

Part Name	Quantity	Refs	MFG Parts
Battery holder for 16mm cell battery, H=4mm max, SMT	1	BH1	KST MY-1632-02-R {KST-1618} RENATA SMTM1632.TR
Battery, Lithium, Cell 16x3.2mm, 3V, 120mAh, 1632, -30C+80C	1	BT2	Any_Mfg 16x3.2mm, 3V, 120mAh, 1632, -30C+80C Any_Mfg CR1632 {-20+70C, 120-140mAh} JL_World (Sener) SBR1632 Panasonic_batteries BR-1632/DBN
Cap., 100nF, 10V, X7R/X5R, 10%, 0402	102	C1,C10,C100,C105,C106,C107,C109,C110,C112,C114,C115,C12,C121,C123,C124,C126,C128,C130,C132,C134,C136,C137,C138,C14,C141,C143,C144,C145,C147,C149,C150,C152,C153,C154,C155,C156,C159,C160,C161,C162,C164,C166,C167,C169,C171,C172,C175,C178,C179,C182,C185,C188,C198,C200,C201,C202,C203,C204,C205,C25,C26,C29,C3,C30,C31,C35,C37,C4,C41,C42,C43,C47,C48,C51,C52,C53,C54,C57,C58,C62,C63,C64,C65,C69,C7,C70,C71,C72,C75,C76,C77,C78,C81,C82,C83,C84,C85,C86,C88,C90,C91,C98	Epcos B37621K8104K060 Fenghua 0402B104K[100]160]NT Fenghua 0402B104K100NT Fenghua 0402B104K160NT Frontier Electronics 0402G[100]160]X104KCT Kemet (Yageo) C0402C104K8PAC(7867) Kemet (Yageo) C0402C104K8PAC7867 Kemet (Yageo) C0402C104K8RAC(7867) Murata GRM155R61A104KA01D Murata GRM155R61C104KA88D Murata GRM155R[6]7]1A104KA01D Murata GRM155R71A104KA01D Murata GRP155R61A104KA01E SAMSUNG_ELECTRO CL05A104KO5NNNC SAMSUNG_ELECTRO CL05A104K[O]P]5NNN[C]E SAMSUNG_ELECTRO CL05A104KP5NNNC SAMSUNG_ELECTRO CL05A104KP5NNNC SAMSUNG_ELECTRO CL05B104KO5NNNC SAMSUNG_ELECTRO CL05B104K[O]P]5NNN[C]E SAMSUNG_ELECTRO CL05B104KP5NNNC SAMSUNG_ELECTRO CL05B104KP5NNND SAMSUNG_ELECTRO CL05B104KPNC Taiyo_yuden LMK105BJ104KV-F TDK C1005JB1A104KT TDK C1005X7R1C104K050BC Walsin 0402B104K100CT Walsin 0402[B]X]104K100CT Walsin 0402X104K100CT Yageo (Brightking) 2238 247 156 49 Yageo (Brightking) CC0402KRX[5]7]R6BB104 Yageo (Brightking) CC0402KRX[5]7]R6BB104 Yageo (Brightking) CC0402KRX5R6BB104 Yageo (Brightking) CC0402KRX7R6BB104
Cap., 2.2uF, 10V, X5R, 10%, 0402	3	C101,C102,C99	CAL-CHIP GMC04X5R225K10NT Murata GRT155R61A225KE01D SAMSUNG_ELECTRO CL05A225KP5NNNC SAMSUNG_ELECTRO CL05A225KP5N[N]S]NC SAMSUNG_ELECTRO CL05A225KP5NSNC TDK C1005X5R1A225K050BC Walsin 0402X225K100CT Yageo (Brightking) CC0402KRX5R6BB225
Cap., 4.7uF, 10V, 20%, X5R, 0402	23	C103,C104,C111,C113,C116,C117,C118,C119,C120,C163,C165,C168,C170,C173,C174,C176,C177,C180,C181,C183,C184,C36,C38	Murata GRM155R61A475MEAAD SAMSUNG_ELECTRO CL05A475KP5NRNC TDK C1005X5R1A475K050BC Yageo (Brightking) CC0402KRX5R6BB475
Cap., 10uF, 6.3V, X5R/X7R, 20%, 0603	6	C108,C11,C140,C157,C158,C210	Kemet (Yageo) C0603C106[K]M]9PAC Murata GRM188R60J106ME47D SAMSUNG_ELECTRO CL10A106[K]M]Q8NNNC SAMSUNG_ELECTRO CL10A106KQ8NNNC SAMSUNG_ELECTRO CL10A106MQ8NNNC Taiyo_yuden JMK107ABJ106KA-T Taiyo_yuden JMK107(A)BJ106[K]M]A-T Taiyo_yuden JMK107ABJ106MA-T Taiyo_yuden JMK107BJ106MA-T TDK C1608X5R0J106[K]M]T Walsin 0603X106[K]M]6R3CT Yageo (Brightking) CC0603MRX5R5BB106
Cap., 10uF, 16V, X5R/X7R, 20%, 0603	3	C122,C131,C206	CAPAX 0603B106[K]M]160SNT Fenghua 0603X106[K]M]160NT Fenghua 0603X106M160NT Murata 1GRM188C81C106MA73D SAMSUNG_ELECTRO CL10A106MO8NQNC Taiyo_yuden EMK107BBJ106MA-T Taiyo_yuden EMK107BJ106MA-T TDK C1608X5R1C106M080AB Thunder 0603X106M160CT
Cap., 10uF, 10V, X5R, 20%, 0402	9	C125,C135,C187,C191,C192,C6,C87,C89,C97	CAL-CHIP GMC04X5R106M10NT EYANG C0402X5R106M100NTC Fenghua 0402X106M100NT SAMSUNG_ELECTRO CL05A106MP5NUNC SAMSUNG_ELECTRO CL05A106MP5N[U]R]B8]NC Walsin 0402X106M100CT

Cap., 22uF, 25V, X5R/X7R, 20%, 0805	3	C127,C16,C39	Murata GRM21BR61E226ME44L SAMSUNG_ELECTRO CL21A226MAQNNNE SAMSUNG_ELECTRO CL21A226MA[Q]YJNNNE SAMSUNG_ELECTRO CL21A226MAYNNNE TDK C2012X5R1E226M125AC Yageo (Brightking) CC0805MKX5R8BB226
Cap., 1uF, 50V, X5R/X7R, 10%, 0603	3	C129,C13,C195	Murata GRM188R61H105KAAALD SAMSUNG_ELECTRO CL10A105KB8NNNC Taiyo_yuden UMK107BJ105KA-T TDK C1608X5R1H105K080AB Yageo (Brightking) CC0603KRX5R9BB105
Cap., 220nF, 16V, X7R/X5R, 0402, 10%	1	C133	Murata GRM155R71C224KA12D SAMSUNG_ELECTRO CL05B224K05NNNC Taiyo_yuden EMK105BJ224KV-F TDK C1005X5R1C224K050BB TDK C1005X5R1C224KT TDK CGA2B3X7R1E224K050BE Thunder 0402X224K160CT Walsin 0402B224K160CT Walsin 0402X224K6R3CT Wurth 885012105017 Yageo (Brightking) CC0402KRX5R[7]8]BB224 Yageo (Brightking) CC0402KRX5R7BB224
Cap., 1uF, 16V, X5R/X7R, 10%, 0402	7	C139,C15,C190,C211,C40,C5,C93	CAL-CHIP GMC04X5R105K16NT(LF) Fenghua 0402X105K160NT SAMSUNG_ELECTRO CL05A105K05NNNC Taiyo_yuden EMK105BJ105KV-F TDK C1005X5R1C105K050BC Walsin 0402[B]X105K[160]250]CT
Cap., 1uF, 6.3V, X5R/X7R, 20%, 0402	7	C142,C146,C148,C151,C208,C209,C212	CAL-CHIP GMC04X5R105M6R3NT Fenghua 0402X105K6R3NT Fenghua 0402X105[K]M]6R3NT Johanson_Dielectrics 100R07X105KV4T Murata GMD155R60J105KE11D Murata GRM155R60J105KE19D Panasonic_Industrial ECJ0E50J105[M]K] SAMSUNG_ELECTRO CL05A105KQ5NNNC SAMSUNG_ELECTRO CL05A105[M]K]Q5NNNC SAMSUNG_ELECTRO CL05A105MQ5NNNC TDK C1005X5R0J105[K]M]T TDK C1005X5R0J105KT Yageo (Brightking) CC0402KRX5R5BB105
Cap., 10uF, =>63V, X7R, 20%, 1210	8	C17,C18,C19,C20,C59,C66,C73,C74	Murata GRM32ER71J106KA12L Murata GRM32ER71J106[K]M]A12L Murata GRM32ER71J106MA12L SAMSUNG_ELECTRO CL32B106KMVNNWE
Cap., 220nF, 100V, X7R/X7S, 20%, 0603	1	C186	CAPAX 0603X224K101SNT Taiyo_yuden HMK107C7224KAHTE Taiyo_yuden MBASH168SC7224KTCA01
Cap., 15pF, 50V, NPO, 5%, 0402	2	C189,C92	AVX 04025A150JAT2A Epcos B37920K5150J60 Fenghua 0402CG150J500NT Kemet (Yageo) C0402C150J5GAC Murata GRM1555C1H150JA01D Murata GRP15X5C1H150JD11E SAMSUNG_ELECTRO CL05C150JB[3]5]NNNC SAMSUNG_ELECTRO CL05C150JB3NNNC SAMSUNG_ELECTRO CL05C150JB5NNNC TDK C1005C0G1H150JT VISHAY VJ0402A150JXAAC Walsin 0402N150J500[C]L]T Walsin 0402N150J500CT Walsin 0402N150J500LT
Cap., 680uF, 4V, TANT7343, Std profile, Low ESR 12mohm, 20%	1	C193	Kemet (Yageo) T520D687M004ATE012 NIC NTP687M4TRD(12)F VISHAY T55D687M004C0007 VISHAY T55D687M004C000[7]8]9] VISHAY T55D687M004C0008 VISHAY T55D687M004C0008 VISHAY T55D687M004C0009
Cap., 220pF, 50V, NPO, 0603, 10%	2	C194,C199	Kemet (Yageo) C0603C221[G]J]K]5GACTU Kemet (Yageo) C0603C221K5GAC(7867) Kemet (Yageo) C0603C221K5GAC7867 SAMSUNG_ELECTRO CL10C221JB8NFNC SAMSUNG_ELECTRO CL10C221JB8NNNC SAMSUNG_ELECTRO CL10C221[J]K]B8N[F]N]NC VISHAY VJ0603A221[G]J]K]XAPW1BC VISHAY VJ0603A221KXAAC Walsin 0603N221J500CT Walsin 0603N221[J]K]500CT Yageo (Brightking) CC0603JRNPO9BN221

Cap., 10nF, 25V, X7R, 10%, 0402	1	C196	CAL-CHIP GMC04X7R103K[25]50JNT(LF) CAL-CHIP GMC04X7R103K50NT Epcos B37921K9103K60 Fenghua 0402B103K[250]500JNT Fenghua 0402B103K500NT Hitano 0402B103K[250]500JNU Kemet (Yageo) C0402C103K3AC Murata GRM155R71E103KA01D Murata GRP155R71E103KA01[D]EJ PHYCOMP 2238 917 156 36 SAMSUNG_ELECTRO CL05B103KANC SAMSUNG_ELECTRO CL05B103KB5NNNC Taiyo_yuden TMK105B7103KV-F Taiyo_yuden TMK105BJ103KV-F TDK C1005JB1E103KT VISHAY VJ0402Y103KXJAT Walsin 0402B103K250CT Yageo (Brightking) CC0402KRX7R9BB103
Cap., 100pF, 0402, NPO, 50V, 5% or 1%	1	C197	Fenghua 0402CG101F500NT Fenghua 0402CG101[F]J500NT Fenghua 0402CG101J500NT Kemet (Yageo) C0402C101F5GAC Murata GRM1555C1H101JA01D Murata GRP1555C1H101JD01E SAMSUNG_ELECTRO CL05C101JB5NNNC SAMSUNG_ELECTRO CL05C101JBNC SAMSUNG_ELECTRO CL05C101J[F]JBN VISHAY VJ0402A101FXAA[T]C Walsin 0402N101J500[C]LJT Walsin 0402N101J500CT Yageo (Brightking) CC0402JRNPO9BN101
Cap., 10uF, 25V, X5R/X7R, 20%, 0603	1	C207	Murata GRM188R61E106MA73D SAMSUNG_ELECTRO CL10A106MA8NRNC TDK C1608X5R1E106M080AC
Cap., 22uF, 6.3V, X5R/X6S, 20%, 0603	10	C21,C22,C32,C33,C34,C46,C67,C68,C79,C80	Murata GRM188R60J226MEA0D Murata GRM188R60J226MEA0[D]J Murata GRM188R60J226MEA0J SAMSUNG_ELECTRO CL10A226MQ8NRNC SAMSUNG_ELECTRO CL10A226MQ8NRN[C]EJ SAMSUNG_ELECTRO CL10A226MQ8NRNE TDK C1608X5R0J226M080AC
Cap., 18pF, 50V, NPO, 5%, 0402	4	C23,C24,C27,C28	CAL-CHIP GMC04CG180J50NT CAL-CHIP GMC04CG180J50NT(LF) Fenghua 0402CG180J500NT Kemet (Yageo) C0402C180J[F]J5GAC Murata GRM1555C1H180JA01D SAMSUNG_ELECTRO CL05C180JB5NNNC VISHAY VJ0402A180[F]JXAA[T]C Walsin 0402N180J500[C]LJT Walsin 0402N180J500CT Walsin 0402N180J500LT
Cap., 10uF, 50V, X7R, 20%, 1206	2	C44,C45	CAL-CHIP GMC31X7R106K50NT SAMSUNG_ELECTRO CL31B106KBHNNNE TDK C3216X7R1H106K160AC
Cap., 2.2nF, 50V, X7R, 10%, 0402	4	C50,C56,C60,C9	AVX 04025C222KAT2A CAL-CHIP GMC04X7R222K50NT Epcos B37921K0222K60 Fenghua 0402B222K500NT Kemet (Yageo) C0402C222K5RAC Murata GRM155R71H222KA01D Murata GRP155R71H222KA01E SAMSUNG_ELECTRO CL05B222KB5NNNC TDK C1005X7R1H222K050BA TDK C1005X7R1H222KT VISHAY VJ0402Y222KXAAT Walsin 0402B222K500CT Yageo (Brightking) CC0402KRX7R9BB222
Diode, TVS, Vrrwm=22V, BiDi, 1500W, SMC	1	D1	BOURNS SMCJ22CA Brightking (Yageo) SMCJ22CA DIODES_Inc (Pericom) SMCJ22CA-13-F FAIRCHILD (ON Semiconductors) SMCJ22CA LittleFuse SMCJ22CA VISHAY SMCJ22CA-E3/9AT Yangjie Electronic SMCJ22CA
Diode, Schottky, Sgl, BAT54WS, SOD-323	3	D2,D3,D5	DIODES_Inc (Pericom) BAT54WS-7 DIODES_Inc (Pericom) BAT54WS[Q]-[7]13]-F Diotec BAT54WS Infineon BAS140W Infineon BAS3010A-03W MCC BAT54WS-TP NXP (Freescale) 1PS76SB10 ON_Semiconductors BAT54HT1 ON_Semiconductors BAT54HT1G VISHAY BAT54WS-[E]Gj3-08 VISHAY BAT54WS-GS08 Yangjie Electronic BAT54WS
LED, Green, SMT,1206	3	DS1,DS3,DS4	Avago HSMG-C150 Avago HSMG-C151 DIALIGHT 597-3311-407 EVERLIGHT 15-21SYGC/S530-E2/TR8 EVERLIGHT 15-21SYGD/S530-E2/3T EVERLIGHT 15-21SYGD/S530-E2/TR8 EVERLIGHT 15-21/VGC/TR8/T1 EVERLIGHT QTLP650D4TR KingBright KP-3216SGC KingBright KP3216SGD LiteON LTST-C230GKT Lumex SML-LX1206GC-TR P-Tec PL00200-WCG13 TOYO LED TY-Y1206UG1(0.90) TOYO LED TY-Y1206UG10.90 z#QT_Opto QTLP650D-4 z#QT_Opto QTLP650D-4.TR

LED, Yellow, SMT,1206	2	DS2,DS5	DIALIGHT 597-3401-407 EVERLIGHT 15-21UYC/S530-A2/3T EVERLIGHT 15-21UYC/S530-A2/TR8 KingBright KP3216YD
Conn., Header, 1x2, 100MIL, TH, JP2, 3mm tail, 6mm mating length	6	E1,E2,E3,E4,E5,E6	Archtech_Electronics TD-02ST Astron 27-010[3]6JH-102-1G-R CVILux CH31-02-2-V-1-00 Harwin M20-9770206 Jih_Vei_Electronics 21B1164-02S10-01G-6/3 Jih_Vei_Electronics 21B12564-02S10B-01G-6/3*P Keltron-KCC PH1-02S-G Major_League_Electronics TSHS-102-S-08-A-T MAXCONN 210-V-B-02-A-1 Neltron 2211S-02G-1050H15 Oupiin 2011-1X2GS Wieson 2100-1*2ST1
Ferrite Bead, 0603, Z=30 Ohm@100Mhz, 5A, 0.01 Ohm DCR, 0603	2	FB1,FB2	ETRONIC MHC1608S300UA MAX ECHO BCMS160808A300 RDC01 5A Murata BLM18KG300TN1D TDK MPZ1608S300ATAH0 TDK MPZ1608S300AT(AH0)DH5)
Ferrite Bead, Z=220R@100Mhz, 2A, 0.05 Ohm DCR, 0603	2	FB3,FB4	Chilisin (PULSE) PBJ 160808T-221Y-N Laird (Ezurio) MI0603L221R-10 Murata BLM18KG221SN1D TDK MPZ1608S221ATA00 TDK MPZ1608S221AT[A00]D25] Tri-Tron (Sunborn) HTBS160808A221 RDC05
Conn., DC Jack, 5.5/2.5mm ext/int Dia., TH, 20V/10A	1	J1	Contact Technology DC-081HS(-2.5) Contact Technology DC-081HS-2.5 CUI PJ-082BH Sinotech SJDC021-L Sinotech SJDC021-TR Technik TDC-081HS (TDC-081HS-2.5MM-PA6T-1AG-1) TTAFF DC-101 (Tape and Reel)
Conn., USB Type A, FEM, RA, PC Mount, SMT	2	J2,J3	Kingfont USBAS-00401W001 Kingfont USBAS-00401W001{Tape&Reel 7"}
Conn., Edge, 50pin, Vert, 1.27mm pitch, SMT	1	J4	Any_Mfg Edge, 50pin, Vert, 1.27mm pitch, SMT EDAC 302-050-399-205
Conn., Audio Jack, Stereo, 3.5mm, with switch	2	J5,J6	SC_Precision SCJ305P00DG0BP9G SC_Precision SCJ305P00DS0B00G
Conn., Jumper Plug (shunt), 2.54mm (.1") spacing, Gold plated, Black color	7	JP1,JP2,JP3,JP4,JP5,JP6,JP7	CVILux CS01632A100 Jih_Vei_Electronics 27S1002-CLS65B-01G-B-B Jih_Vei_Electronics 27S1002-CLS65[B]P-01G-B-B(P) Jih_Vei_Electronics S1002-CLE65-01G-B Keltron-KCC MJ-5.97-G Keltron-KCC MJ-6.47C-G Krista_Micro 24-872 MAXCONN S100 0 -2 MAXCONN S200 0 -2 Oupiin 2006-A BLK
EMI Filter, Common mode, With ESD, 60Ohm, USB3 app, SMT	13	L1,L12,L13,L14,L15,L16,L19,L2,L20,L21,L22,L23,L24	LittleFuse LCFE121002A650TG Murata LXES11DAA2-135 TDK TCE1210U-500-2P-T
Inductor, 10uH, 0.8A, 4x4mm	2	L10,L11	Delta SI43-100 Murata LQH44PN100MP0L Sunlord SWPA4020S100M Sunlord SWPA4020S100M(T) Sunlord SWPA4020S100MT Taiyo_yuden (LM) NR 4018T 100M Taiyo_yuden LM NR 4018T 100M Taiyo_yuden SWPA4020S100M TDK VLC4018T-100M
Ferrite Bead, Z=120 Ohm@100Mhz, >=500mA, <=0.25 Ohm DCR, 0402	2	L17,L18,L7	Chilisin (PULSE) SBJ100505T-121Y-N SAMSUNG_ELECTRO CIM05U121NC Taiyo_yuden BK1005HS121-T TDK MMZ1005S121C
Inductor, 6.8uH, Irms>=4A, Isat>=4A, DCR < 76mohm	3	L3,L5,L6	BOURNS SRP5030T-6R8M Erocore MPS0530S-6R8M
Inductor, 6.8uH, Irms>=2.4A, Isat>=3.8A, DCR < 150mohm, H=2mm MAX	1	L4	PULSE PM4345.682NLT
Assembled PCB, MCM-iMX93-C1700D-D2-N32	1	MCM93_MOD1	Compulab MCM-iMX93-C1700D-D2-N32, Rev 1.0
Conn., Header, 2x 4, 100MIL, SMT, 6mm mating length	8	P10,P13,P15,P16,P17,P19,P20,P9	AMPHENOL (FCI) 10129383-908001ALF Archtech_Electronics TDE-08MG FCI (AMPHENOL) 54202-T08-08P FCI (AMPHENOL) 95278-401B08 Harwin M20-8860422 Jih_Vei_Electronics 21N22564-08M10B01G6/1.5-C Jih_Vei_Electronics 21N22564-08M10B01G6/1.5-C*R Jih_Vei_Electronics N2264-08M15-01T Major_League_Electronics TSHSM-104-D-06-T-V-P Oupiin 2015-2X4G00D+tape&Reel+cap Oupiin 2015-2X4TD/L2 Samtec TSM-104-01-T-DV-M

Conn., Header, 2x 5, 100MIL, SMT, DR10, 6mm mating length	2	P11,P18	AMP (TE) 146130-4 Archtech_Electronics TDE-10MG CVILux CH81102M10[1 2 3]-0P FCI (AMPHENOL) 54202-T08-10P FCI (AMPHENOL) 71276-210HT FCI (AMPHENOL) 95278-401B10 Harwin M20-8860522 Jih_Vei_Electronics 21N22564-10M10B-01G-6/1.5-C*B Jih_Vei_Electronics N2264-10M15-01G (ROHS) Jih_Vei_Electronics N2264-10M15-01T Major_League_Electronics TSHSM-105-D-06-T-V-P Neltron 2213SMD-10T Oupiin 2015-2X5TD/L2 Samtec TSM-105-01-T-DV-M
Conn., Header, 2x10, 100MIL, SMT, DR20, 6mm mating length	2	P12,P14	Archtech_Electronics TDE-20MG FCI (AMPHENOL) 54202-T08-20P FCI (AMPHENOL) 95278-401B20 Harwin M20-8861022 Jih_Vei_Electronics N2264-20M15-01TG (ROHS) Major_League_Electronics TSHSM-110-D-06-T-V-P Oupiin 2015-2X10TD/L2 Samtec TSM-110-01-T-DV-M
Conn., Micro-USB, B-Type, Rec, RA, with optional pegs	2	P21,P3	Amco 211-100521-002 Mainsuper AV4-AA-005-K0 (UCNRB005E005-0) T&R Walta D03-0718-05002
Conn., Micro-SD, Push/pull type, With Card Detect, SMT	1	P4	Molex 105162-0001 Molex 105162-0101 Molex 105162-[10 01 00]01
Conn., RJ45, W/1GB-T mag and G/Y LED, RA, TH	2	P5,P6	GLGNET NLFA1T802-GL/YR LINK-PP LPJG0801AHNL Prosper_Electronics PRJ-G111083NL SJC 9805-81024-130D-LOT3-A Speed_Tech P65-101-[1 2]AK9 Speed_Tech P65-101-1AK9 Speed_Tech P65-101-2AK9 UDE RB1-125BAK1A UNE (B-TOP) B5002-32G8-09-A223-B12 UNE (B-TOP) B50(02-32)G8-09-A223-B[1 5]2 UNE (B-TOP) B5002-32G8-09-A223-B52
Socket, Micro-Sim, SMT, 6pin	1	P7	GCT SIM7050-6-0-00-A Most Well R2S32HM-824106G117A01
Conn., Mini-PCle socket, Card H=4.8mm (6.8mm connector body), Black	1	P8	Concraft 0717A01A68C Lotes AAA-PCI-073-P08 Neltron 6616-52SG-68-TR Tyco (TE) 2041262-1
PCB, SBC-MCM93, Rev 1.0	1	PCB1	Q&D Circuits 188C04590, IMG Suntak 188C04590, IMG Unitech 188C04590, IMG
Transistor, P-MOSFET, 8.3A, 20V, vgs(th)=-1.8V / Rds=30mOhm	1	Q1	DIODES_Inc (Pericom) DMP2008UFG-7 DIODES_Inc (Pericom) DMP2008UFG[-7 13] FAIRCHILD (ON Semiconductors) FDMC510P FAIRCHILD (ON Semiconductors) FDMC510P(F106) FAIRCHILD (ON Semiconductors) FDMC510P_F106 ON_Semiconductors NTLTS3107PR2G ON_Semiconductors NTTFS3A08PZTAG ROHM Q1A070ZP VISHAY Si7413DN-T1-E3 VISHAY Si7413DN-T1-GE3 VISHAY Si7413DN-T1-(G)E3 VISHAY SiS407DN-T1-GE3
Transistor, N-MOSFET, Dual, 20V, 0.5A, vgs(th)=0.6V, NTZD3154NT	3	Q10,Q11,Q4,Q9	DIODES_Inc (Pericom) DMN32D2LV-7 MCC SIX3134KA-TP ON_Semiconductors NTZD3154NT1G ON_Semiconductors NTZD3154NT5G VISHAY Si1036X-T1-GE3
Transistor, N-MOSFET, NDS335N, Vgs(TH)=1.2Vmax, Rds=100mOhm@2.5V, 3A, 20V	1	Q19	DIODES_Inc (Pericom) DMN3052L-7 FAIRCHILD (ON Semiconductors) FDN335N FAIRCHILD (ON Semiconductors) NDS335N ON_Semiconductors NTR4501NT1G VISHAY Si2312BDS-T1-E3 Yangjie Electronic YJL2300A
Transistor, N-MOSFET, 1A, 30V, RDS	5	Q2,Q3,Q5,Q6,Q7	NXP (Freescale) BSH103BKR
Res., 10K, 1%, 0402, 1/16W	44	R1,R11,R12,R125,R129,R13,R132,R135,R144,R15,R155,R157,R158,R166,R17,R170,R171,R173,R175,R176,R179,R18,R182,R189,R19,R208,R209,R214,R215,R218,R228,R230,R234,R237,R238,R239,R240,R28,R3,R31,R33,R46,R60,R77	Fenghua RC-02K1002FT PDC FCR02FV1002 Royalohm 0402WGF1002TCE SAMSUNG ELECTRO RC1005F1002CS TY-OHM RCM0402-1/16W-10K-F Walsin WR04X1002FTL Yageo (Brightking) RC0402FR-0710K0 Yageo (Brightking) RC0402FR-0710KL

Res., 0R, 5%, 0402, 1/16W	56	R10,R107,R111,R112,R115,R116,R117,R118,R120,R121,R122,R123,R127,R128,R130,R133,R136,R137,R138,R139,R140,R141,R142,R143,R148,R151,R152,R159,R16,R160,R161,R169,R172,R174,R178,R188,R192,R195,R216,R223,R224,R23,R231,R232,R27,R30,R34,R48,R51,R53,R56,R58,R61,R79,R91,R95	Fenghua RC-02000JT PDC FCR02JV000 Royalohm 0402WGF0000TCE SAMSUNG_ELECTRO RC1005J000CS TY-OHM RCM0402-1/16W-0R-J Walsin WR04X000PTL Yageo (Brightking) RC0402JR-070R Yageo (Brightking) RC0402JR-070RL
Res., 1K, 1%, 0402, 1/16W	8	R100,R147,R24,R25,R35,R6,R64,R83	Fenghua RC-02K1001FT PDC FCR02FV1001 Royalohm 0402WGF1001TCE SAMSUNG_ELECTRO RC1005F1001CS TY-OHM RCM0402-1/16W-1K-F Walsin WR04X1001FTL Yageo (Brightking) RC0402FR-071KL
Res., 1.5K, 1%, 0402, 1/16W	5	R103,R191,R194,R2	PDC FCR02FV1501 Royalohm 0402WGF1501TCE SAMSUNG_ELECTRO RC1005F1501CS TY-OHM RCM0402-1/16W-1K5-F Walsin WR04X1501FTL Yageo (Brightking) RC0402FR-071K5 Yageo (Brightking) RC0402FR-071K5L
Res., 20.5R, 1%, 0402, 1/16W	2	R104,R110	Fenghua RC-02K20R5FT Fenghua RC-02[K W]20R5FT Royalohm 0402WGF205JTCE SAMSUNG_ELECTRO RC1005F20R5CS Walsin WR04X20R5FTL Yageo (Brightking) RC0402FR-0720R5L
Res., 4.75K, 1%, 0402, 1/16W	22	R106,R119,R183,R185,R198,R199,R200,R202,R203,R204,R205,R43,R44,R52,R54,R57,R59,R65,R66,R70,R72,R76	Fenghua RC-02K4751FT Royalohm 0402WGF4751TCE SAMSUNG_ELECTRO RC1005F4751CS Walsin WR04X4751FTL Yageo (Brightking) RC0402FR-074K75L
Res., 0R, 1206	1	R126	SAMSUNG_ELECTRO RC3216F000CS VISHAY CRCW1206-100-000-JCS Walsin WR12X000PTL Yageo (Brightking) RC1206JR-070R Yageo (Brightking) RC1206JR-070RL
Res., 100K, 5%, 0402, 1/16W	5	R14,R41,R81,R89,R92	Fenghua RC-02K104JT PDC FCR02JV1003 Royalohm 0402WGF0104TCE SAMSUNG_ELECTRO RC1005J1003CS TY-OHM RCM0402-1/16W-100K-J Walsin WR04X104_JTL Yageo (Brightking) RC0402JR-07100K Yageo (Brightking) RC0402JR-07100KL
Res., 0.75R, 1%, 0402, 1/16W (current sense)	1	R150	Panasonic_Industrial ERJ-2BQFR75X ROHM UCR01MVPFLR750 Tyco (TE) RLP73K1ER75FTDF VISHAY RCWE0402R750FKEA Yageo (Brightking) PT0402FR-070R75L
Res., 2.2K, 5%, 0402, 1/16W	1	R154	Fenghua RC-02K222JT Royalohm 0402WGF2201TCE Royalohm 0402WGF0222TCE SAMSUNG_ELECTRO RC1005J222CS Walsin WR04X222_[F J]TL Walsin WR04X222_FTL Walsin WR04X222_JTL Yageo (Brightking) RC0402JR-072K2L
Res., 475R, 1%, 0402, 1/16W	4	R162,R163,R164,R165	Fenghua RC-02K4750FT PDC FCR02FV4750 Royalohm 0402WGF4750TCE SAMSUNG_ELECTRO RC1005F4750CS TY-OHM RCM0402-1/16W-475R-F Walsin WR04X4750FTL Yageo (Brightking) RC0402FR-07475R Yageo (Brightking) RC0402FR-07475RL
Res., 680R, 1%, 0402, 1/16W	2	R167,R90	Fenghua RC-02K6800FT SAMSUNG_ELECTRO RC1005F680RCS Walsin WR04X6800FTL Yageo (Brightking) RC0402FR-07680RL
Res., 14.7K, 1%, 0402, 1/16W	2	R177,R36	Royalohm 0402WGF1472TCE SAMSUNG_ELECTRO RC1005F1472CS Viking CR-02FL6-14K7 Walsin WR04X1472FTL Yageo (Brightking) RC0402FR-0714K7L
Res., 56.2K, 1%, 0402, 1/16W	1	R180	SAMSUNG_ELECTRO RC1005F5622CS Walsin WR04X5622FTL Yageo (Brightking) RC0402FR-0756K2L
Res., 17.8K, 1%, 0402, 1/16W	3	R181,R196,R211	Royalohm 0402WGF1782TCE SAMSUNG_ELECTRO RC1005F1782CS Walsin WR04X1782FTL Yageo (Brightking) RC0402FR-0717K8L
Res., 64.9K, 1%, 0402, 1/16W	2	R187,R213	SAMSUNG_ELECTRO RC1005F6492CS Walsin WR04X6492FTL Yageo (Brightking) RC0402FR-0764K9L

Res., 30K, 1%, 0402, 1/16W	1	R21	Fenghua RC-02K3002FT PDC FCR02FV3002 Royalohm 0402WGF3002TCE SAMSUNG_ELECTRO RC1005F3002CS TY-OHM RCM0402-1/16W-30K-F Walsin WR04X3002FTL Yageo (Brightking) RC0402FR-0730K Yageo (Brightking) RC0402FR-0730KL
Res., 22.1K, 1%, 0402, 1/16W	1	R210	PDC FCR02FV2212 SAMSUNG_ELECTRO RC1005F2212CS TY-OHM RCM0402-1/16W-22K1-F Walsin WR04X2212FTL Yageo (Brightking) RC0402FR-0722K1 Yageo (Brightking) RC0402FR-0722K1L
Res., 12.4K, 1%, 0402, 1/16W	1	R212	Fenghua RC-02K1242FT SAMSUNG_ELECTRO RC1005F1242CS Walsin WR04X1242FTL Yageo (Brightking) RC0402FR-0712K4L
Res., 100K, 1%, 0402, 1/16W	3	R217,R62,R63	Fenghua RC-02K1003FT Royalohm 0402WGF1003TCE SAMSUNG_ELECTRO RC1005F1003CS Walsin WR04X1003FTL Yageo (Brightking) RC0402FR-07100KL
Res., 200K, 1%, 0402, 1/16W	2	R22,R45	Fenghua RC-02K2003FT PDC FCR02FV2003 Royalohm 0402WGF2003TCE SAMSUNG_ELECTRO RC1005F2003CS TY-OHM RCM0402-1/16W-200K-F Walsin WR04X2003FTL Yageo (Brightking) RC0402FR-07200K Yageo (Brightking) RC0402FR-07200KL
Res., 100R, 1%, 0402, 1/16W	1	R221	Fenghua RC-02K1000FT PDC FCR02FV1000 Royalohm 0402WGF1000TCE SAMSUNG_ELECTRO RC1005F1000CS TY-OHM RCM0402-1/16W-100R-F Walsin WR04X1000FTL Yageo (Brightking) RC0402FR-07100R Yageo (Brightking) RC0402FR-07100RL
Res., 220R, 5%, 0402, 1/16W	1	R222	PDC FCR02JV221 SAMSUNG_ELECTRO RC1005J221CS TY-OHM RCM0402-1/16W-220R-J Walsin WR04X221 JTL Yageo (Brightking) RC0402JR-07220R Yageo (Brightking) RC0402JR-07220RL
Res., 6.2R, 1%, 0402, 1/16W	1	R225	SAMSUNG_ELECTRO RC1005F6R2CS VISHAY CRCW04026R20FKED Walsin WR04W6R20FTL Yageo (Brightking) RC0402FR-076R2L
Res., 200R, 1%, 0402, 1/16W	2	R226,R229	Fenghua RC-02K2000FT PDC FCR02FV2000 Royalohm 0402WGF2000TCE SAMSUNG_ELECTRO RC1005F2000CS TY-OHM RCM0402-1/16W-200R-F Walsin WR04X2000FTL Yageo (Brightking) RC0402FR-07200R Yageo (Brightking) RC0402FR-07200RL
Res., 120R, 1%, 0402, 1/16W	1	R233	Fenghua RC-02K1200FT Royalohm 0402WGF1200TCE Walsin WR04X1200FTL Yageo (Brightking) RC0402FR-07120RL
Res., 562K, 1%, 0402, 1/16W	1	R26	SAMSUNG_ELECTRO RC1005F5623CS Walsin WR04X5623FTL Yageo (Brightking) RC0402FR-07562KL
Res., 2.49K, 1%, 0402, 1/16W	2	R29,R32	Royalohm 0402WGF2491TCE SAMSUNG_ELECTRO RC1005F2491CS Walsin WR04X2491FTL Yageo (Brightking) RC0402FR-072K49L
Res., 301K, 1%, 0402, 1/16W	1	R37	SAMSUNG_ELECTRO RC1005F3013CS Walsin WR04X3013FTL Yageo (Brightking) RC0402FR-07301KL
Res., 10R, 5%, 0603	10	R38,R39,R40,R49,R85,R86,R96,R97,R98,R99	PDC FCR03JT100 ROHM MCR03EZHU100 SAMSUNG_ELECTRO RC1608J100CS Stackpole RMCF0603JT10R0 TY-OHM RCM0603-1/16W-10R-J VISHAY CRCW0603100JRT1 Walsin WR06X100_JTL Yageo (Brightking) RC0603JR-0710R Yageo (Brightking) RC0603JR-0710RL
Res., 28.7K, 1%, 0402, 1/16W	4	R4,R80,R88,R93	Fenghua 0402WGF2872TCE Fenghua RC-02K2872FT Royalohm 0402WGF2872TCE SAMSUNG_ELECTRO RC1005F2872CS Walsin WR04X2872FTL Yageo (Brightking) RC0402FR-0728K7L
Res., 0.020R, 1%, 1206, 1/2W (Current sense)	1	R42	ROHM UCR18EVHFSR020 SAMSUNG_ELECTRO RU3216FR020CS Yageo (Brightking) RL1206FR-070R02L
Res., 33R, 5%, 0402, 1/16W	3	R47,R50,R55	Fenghua RC-02K330JT Fenghua RC-02[K W]330JT PDC FCR02JV330 Royalohm 0402WGF0330TCE SAMSUNG_ELECTRO RC1005J330CS TY-OHM RCM0402-1/16W-33R-J Walsin WR04X330 JTL Yageo (Brightking) RC0402JR-0733R Yageo (Brightking) RC0402JR-0733RL

Res., 6.04K, 1%, 0402, 1/16W	1	R94	PDC FCR02FV6041 Royalohm 0402WGF6041T[5]CJE SAMSUNG_ELECTRO RC1005F6041CS TY-OHM RCM0402-1/16W-6K04-F Walsin WR04X6041FTL Yageo (Brightking) RC0402FR-076K04 Yageo (Brightking) RC0402FR-076K04L
Res., Array, 10K, 8P4R, 5%, 0805	2	RN2,RN3	BOURNS CAY10-103J4LF CAL-CHIP CN24J103CT Panasonic_Industrial EXB-N8V103JX Royalohm 4D02WVGJ0103TCE SAMSUNG_ELECTRO RP104PJ103CS TA-I CN24JTN103 Walsin WA04X103JTL Yageo (Brightking) YC124JR-0710K Yageo (Brightking) YC124JR-0710KL
Spacer, Round, M2 Threaded, H=4mm, For 1.6mm PCB thickness, SMT	2	SP1,SP2	MAC8 TH-1.6-4.0-M2
Standoff, Hex, M2, L=4.5mm, Male/Female	2	SPACER1,SPACER2	WORLD_BRIDGE_MACHINARY 206C10160 {HS200025M1} WORLD_BRIDGE_MACHINARY HS200025M1-2
Switch, Slide, SPST, On-Off, 16x10x8mm, TH	1	SW1	CW Industries GF-123-0054
SWITCH, Push-B,Tact, 6x6 mm, 4.3mm High, SMT	3	SW2,SW3,SW4	APEM-MORS ADTSM61NVTR APEM-MORS MJTP1122B Canal_Electronics DTSM61N DAEJIN 1102S DIPTRONICS DTSM61N DIPTRONICS DTSM-61N-V-T/R Switronic 1102W
IC, interface, Level translator, 2 bit, Bi-Di, for OC and Push-pull, for I2C	1	U1	NXP (Freescale) NTS0102DP TI (National Semi) TXS0102DCTR TI (National Semi) TXS0102DCTT TI (National Semi) TXS0102DCT[T R](E4 G4)
IC, Interface, 10/100TX/1000 PHY, RGMII (1.5V<RGMII_VIO	2	U10,U9	REALTEK RTL8211FD-CG REALTEK RTL8211FD(I)-CG
IC, Analog, 3A power switch with adj. current limit (USB), For ARM platform	2	U11,U4	JTM CXUS7702SR(MT-G) JTM CXUS7702SRMT-G Richtek RT9703GS Richtek RT9703[P G]S
IC, Clock generator, 32.768Khz, 20PPM, 1.65..3.6V	1	U12	Em_Microelectronic EM7604V00SP6B+
IC, Volt Reg., Step down, 3A, Vin=4.5V..36V, Vo=0.8V..30V, RT7272B, SOP-8	4	U13,U14,U15,U3	Richtek RT7272BGSP
IC, Periph., WM8962B, LP Audio Stereo codec, I2S, w/Headphone Amplifier, (1.8-2.5V VIO), BGA-49	1	U16	Cirrus_Logic WM8962BECN/R
IC, Periph, 16-bit I2C and SMBus GPIO I/O expander	1	U17	DIODES_Inc (Pericom) PI4IOE5V9555ZDEX DIODES_Inc (Pericom) PI4IOE5V9555ZDEX(13R) EXAR (MaxLinear) XRA1201PIL24-F EXAR (MaxLinear) XRA1201PIL24(TR)-F EXAR (MaxLinear) XRA1201PIL24TR-F MAXIM (Analog Devices) MAX7311ATG(+T) NXP (Freescale) PCA9555BS,118 NXP (Freescale) PCA9555HF,118 ON_Semiconductors CAT9555HT6I-GT2 ON_Semiconductors CAT9555HV6I(G)-T2 ON_Semiconductors CAT9555HV6I-GT2 ON_Semiconductors CAT9555HV6I-T2 ON_Semiconductors PCA9655EMTTXG TI (National Semi) PCA9555RGER(G4) TI (National Semi) TCA9555RTWR
IC, Led driver, Step-up, PWM, 2.5-5.5V Vin, 40mA Iout (var), 6-12 LED	1	U18	DIODES_Inc (Pericom) AP3019AKTR-G1 Yobon YB9285
IC, Led driver, Step-up, PWM, 3-18V Vin, 1.2A Iout (var), SOT-23	1	U19	TI (National Semi) TPS61165DBV TI (National Semi) TPS61165DBVR TI (National Semi) TPS61165DBVT TI (National Semi) TPS61165DBV(T R)
Diode, TVS, Dual USB 2.0 ESD protection, Low cap (1pF)	4	U2,U22,U23,U28	AOS AOZ8007CI NXP (Freescale) IP4220CZ6 NXP (Freescale) IP4220CZ6(,125) ON_Semiconductors NUP4301MR6T1G ST DVIULC6-45C6 Wayon WE05-4RVL

IC, Logic, MicroGate, Open drain buffer, Vcc 0.8-3.6V	1	U20	DIODES_Inc (Pericom) 74AUP1G07SE-7 NXP (Freescale) 74AUP1G07GW,125 NXP (Freescale) 74AUP1G07SE-7 TI (National Semi) SN74AUP1G07DCKR TI (National Semi) SN74AUP1G07DCKT TI (National Semi) SN74AUP1G07DCK[T]R]
IC, Interface, CAN transceiver, 5Mbps data rate	1	U21	Infineon TLE9251VSJXUMA1 MicroChip (SST/Micrel/Atmel/SMSC) ATA6563-GAQW0 MicroChip (SST/Micrel/Atmel/SMSC) ATA6563-GAQW[0]1] MicroChip (SST/Micrel/Atmel/SMSC) ATA6563-GAQW1 ON_Semiconductors NCV7344AD13R2G TI (National Semi) TCAN1057AVDRQ1
IC, Interface, USB 2.0 Full Speed to UART bridge	1	U24	Silicon Labs CP2104-F03-GM(R) Silicon Labs CP2104-F03-GMR
IC, Interface, USB2.0 HS 2:1 multiplexer (DPDT)	1	U25,U7	Intersil (Renesas) ISL54222AIRUZ-T ON_Semiconductors NLAS7222AMTR2G ON_Semiconductors NLAS7222AMUR2G ON_Semiconductors NLAS7222AMUTAG ON_Semiconductors NLAS7222BMUTAG TOSHIBA TC7USB40MU,LF
IC, Logic, 74LVC, Single Schmitt Trigger buffer, 1.65-5.5V, SC-70	2	U26	DIODES_Inc (Pericom) 74LVC1G17SE-7 Nexperia 74LVC1G17GW,125 TI (National Semi) SN74LVC1G17MDCKREP
IC, Memory, EEPROM, 24C08, 1Kx8, 16-bytes page size, 1.8-5.5V, I2C interface, DFN-8	1	U27	ON_Semiconductors CAT24C08HU4I-GT3 Puya P24C08D-UNH-MIR ST M24C08-FMC6TG
IC, SPDT Analog switch/2:1 Bus switch, SC70-6	2	U5,U8	FAIRCHILD (ON Semiconductors) NC7SB3157P6X Nexperia 74LVC1G3157GW,125 TI (National Semi) SN74LVC1G3157DCKR
IC, Periph., 2.4/5GHz WiFi a/b/g/n/ac + BT5.0, 2Tx2R, MU-MIMO, M.2 1216, AzureWave AW-CM276NF	1	U6	AzureWave AW-CM276NF {2-2276NF-0BH}
XTAL, Industrial, 32.768Khz, 20PPM, 3.2x1.5mm SMT, -40+85C	1	X1	ABLIC (SII Seiko) Q-SC32S03220C5AAAF ABLIC (SII Seiko) Q-SC32S03220C5AAAF {SC32S-12.5PF20PPM} ABLIC (SII Seiko) SC32S03220C5AAAF ABLIC (SII Seiko) SC32S-12.5PF20PPM {Q-SC32S03220C5AAAF} Epson FC-135 3276800kHz 12.5+20.0-20.0 {Q13FC1350000400} Frontier Electronics FTX32.768K12.5SM3-20DL16 IQD CFPX-206C IQD CFPX-217 {LFX TAL009678} IQD Q-SC32S03220C5AAAF IQD Q-SC32S03220C5AAAF Micro Crystal CM7V-T1A32.768kHz12.5pF20ppm Micro Crystal CM7V-T1A32.768kHz12.5pF20ppm(TAQ) NDK NX3215SA-32.768K-STD-MUA-4 NDK NX3215SA-32.768K-STD-MUA-[4]8] NDK Q-SC32S03220C5AAAF NDK SC32S-12.5PF20PPM Raltron RT3215-32.768-12.5-TR SJK SJK-7L-32.768-12.5-20-70-C Taijing Technology (TKD) SF32K32768D31T-12.5B {SF32WK32768D31T002} TAL_TIEN XDMCZLNDDF-0.032768 Tech-Time FS3-32.768KHZ-12.5-48-2-R Transko CS31-32.768K-12.5-TR Yoketan S3215C-032768-F12BAA Yoketan S3215C-032768-F12BAA(C) Yoketan S3215C-032768-F12BAAC
XTAL, Industrial, 25.000Mhz, 18pF, 30PPM, 3.2x2.5mm, 4 pads, SMT	2	X2,X3	Abrakon ABM8-25.000MHZ-D2Y-T DIODES_Inc (Pericom) FL2500133 SJK SJK-7U-25.000-18-30-40-C-30 Tech-Time S32-25.000-18-48-1-2-F-R Yoketan S3225A-025000-T18BBAAAC