1 Ohm, +/-1%	Samsung Electro-Mech	RC1005F1R0CS
520-00087	2	R145, R146	Res, TkF, 1.2K Ohm, +/-	KOA Electronics	RK73H1ETTP1201F
520-00049	2	R167, R174	Res, TkF, 6.2K Ohm, +/-	KOA Electronics	RK73H1JTTD6201F
520-00273	4	R168, R169, R175, R17	Res, TkF, 10 Ohm, +/-1%	Bourns	CR1206-FX-10R0ELF
520-00276	1	R183	Res, TnF, 39K Ohm, +/-	Panasonic Electronic C	ERA-2AEB393X
520-00072	2	R186, R196	Res, TkF, 110 Ohm, +/-	Panasonic Electronic C	ERJ-3EKF1100V
520-00261	1	R187	Res, TkF, 33 Ohm, +/-1%	Bourns	CRM2512-FX-33R0ELF
110-00051	1	SH1	RF Shield Frame 0.650"	Laird Technology	BMI-S-202-F
210-00005	1	SN:	Label, Serial Number P		
420-00014	2	SW1, SW2	Switch, Tactile, SPST-N	E-Switch	TL1105JAF160Q
420-00021	1	SW4	Switch, Tactile, SPST-N	E-Switch	TL1105VF160Q
420-00032	1	SW5	Switch, Tactile, SPST-N	E-Switch	TL1105MF160Q
560-00060	2	T1, T2	Inductor, Array, 2 Coil,	Eaton	CTX100-1P-R
640-00035	4	U1, U4, U5, U24	IC, OpAmp, PGA, 560k	Linear Technology	LT1991IMS#PBF
640-00031	1	U2	IC, Surge Protection, A	Linear Technology	LTC4368IDD-2#PBF
640-00036	1	U3	IC, OpAmp, PGA, 560k	Linear Technology	LT1991AIMS#PBF
670-00026	1	U6	IC, Switching Regulator	Linear Technology	LT3988EMSE#PBF
670-00023	1	U7	IC, Buck Switching Reg	Fairchild Semiconductor	FAN5362UMP33X
640-00024	1	U8	IC, Op Amp, GP, 5.5MHz	Texas Instruments	OPA2376AIDGKR
640-00034	1	U9	IC, Voltage Reference	Analog Devices	ADR5040BKSZ-REEL7
670-00009	1	U10	IC, PWM DC/DC Converter	Linear Technology	LT3580EDD
660-00014	1	U11	IC, RF Transceiver, M	Silicon Labs	EFR32MG12P432F1024
655-00013	1	U12	IC, Flash, 8M-BIT, 104M	Macronix	MX25R8035FZUIH1
670-00030	1	U13	IC, Regulator, Dual, DC	Linear Technology	LTC3892EUH-2#PBF
665-00005	2	U14, U32	IC, Precision Monitor, I	Intersil	ISL28022FUZ-T7A
665-00010	1	U15	IC, Digital to Analog Co	Microchip Technology	MCP4726A0T-E/CH
420-00022	2	U16, U30	Relay, DPST, 350V, SO	IXYS Integrated Circuit	CPC2030N
665-00007	2	U19, U23	IC, Mosfet Driver, Half-	Linear Technology	LT1336CS#PBF
645-00019	2	U20, U38	IC, Quad 2-input and g	Nexperia	74LVC08ABQ,115
645-00013	2	U21, U39	IC, Dual Inverter, Schm	Fairchild Semiconductor	NC7WZ14P6X

645-00011	1	U22	IC, Dual 2-Input OR Ga	ON Semiconductor	NL27WZ32USG
570-00008	2	U25, U27	Sensor, Temperature, 1	Texas Instruments	LM73CIMK-1/NOPB
640-00029	3	U26, U31, U34	IC, OP amp, Differential	Linear Technology	LT1990HS8#PBF
665-00011	1	U28	IC, Digital to Analog Co	Microchip Technology	MCP4726A1T-E/CH
640-00012	1	U29	IC, Op Amp, Rail-to-Ra	Texas Instruments	OPA192IDBVR
420-00024	1	U33	Relay, SPST-NO, 100m	IXYS Integrated Circuit	CPC1017NTR
640-00019	1	U35	IC, Op Amp, RRIO with	Texas Instruments	OPA2192IDGKT
640-00037	1	U37	IC, Comparator, Dual, v	Linear Technology	LTC1843IS8#PBF
645-00005	1	U41	IC, Quad 2-input OR g	NXP Semiconductors	74LVC32ABQ,115
645-00012	1	U42	IC, Single 2-Input AND	ON Semiconductor	NL17SZ08DFT2G
620-00001	1	Y1	Crystal, 32.768kHz, 20p	Interquip Electronics	9CAA32768122TF70Q
620-00010	1	Y2	Crystal, 38.4MHz, 10pF	Abracon Corp	ABM10-165-38.400MH

Footprint
BARE_PCB
Ant2-chip-6_5mm
CAPAE110103X105L
CAPC1005X06L
CAPC1005X06L
CAPC1005X06L
CAPC1005X06L
Cap-2220L
CAPC1005X06L
CAPC1005X06L
CAPC1005X06L
CAPC2012X14L
CAPC1608X09L
CAPC2012X14L
CAPC1005X06L
Cap-0201L
CAPC1005X06L
CAPC3225X27L
CAPC1005X06L
CAPC1608X09L
CAPC2012X14L
CAPC1608X09L
CAPC3225X27L
CAPC1005X06L
CAPC1608X09L
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CAPC2012X14L
CAPAE110103X105L
CAPC2012X14L
CAPC2012X14L
DIODE-DO214AC
Led4-RGB
SOT-143
DIOC1005X06L-YELLOW
DIOC1005X06L-GRN
DIOC1005X06L-WHITE
DIOC1005X06L-RED
DIODE-DO214AA
Diode-SOD123
Diode-SOD123-2
DIODE-DO214AC

Con_term_screw4_4-40-ra
Con_hdr2x1-3_81mm-th-ra
Con_hdr8x1-3_81mm-th-ra
PCB-MLX-0734120110
INDC1005X06L
Ind-bead-0805
Ind2-ASPI7318
Ind2-HCM1103
Ind-LPD6235
INDC1005X06L
INDC1005X06L
Ind-XAL1010
Ind-bead-0805
Light_Pipe-SLP3-FF
SOT23-3
SOT23-3
TDSON127P_515x615_110_8
POWERPAK-SO8
TDSON127P_515x615_110_8
POWERPAK-SO8
RESC1005X04L
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Res-2512L
Shield-RF-1650x1650-360-SMD
SERIAL_NUMBER
SW-Tact-TL1105JA-6_35mm-ra-th
SW-Tact-TL1105VF160Q-3_85mm-ra-th
SW-Tact-TL1105MF160Q
Ind2-CTX100-1P-R
TSSOP50P490X110-10L
DFN50P-300x300-75-10-HS
TSSOP50P490X110-10L
MSOP16-0_5MM-THERM
DFN65P-200x200-55-6
TSOP65P490X110-8
SOT65P_210_110_3
DFN8-0_5MM-THERM
BGA125C50P13X13_700X700X94
SON50P_200x300_60_8-HSP
QFN50P500X500X85_HS-33L
TSSOP50P490X110-10L
SOT23-6L
SO254P-609-218-8
SOIC127P990X390-16L
QFN50P300X250X100_HS-15
SC70-6L

TSSOP50P310X90-8
SOT23-6L
SO127P193X153-61-8
SOT23-6L
SOT23-5L
SOP4-5_6X2_54MM
TSOP65P490X110-8
SOIC-08L

QFN50P300X250X100_HS-15

SC70-5L
PCB-ABRA-ABS07
CRY4-ABM10