



Bill Of Mat Page1

Item	Quantity	AgilePN	ASSY_OPT	Reference	Value	Description	ASSY_N Mfg Name	Mfg Part Number
1	1	211-76422		CN1 C1,C4,C19,C22,C26,C27,C28,C32,C40,C42,C46,C47, C48,C56,C57,C58,C59,C60,C62,C66,C68,C70,C71,C 75,C79,C80,C83,C85,C86,C87,C88,C90,C94,C97,C9 9,C101,C105,C107,C111,C114,C116,C117,C119,C12 0,C121,C122,C123,C124,C127,C128,C129,C131,C13 2,C135,C136,C137,C138,C139	CONN_SD_C ARD	CONN 9 SD CARD SMT 2.5MM SP AU	MOLEX	676000004
2	58	150-75969		C2,C3	0.1UF	CAP CER 0.1UF 25V 10% X7R 0603	MURATA	GRM188R71E10 4KA01D TPSE107K016R0
3	2	150-75159		C5,C6,C7	100UF	CAP TANT 100UF 16V 10% -- 7343-43	AVX	100 C0603C221K5RA C
4	3	150-75200		C8,C9,C134	220PF	CAP CER 220PF 50V 10% X7R 0603	KEMET	C
5	3	150-75294		C10,C12,C13,C18	220UF	CAP TANT 220UF 16V 10% -- 7343-43	AVX	TAJE227K016R
6	4	150-75413		C11,C16,C17,C64,C65	4.7UF	CAP TANT 4.7UF 10V 10% -- 3216-18	AVX	TAJA475K010R T491A105K016A
7	5	150-75441		C14,C25	1.0UF	CAP TANT 1.0UF 16V 10% -- 3216-18	KEMET	T C0603C220J5GA C
8	2	150-75189		C15,C24	22 PF	CAP CER 22PF 50V 5% C0G 0603	KEMET	C
9	2	150-75140		C20,C21	1000PF	CAP CER 1000PF 50V 10% X7R 0603	VENKEL COMPANY	C0603X7R500- 102KNE
10	2	150-75560	DNP	C23,C93	18PF	CAP CER 18PF 25V 5% NP0 0603	VENKEL COMPANY	C0603C0G250- 180JNP
11	2	150-75009		C29,C33,C44,C63,C67,C77,C82,C130	0.01UF	CAP CER 0.01UF 50V 10% X7R 0603	VENKEL COMPANY	C0603X7R500- 103KNE
12	8	150-75055		C30	10UF	CAP TANT 10UF 16V 10% -- 3216-18	AVX	TAJA106K016R
13	1	150-75229		C31,C78	0.1 UF	CAP CER 0.10UF 16V 10% X7R 0603	VENKEL COMPANY	C0603X7R160- 104KNE
14	2	150-30028		C34	1.0 UF	CAP CER 1.0UF 16V 10% X7R 0603	AVX	0603YC105KAT2 A
15	1	150-75398		C35	0.01UF	CAP CER 0.010UF 16V 10% X7R 0603	SMEC	F MCCA103K1NRT
16	1	150-75930		C36	6.8nF	CAP CER 6800PF 50V 5% C0G 0805	TDK	J C2012C0G1H682
17	1	150-30016	DNP		100UF	CAP TANT 100UF 10V 10% -- 7343-31	EPCOS	B45196H2107K4 06



18	4	150-75260	C37,C38,C72,C76	10UF	CAP TANT ESR=0.800 OHMS 10UF 16V 20% -- 3528-21	AVX	TPSB106M016R0 800
19	8	150-75116	C39,C43,C49,C51,C52,C53,C54,C55	18PF	CAP CER 18PF 50V 5% C0G 0603	YAGEO AMERICA	0603CG180J9B2 00
20	2	150-75009	DNP	0.01UF	CAP CER 0.01UF 50V 10% X7R 0603	VENKEL COMPANY	C0603X7R500- 103KNE
21	2	150-75053	C50,C133	100UF	CAP TANT 100UF 16V 10% -- 7343-31	AVX	TAJD107K016R 06035C471KAT2
22	1	150-75277	C61	470PF	CAP CER 470PF 50V 10% X7R 0603	AVX	A
23	1	150-75391	C69	4.7UF	CAP TANT 4.7UF 16V 20% -- 3216-18	VENKEL COMPANY	TA016TCM475M AR
24	2	150-75225	C73,C84	4.7UF	CAP CER 4.7UF 16V 10% X7R 1210	AVX	1210YC475KAT4 A
25	1	150-30047	C74	470 PF	CAP CER 470PF 50V 5% X7R 0603	VISHAY INTERTEC HNOLOGY	VJ0603Y471JXA AT
26	1	150-30016	C81	100UF	CAP TANT 100UF 10V 10% -- 7343-31	EPCOS	B45196H2107K4 06
27	8	150-75187	C89,C91,C95,C100,C102,C106,C108,C112 C92,C96,C98,C103,C104,C109,C110,C113,C115,C11 8,C125,C126	680PF	CAP CER 680PF 50V 5% C0G 0603	KEMET	C0603C681J5GA C
28	12	150-75193		1000PF	CAP CER 1000PF 25V 5% C0G CC0603	KEMET	C0603C102J3GA C
29	1	480-30013	D1	1SMC5.OAT3	DIODE ZNR 1MA 5V 5%	ON SEMICON DUCTOR	1SMC5.0AT3G ON
30	1	480-30009	D2	MBRD835L	DIODE PWR RECT 8A 35V DPAK	ON SEMICON DUCTOR	MBRD835LG
31	1	370-30001	D3	LED YEL	LED YEL SGL 25MA 1206	AGILENT TECHNOL OGIES	HSMY-C150
32	1	480-75257	D4	RLS4148	DIODE SW .015A 500MW SOD-80	ROHM	RLS4148TE11
33	1	370-30003	D5	LED GRN	LED GRN SGL 25MA 1206	AVAGO TECHNOL OGIES	HSMG-C150
34	1	370-75079	D6	RED LED_GRN_D	LED ULTA BRIGHT RED 30MA 5V SMT 0603	LITE ON	LTST-C190KRKT
35	7	370-30012	LED1,LED2,LED3,LED4,D7,D12,D13	L	LED GRN SGL 25MA 0603	DIALIGHT	597-5312-407F
36	1	510-76238	F1	4A DC_POWER	FUSE PLYSW 4A HOLD 16V RADIAL	BEL FUSE CUI	0ZRA0400FF1E
37	1	210-76612	J1	_JACK	CON RA PWR 2.1MM JACK TH	STACK	PJ-102AH



38	2 210-77715	J2,J3	CON 9	CON 9 AUD DUAL JACK RA SHLD SKT TH -- SN	CUI STACK	SJD-3512-45
39	1 211-75511 DNP	J4	HDR_13X2	HDR 2X13 SMT 100MIL SP AU	SAMTEC	TSM-113-01-S-DV
40	8 211-75268	J5,J7,J12,J14,J18,J20,J23,J25	HDR_2X2	HDR 2X2 SMT 100MIL CTR 380H AU	SAMTEC	TSM-102-01-SM-DV-P-TR
41	7 210-30160	J6,J15,J16,J21,J29,J30,J31	CONN_HDR_3X1	HDR 1X3 TH 100MIL SP 340H AU	HARWIN INC	M20-9990345
42	3 210-30080	J8,J10,J26	HDR_1X2_M	HDR 1X2 TH 100MIL SP 340H SN	HARWIN INC	M20-9990246
43	2 210-75755	J9,J19	DB9_574784 4-4	CON 9 DB SKT RA TH 112MIL SP AU	TYCO ELECTRO	
44	1 210-30002	J11	USB_TYPE_B	CON 4 USB B RA SKT SHLD TH -- AU	NICS SINGATR	5747844-4
45	3 211-75231	J13,J24,J27	HDR_2X3	HDR 2X3 SMT 100MIL CTR 390H AU	ON	2UB1505-000101 TSM-103-01-SM-DV-P-TR
46	1 210-75504	J17	HDR_2X22	HDR 2X22 TH 100MIL CTR 330H AU	SAMTEC	TSW-122-07-S-D PULSE
47	1 210-77714	J22	J1011F21PN L	CON 8 SKT SHLD RA TH RJ45 WITH LEDS GRN YEL -- --	ENGINEE RING	J1011F21PNL
48	1 211-75263	J28	USB_MINI_A B_RECEPTA CLE	CON 5 JACK RA SMT -- AU	MOLEX HARWIN	56579-0576
49	1 210-30080	J32	HDR_1X2_M	HDR 1X2 TH 100MIL SP 340H SN	INC	M20-9990246
50	1 210-75780	J33	HDR_2X20	CON 2X20 PLUG SHRD TH 100MIL CTR AU	3M	N2540-6002RB HTSW-130-07-S-D
51	1 210-75989	J34	HDR_2X30	HDR 2X30 TH 100MIL CTR 330H AU	SAMTEC	D
52	1 180-75575	L1	250Ohm/100 Mhz	IND FER BEAD 250OHM@100MHZ 4A 25% 2220 SMD	STEWARDS	HI2220P251R-10
53	17 180-76158	L2,L3,L12,L16,L17,L18,L19,L20,L21,L22,L23,L24,L25,L26,L27,L28,L29	470OHM	IND FER BEAD 470OHM@100MHZ 500MA 25% 0603	MURATA	BLM18EG471SN 1D
54	1 180-75155	L4	4.7UH	IND 4.7UH 0.0146 OHM 5A SMT ROHS COMPLIANT	WURTH ELEKTRO NIK EISOS GMBH & CO. KG	74456047
55	1 180-75058	L5	10UH	IND SMD 10UH@10KHZ 1.2A 30%, ROHS COMPLIANT	SUMIDA ELECTRIC	CDRH6D38NP-100NC
56	4 180-75060	L6,L7,L13,L30	26OHM	IND FER BEAD 26 OHM@100MHZ 1.5A --	STEWARDS	MI1206K260R-10
57	4 180-75816	L8,L9,L10,L11	1K	IND FER BEAD 1K@100MHZ 100MA 25% 0603	MURATA	BLM18AG102SN 1D



58	1 180-76315		L14	1000OHM	IND FER 1000 OHM@100MHZ 250MA 25% 0402	MURATA	BLM15HG102SN 1D
59	1 180-76336	DNP	L15	90OHM	IND CHK 90 OHM@100MHZ 330MA 25% 0805	MURATA ON	DLW21HN900SQ 2L
60	1 480-75457		Q1	NTD20N03L2 7T4G	TRAN MOSFET PWR 20A 30V DPAK	SEMICON DUCTOR	NTD20N03L27T4 G
61	14 470-30356		RN1,RN2,RN3,RN4,RN5,RN6,RN7,RN8,RN9,RN10,R N11,RN12,RN13,RN14	47 OHM	RNET ISO 4 47 OHM 1/16W 5% SMT	KOA SPEER	CN1J4TTD470J
62	1 470-76709		RP1	1K	RNET ISO 4 1K 1/16W 5% SMT 0603X4A	PANASON IC	EXBV8V102JV
63	1 470-76708		RP2	100K	RNET ISO 4 100K 1/16W 5% 0603X4	CTS	742C083104JP
64	2 470-78325		R1,R2	3352W-1- 502LF	RES POT 5.0K 1/2W 20% TH	BOURNS	3352W-1-502LF
65	26 470-75422		R3,R16,R23,R24,R27,R30,R33,R48,R63,R64,R74,R7 5,R76,R77,R78,R79,R85,R86,R96,R101,R104,R127, R134,R140,R142,R153	10.0K	RES MF 10.0K 1/10W 1% 0603	KOA SPEER THYE MING TECH CO	RK73H1JTTD100 2F
66	6 470-75407	DNP	R4,R5,R6,R7,R40,R49	0 OHM	RES MF ZERO OHM 1/10W -- 0603	LTD KOA	CR-03JL7----0R RK73H1JTTD470
67	5 470-75812		R8,R9,R12,R83,R84	47.0K	RES MF 47.0K 1/10W 1% 0603	SPEER KOA	2F RK73H1JTTD560
68	4 470-78026		R10,R11,R13,R14	5.6K	RES MF 5.6K 1/10W 1% 0603	SPEER	1F CR0603-JW-
69	3 470-75840		R15,R47,R141	680 OHM	RES MF 680 OHM 1/10W 5% 0603	BOURNS	681ELF
70	1 470-30384		R17	680 OHM	RES MF 680 OHM 1/10W 1% 0603	KOA SPEER	RK73H1JTTD680 0F
71	1 470-75924	DNP	R18	0 OHM	RES MF ZERO OHM 1/4W -- 1206	VISHAY INTERTEC HNOLOGY	CRCW12060000 Z0EA
72	4 470-75846		R19,R155,R156,R157	1.0M	RES MF 1.0M 1/10W 5% 0603	BOURNS	CR0603-JW- 105ELF
73	3 470-75412		R20,R21,R26	1K	RES MF 1.0K 1/10W 5% 0603	VENKEL COMPANY	CR0603-10W- 102JT
74	1 470-77907		R22	120.0 OHM	RES MF 120 OHM 1/10W 1% 0603	KOA SPEER	RK73H1JTTD120 0F
75	1 470-75412	DNP	R25	1K	RES MF 1.0K 1/10W 5% 0603	VENKEL COMPANY	CR0603-10W- 102JT
76	4 470-30163		R28,R32,R152,R154	5.1K	RES MF 5.1K 1/10W 1% 0603	KOA SPEER	RK73H1JTTD510 1F
77	1 470-78037		R29	9.53K	RES MF 9.53K 1/10W 1% 0603	KOA SPEER	RK73H1JTTD953 1F



78	1 470-30141	R31	330K	RES MF 330K 1/10W 1% 0603	KOA SPEER	RK73H1JTDD330 3F
79	2 470-75914	R34,R36	33 OHM	RES MF 33 OHM 1/4W 1% 1206	BOURNS KOA	CR1206-FX- 33R0ELF RK73H1JTDD511
80	1 470-75541	R35	5.11K	RES MF 5.11K 1/10W 1% 0603	SPEER	1F
81	1 470-75514	R37	1.50K	RES MF 1.50K 1/10W 1% 0603	KOA SPEER	RK73H1JTDD150 1F
82	3 470-75420	R38,R81,R82	100 OHM	RES MF 100 OHM 1/10W 1% 0603	KOA SPEER THYE MING TECH CO	RK73H1JTDD100 0F
83	5 470-75407	R39,R59,R60,R72,R73	0 OHM	RES MF ZERO OHM 1/10W -- 0603	LTD	CR-03JL7----0R CR0603-JW- 511ELF
84	1 470-75844	R41	510 OHM	RES MF 510 OHM 1/10W 5% 0603	BOURNS	
85	24 470-75816	R42,R43,R45,R55,R56,R57,R58,R65,R71,R97,R98,R99,R100,R103,R105,R111,R112,R115,R116,R117,R118,R119,R122,R123	47.0 OHM	RES MF 47.0 OHM 1/10W 1% 0603	KOA SPEER	RK73H1JTDD47R 0F
86	26 470-75414	R44,R50,R52,R61,R62,R88,R89,R102,R106,R107,R108,R109,R110,R113,R114,R121,R124,R135,R136,R137,R138,R139,R148,R149,R150,R151	4.7K	RES MF 4.7K 1/10W 5% 0603	VENKEL COMPANY KOA	CR0603-10W- 472JSNT RK73H1JTDD100
87	2 470-75422 DNP	R46,R87	10.0K	RES MF 10.0K 1/10W 1% 0603	SPEER THYE MING TECH CO	2F
88	2 470-75407	R51,R158	0 OHM	RES MF ZERO OHM 1/10W -- 0603	LTD	CR-03JL7----0R
89	9 470-30298	R53,R66,R80,R133,R143,R144,R145,R146,R147	270 OHM	RES MF 270 OHM 1/10W 5% 0603	KOA SPEER	RK73B1JTDD271 J
90	1 470-75517	R54	6.04K	RES MF 6.04K 1/10W 1% 0603	KOA SPEER	RK73H1JTDD604 1F
91	4 470-75432	R67,R68,R69,R70	49.9 OHM	RES MF 49.9 OHM 1/10W 1% 0603	KOA SPEER	RK73H1JTDD49R 9F
92	1 470-78066	R90	33.0K	RES MF 33K 1/10W 1% 0603	KOA SPEER	RK73H1JTDD330 2F
93	1 470-76701	R91	300 OHM	RES MF 300 OHM 1/10W 1% 0603	VISHAY INTERTEC HNOLOGY	CRCW0603300R FKEA
94	1 470-75818	R92	49.9K	RES MF 49.9K 1/10W 1% 0603	KOA SPEER	RK73H1JTDD499 2F
95	1 470-75424	R93	100K	RES MF 100K 1/10W 1% 0603	KOA SPEER	RK73H1JTDD100 3F
96	1 470-75995	R94	1.5K	RES MF 1.5K 1/10W 5% 0603	BOURNS	CR0603-JW- 152ELF



97	1 470-76704	R95	.022 OHM	RES MF .022 OHM 1W 1% 2512	VISHAY INTERTEC WSL2512R0220F HNOLOGY EA
98	2 470-75421 DNP	R120,R126	1.0K	RES MF 1.00K 1/10W 1% 0603	KOA RK73H1JTTD100 SPEER 1F
99	2 470-75430	R125,R128	4.70K	RES MF 4.70K 1/10W 1% 0603	KOA RK73H1JTTD470 SPEER 1F
100	3 470-75421	R129,R130,R131	1.0K	RES MF 1.00K 1/10W 1% 0603	KOA RK73H1JTTD100 SPEER 1F
101	1 470-30137	R132	6.80K	RES MF 6.80K 1/10W 1% 0603	KOA RK73H1JTTD680 SPEER 1F
102	5 470-75778	R159,R160,R161,R162,R163	68K	RES MF 68K 1/10W 5% 0603	VENKEL CR0603-10W- COMPANY 683JT
103	1 510-75062	SW1	1101M2S3C QE2	SW SPDT SLD TH WSH 28V 6A TH SW SPST PB MOM NO SMT	ITT CANNON 1101M2S3CQE2
104	5 510-75094	SW2,SW3,SW4,SW5,SW6	SPST PB NO	50MA@50V AG, ROHS	E SWITCH TL3301NF160QG
105	3 510-75618	TP1,TP2,TP3	TP_35MIL	TEST POINT PAD .035 SMT	
106	1 480-75198	U1	IRLML6402T RPBF	TRAN PMOS PWR -20VDS -3.6A	INTERNAT IONAL RECTIFIE IRLML6402TRPB R F
107	1 480-75198 DNP	U2	IRLML6402T RPBF	TRAN PMOS PWR -20VDS -3.6A	INTERNAT IONAL RECTIFIE IRLML6402TRPB R F
108	1 480-75480	U3	NTR4501NT1 G	TRAN N CHNL MOSFET SGL PWR 20V 3.2A SOT23	ON SEMICON DUCTOR NTR4501NT1G TEXAS
109	5 315-75266	U4,U8,U10,U13,U14	74LVC2G66	IC LIN SW DUAL 1.65-5.5V VSSOP8	INSTRUM SN74LVC2G66D ENTS CUTE4 FREESCA LE
110	1 312-75627	U5	MC34702	OBSOLETE DUE TO EOL, IC REG LIN SWITCH-MODE PWR SUP 2.8-6V	SEMICON DUCTOR MC34702EKR2
111	1 312-75370	U6	WM8731SED S	IC LIN ADC DAC 32 BITS 3.3V SSOP28 IC MEM EEPROM SER 256K 1.8-3.6V	WOLFSON MICROEL ECTRONI CS WM8731SEDS AT24C256BN-SH-
112	1 334-76378	U7	EEPROM	SOIC8	ATMEL B



113	1 344-00005	U9	MC9S12UF32	IC MCU 16 BIT 3.3/5V 100 LQFP PQFP100, UF32 MCU PROGRAMMED BY P&E WITH USB BDM MULTILINK FIRMWARE	P&E MICROCOMPUTER TEXAS INSTRUMENTS	UF32E_CF
114	1 315-75111	U11	SN74LVC1G66	IC SGL SW ANALOG 1.65-5.5V	TEXAS INSTRUMENTS	SN74LVC1G66D BV
115	1 312-75968	U12	SN74LVC1G08	IC GATE AND SGL 2-INPUT POSITIVE 5V SOT23-5	TEXAS INSTRUMENTS	SN74LVC1G08D BVRE4
116	1 312-30167	U15	MC34164	IC VSUP 5V MONITOR TRIP/1.0V SO8 SO8	SEMICONDUCTOR TEXAS INSTRUMENTS	MC34164D-5G
117	1 312-30280	U16	SN65HVD230D	IC XCVR CAN 1MBPS 3.3V SOIC 8	TEXAS INSTRUMENTS	SN65HVD230D
118	1 312-75606	U17	SN74LVC2G08DCUT	IC GATE AND DUAL 2-INPUT POSITIVE 1.65-5.5V VSSOP8	TEXAS INSTRUMENTS	SN74LVC2G08D CUT
119	1 344-00505	U18	MCF5253VM140	IC MCU 32BIT 128K SRAM 3.3V MAPBGA225	FREESCALE SEMICONDUCTOR	MCF5253VM140
120	1 312-77419	U19	MMA7260QT	IC ACCELERATION SENSOR 1.5-6G 3-AXIS 2.2-3.6V QFN16	SEMICONDUCTOR	MMA7260QT
121	1 312-77466	U20	SST39VF6401B	IC MEM FLASH 64MBIT 70NS 2.7-3.6V TSOP48	SST	SST39VF6401B-70-4C-EKE
122	1 334-76677	U21	K4S281632	IC MEM SDRAM 8MX16 7.5NS SYNC 3.3V TSOP116	SAMSUNG	K4S281632I-UC75
123	1 330-75799	U22	DM9000EP	IC CTLR ETHERNET 10/100M PHY 3.3V LQFP100	DAVICOM	DM9000EP
124	1 312-75390	U23	MIC2026,MIC2076	IC LIN SW 2 PWR 2.7-5.5V SOIC 8	MICREL	MIC2026-2YM
125	1 312-77064	U24	SP3232	IC XCVR RS232 120KBPS 3.0-5.5V SSOP16	SIPEX NATIONAL SEMICONDUCTOR	SP3232ECA-L
126	1 315-30029	U25	LM1117MPX-3.3/NOPB CS20-11.2896MAB	IC VREG LDO 3.3V 800MA 1.25V-13.8V SOT-223-4	SEMICONDUCTOR	LM1117MPX-3.3/NOPB
127	1 230-76375	DNP	J-UT	XTAL 11.2896MHZ SMT	CITIZEN	CS20-11.2896MABJ-UT
128	1 230-75892	Y2	12MHZ	XTAL 12.000MHZ SER -- TH	CITIZEN	HC49US12.000M ABJ-UT



129	1 230-30001	Y3	32.768KHz	XTAL 32.768KHZ PAR -- TH	VISHAY INTERTEC HNOLOGY XT26TTA32K768
130	1 230-75469	Y4	24MHZ	XTAL 24MHZ 20PPM -- SMT	ABRACON ABM8- CORP 24.000MHZ-B2-T ECS INC. INTERNAT
131	1 230-75427	Y5	25MHz	XTAL 25MHZ RSN -- SMT	IONAL ECS-250-18-5PX
132	1 230-76375	Y6	CS20- 11.2896MAB J-UT	XTAL 11.2896MHZ SMT	CITIZEN CS20- 11.2896MABJ-UT