91-0116 PCBA WIS 1G Belt Receiver -- V8.2A **Bill of Materials -- 10 January 2018**

Qty	ROGI PN	Description	Manufacturer	Mfr Part Number	Part	PCB Footprint	Tol	Volt	Reference
4	11-0153	SMT Standoff Electro Tin plated 2-56 x 3/16"	Penn Engineering	SMTSO-256-6ET	SMTSO256	SMTSO256xET			SD1,SD2,SD3,SD4
1	21-0339	Conn Plug 80 Pos JMD	JST	80P-JMDSS-G-1-TF(LF)	80P-JMDSS-G-1-TF	HDR-ZX40-JMDSS-J			J3
1	2C-0394	PCB WIS 1G Belt RX V8	NCAB	2C-0394					
1	2J-0498	Stencil WIS 1G Belt RX V8 (T) 20X20	Beam On	2J-0498					
1	2J-0499	Stencil WIS 1G Belt RX V8 (B) 20X20	Beam On	2J-0499					
10	31-0184	RES ERJ 0402 0 ohm jumper	Panasonic	ERJ-2GE0R00X	0 Ohm	CR0402			R5,R34,R36,R53,R61,R65,R68,R84,R105,R135,R136,R139,R155,R164,R165,R167,R183,R209,R211,R213
1	31-0788	RES ERJ 0603 1/10W ±5% 7.5k	Panasonic	ERJ-3GEYJ752V	7.5K	CR0603			R3
2	31-0870	RES ERJ 0402 1/16W ±5% 33 ohm	Panasonic	ERJ-2GEJ330X	33 ohm	CR0402	<Tol>		R98,R197
4	31-0874	RES ERJ 0402 1/16W ±1% 3.32k	Panasonic	ERJ-2RKF3321X	3.3k	CR0402	1%		R85,R97,R184,R196
22	31-0875	RES ERJ 0402 1/16W ±1% 1k	Panasonic	ERJ-2RKF1001X	1k	CR0402	1%		R12,R23,R27,R31,R38,R49,R56,R72,R77,R80,R96,R113,R124,R129,R132,R140,R151,R156,R171,R176,R179,R194
2	31-0878	RES ERJ 0402 1/16W ±1% 2.49k	Panasonic	ERJ-2RKF2491X	2.49K	CR0402	1%		R101,R200
4	31-0887	RES ERJ 0402 1/16W ±5% 6.8k	Panasonic	ERJ-2GEJ682X	6.8K	CR0402			R33,R52,R134,R154
55	31-0892	RES ERJ 0402 1/16W ±1% 10k	Panasonic	ERJ-2RKF1002X	10K	CR0402	1%		R2,R28,R29,R51,R58,R62,R63,R64,R67,R69,R70,R73,R74,R75,R81,R82,R83,R87,R88,R90,R91,R92,R93,R94,R95,R100,R103,R128,R130,R153,R157,R159,R160,R163,R166,R168,R169,R172,R173,R175,R180,R181,R182,R186,R187,R189,R190,R191,R192,R193,R195,R199,R203,R206,R208
2	31-0902	RES ERJ 0402 1/16W ±5% 4.3k	Panasonic	ERJ-2GEJ432X	4.3K	CR0402			R55,R202
4	31-0942	RES ERJ 0402 1/16W ±1% 1.5k	Panasonic	ERJ-2RKF1501X	1.50K	CR0402	1%		R86,R89,R185,R188
2	31-0951	RES ERJ 0402 1/16W ±1% 1.96k	Panasonic	ERJ-2RKF1961X	1.96K	CR0402	1%		R32,R133
2	31-0954	RES ERJ 0402 1/16W ±1% 2k	Panasonic	ERJ-2RKF2001X	2.00k	CR0402	1%		R1,R102
2	31-0963	RES ERJ 0402 1/16W ±1% 7.5k	Panasonic	ERJ-2RKF7501X	7.50K	CR0402	1%		R99,R198
10	31-1004	RES ERJ 0402 1/16W ±1% 499 ohm	Panasonic	ERJ-2RKF4990X	499 ohm	CR0402	1%		R16,R22,R26,R40,R48,R117,R123,R127,R142,R150
2	31-1014	RES ERJ 0402 1/16W ±1% 6.34k	Panasonic	ERJ-2RKF6341X	6.34K	CR0402	1%		R25,R126
2	31-1027	RES ERJ 0402 1/16W ±5% 2.2k	Panasonic	ERJ-2GEJ222X	2.2K	CR0402			R54,R57
4	31-1044	RES ERA 0402 1/16W ±0.1% 49.9 ohm	Panasonic	ERA-2AEB49R9X	49.9 ohm	CR0402	0.10%		R17,R41,R118,R146
8	31-1045	RES ERA 0402 1/16W ±0.1% 113 ohm	Panasonic	ERA-2AEB1130X	113 ohm	CR0402	0.10%		R19,R20,R43,R46,R119,R122,R143,R147
8	31-1046	RES ERA 0402 1/16W ±0.1% 127 ohm	Panasonic	ERA-2AEB1270X	127 ohm	CR0402	0.10%		R14,R21,R44,R47,R115,R120,R144,R148
8	31-1047	RES ERA 0402 1/16W ±0.1% 348 ohm	Panasonic	ERA-2AEB3480X	348 ohm	CR0402	0.10%		R15,R18,R42,R45,R116,R121,R145,R149
2	31-1063	RES ERJ 0402 1/16W ±1% 100k	Panasonic	ERJ-2RKF1003X	100K	CR0402	1%		R76,R174
2	31-1065	RES ERJ 0402 1/16W ±5% 510 ohm	Panasonic	ERJ-2GEJ511X	510 ohm	CR0402			R66,R162
2	31-1066	RES ERJ 0402 1/16W ±5% 470k	Panasonic	ERJ-2GEJ474X	470K	CR0402			R59,R158
2	31-1088	RES ERJ 0402 1/16W ±1% 1.3k	Panasonic	ERJ-2RKF1301X	1.30K	CR0402	1%		R79,R178
4	31-1089	RES ERJ 0402 1/16W ±1% 3.92k	Panasonic	ERJ-2RKF3921X	3.92K	CR0402	1%		R35,R78,R137,R177
2	31-1102	RES ERA 0402 1/16W ±0.1% 432 ohm	Panasonic	ERA-2AEB4320X	432 ohm	CR0402	0.10%		R114,R141
2	31-1117	RES ERJ 0402 1/16W ±1% 887 ohm	Panasonic	ERJ-2RKF8870X	887 ohm	CR0402	1%		R37,R138
4	31-1134	RES ERJ 0402 1/16W ±1% 36.5k	Panasonic	ERJ-2RKF3652X	36.5k	CR0402	1%		R24,R50,R125,R152
2	31-1142	RES ERJ 0402 1/16W ±1% 432 ohm	Panasonic	ERJ-2RKF4320X	432 ohm	CR0402	1%		R13,R39
2	31-1211	RES ERJ 0402 1/16W ±1% 4.75k	Panasonic	ERJ-2RKF4751V	4.7k	CR0402	1%		R210,R212
1	32-0041	Potentiometer Digital Dual 25k TSSOP-16	Analog Devices	AD5235BRUZ25	AD5235BRUZ25	TSOP65P640-16			U15
1	33-0002	RES Array 4 Res ±5% 33 ohm	CTS	742C083330JPTR	33ohm	CRN_742-4			R201
7	38-0004	CAP 0402 C0G 50V ±5% 100pF	Kemet	C0402C101J5GACTU	100pF	CC0402			C15,C17,C85,C117,C161,C230,C262
11	38-0045	CAP 0402 X7R 50V ±10% 1nF	Murata	GRM155R71H102KA01D	1nF	CC0402			C7,C9,C150,C158,C160,C294,C302,C315,C319,C320,C321
2	38-0081	CAP 0603 C0G 50V ±5% 150pF	Kemet	C0603C151J5GACTU	150pF	CC0603			C126,C267
4	38-0259	CAP 0603 X7R 50V ±10% 47nF	Murata	GRM188R71H473KA61D	47nF	CC0603			C121,C134,C265,C278
95	38-0391	CAP 0402 X5R 10V ±10% 100nF	Murata	GRM155R61A104KA01D	0.1uF	CC0402			C1,C3,C4,C5,C8,C10,C47,C48,C49,C71,C72,C73,C74,C75,C76,C78,C86,C87,C88,C89,C90,C112,C113,C114,C118,C119,C120,C123,C124,C125,C129,C131,C132,C133,C136,C137,C140,C141,C142,C143,C146,C147,C148,C149,C151,C153,C155,C156,C159,C192,C193,C194,C216,C217,C218,C219,C220,C222,C223,C231,C232,C233,C234,C235,C257,C258,C259,C263,C264,C268,C269,C270,C273,C275,C276,C277,C281,C282,C284,C285,C286,C287,C290,C291,C292,C293,C295,C297,C300,C301,C304,C305,C306,C307,C308
4	38-0392	CAP 0603 X5R 16V ±10% 2.2uF	Kemet	C0603C225K4PACTU	2.2uF	CC0603			C6,C135,C157,C279
5	38-0402	CAP 0402 X5R 10V ±10% 1uF	Kemet	C0402C105K8PACTU	1uF	CC0402			C84,C229,C298,C299,C303
2	38-0442	CAP 0603 X7R 16V ±10% 390nF	Kemet	C0603C394K4RACTU	0.39uF	CC0603			C127,C271
8	38-0453	CAP 0603 C0G 50V ±5% 1.8nF	Murata	GRM188R5CH182JA01D	1.8nF	CC0603	5% COG		C50,C70,C92,C111,C195,C215,C236,C256
2	38-0456	CAP 1206 X5R 16V ±20% 47uF	TDK	C3216X5R1C476M160AB	47uF	CC1206			C82,C227
2	38-0470	CAP 0603 C0G 50V ±5% 2.7nF	Murata	GRM188SC1H272JA01D	2.7nF	CC0603	5% COG		C79,C224
2	38-0475	CAP 0805 X5R 16V ±10% 22uF	TDK	C2012X5R1C226K125AC	22uF	CC0805			C139,C283
2	38-0476	CAP 0402 X5R 16V ±10% 220nF	TDK	C1005X5R1C224K050BB	220nF	CC0402			C80,C225
7	38-0477	CAP 0402 X7R 25V ±10% 22nF	TDK	C1005X7R1E223K050BB	22nF	CC0402			C309,C312,C313,C314,C316,C317,C318
16	38-0487	CAP 0805 C0G 25V ±5% 27nF	Kemet	C0805C273J3GACTU	27nF	CC0805	5% COG		C51,C65,C67,C68,C91,C106,C108,C109,C196,C210,C212,C213,C237,C250,C252,C255
36	38-0488	CAP 0805 C0G 16V ±5% 47nF	Kemet	C0805C473J3GACTU	47nF	CC0805	5% COG		C52,C53,C54,C55,C56,C58,C59,C60,C64,C93,C94,C95,C96,C97,C98,C99,C100,C105,C197,C198,C199,C200,C201,C202,C203,C204,C209,C238,C239,C240,C241,C242,C243,C244,C245,C249
4	38-0501	CAP 0402 U-Hi-Q NP0 50V ±2% 22pF	Johanson	500R07S220GV4T	22pF	CC0402			C77,C115,C221,C260
1	38-0504	CAP 0402 U-Hi-Q NP0 50V ±2% 15pF	Johanson	500R07S150GV4T	15pF	CC0402			C16
8	38-0508	CAP 0402 C0G 50V ±2% 150pF	AVX	04025A151GAT2A	150pF	CC0402			C2,C122,C138,C144,C154,C266,C280,C288
8	38-0518	CAP 0603 X5R 10V ±10% 10uF	TDK	C1608X5R1A106K	10uF	CC0603			C81,C83,C116,C130,C226,C228,C261,C274
8	38-0535	CAP 0805 C0G 50V ±5% 15nF	TDK	C2012C0G1H153J	15nF	CC0805	5% COG		C57,C66,C102,C107,C205,C211,C246,C251
4	38-0539	CAP 0603 C0G 25V ±5% 7.5nF	Kemet	C0603C752J3GAC7867	7.5nF	CC0603	5% COG		C69,C110,C214,C254
2	38-0544	CAP 0402 U-Hi-Q NP0 50V ±0.25pF 5.6pF	Johanson	500R07S5R6CV4T	5.6pF	CC0402			C12,C14
1	38-0548	CAP 0402 U-Hi-Q NP0 50V ±0.1pF 3.9pF	Johanson	500R07S3R9BV4T	3.9pF	CC0402			C13
2	38-0557	CAP 0402 X7R 16V ±10% 82nF	Murata	GRM155R71C823KA88D	82nF	CC0402			C128,C272
2	38-0558	CAP 0805 X7R 25V ±5% 1uF	Kemet	C0805C105J3RACTU	1uF	CC0805	5%		C152,C296
2	38-0585	CAP 0805 X7R 16V 10% 10uF	Samsung	CL21B106KOQNNNE	10uF	CC0805	10%		C145,C289
8	38-0595	CAP 0603 X5R 10V ±20% 22uF	TDK	C1608X5R1A226M080AC	22uF	CC0603	10% X7R		C61,C63,C101,C104,C206,C208,C247,C253
4	38-0597	CAP 0402 Hi-Q C0G 50V ±0.25pF 5pF	Murata	GJM1555C1H5R0CB01D	5pF	CC0402			C11,C162,C310,C311
3	3A-0705	IND 0805CS ±5% 47nH	Coilcraft	0805CS-470XLC	47nH	IND_0805CS			L1,L2,L3
2	3A-0717	IND 0805CS ±5% 22nH	Coilcraft	0805CS-220XLC	22nH	IND_0805CS			L12,L13
2	3A-0789	IND Air Core Micro Spring ±5% 12.5nH	Coilcraft	1606-10JLC	12.5nH	IND_1606			L4,L5
4	3A-0817	IND 0402CS ±5% 18nH	Coilcraft	0402CS-18NGLW	18nH	IND_0402CS			L14,L15,L16,L17
1	3F-0053	Transformer Balun 4:1 SM-138	MA-COM	MABACT0066	MABACT0066	XFMR_MABACT0066			T4
5	42-1001	MOSFET P-Channel 2.5V Specified Power Trench	Fairchild	FDN338P	FDN338P	SOT23			Q1,Q2,Q4,Q6,Q7
2	42-1024	MOSFET N-CH 30V 1.7A SSOT3	Fairchild	NDS355AN	NDS355AN	SOT23			Q3,Q5
8	4A-0222	Diode Small Signal SOD-323	Fairchild	1N4448WS	1N4448WS	DIO_SOD323			D3,D4,D5,D6,D9,D10,D11,D12
2	4I-0311	Diode PIN RF HSMP-3824 Common Cathode SOT-23	Avago	HSMP-3824	HSMP-3824	SOT23			D14,D15
1	4I-0312	Diode PIN RF HSMP-482B Dual Anode SOT-323	Avago	HSMP-482B	HSMP-482B	SOT323			D13
4	4I-0316	Diode PIN RF HSMP-381C SOT-323	Avago	HSMP-381C	HSMP-381C	SOT323			D1,D2,D7,D8
1	50-0084	IC CPLD 152MHz 128 Macro Cells VTQFP-100	Xilinx	XC2C128-7VQG100C	XC2C128-7VQG100C	VQFP50P1600X1600-100			U52
3	53-1055	IC Logic UHS Inverter SC70-5	Fairchild	NC7S204P5X	NC7S204P5X	SC70-5			U26,U49,U54
2	58-0285	IC Op Amp Low Power Rail-to-Rail I/O SOT23-6	Analog Devices	ADA4841-1YRJZ	ADA4841-1YRJZ	SOT23-6			U1,U27
6	58-0306	IC Op Amp 3MHz Rail-to-Rail 2 Channel MSOP-8	Texas Instruments	TLV272IDGKR	TLV272IDGKR	MSOP65P490-8			U21,U22,U25,U45,U46,U50
4	58-0310	IC Op Amp GP Dual DFN-8	Linear Tech	LT6234IDD#PBF	LT6234IDD	QFN50P300X300-9			U7,U12,U33,U39
2	58-0311	IC Op Amp GP 60MHz RRO SOT23-5	Linear Tech	LT6220IS5#TRMPBF	LT6220IS5	SOT23-5			U24,U48
2	58-0312	IC Op Amp Rail-to-Rail Output SO-8	Linear Tech	LT1635IS8#TRPBF	LT1635IS8	SOIC127P600-8			U23,U47
10	58-0322	IC Op Amp Dual GP Rail to Rail Output DFN-8	Linear Tech	LT6011IDD#TRPBF	LT6011IDD	QFN50P300X300-9			U6,U8,U13,U14,U19,U31,U32,U37,U38,U43
10	58-0324	IC Op Amp GP 3.3MHz Rail to Rail Output TSOT23-5	Linear Tech	LT6015IS5#TRPBF	LT6015IS5	SOT23-6			U10,U11,U16,U18,U20,U35,U36,U40,U42,U44
2	59-0040	IC Analog Multiplier 4-Bit SOIC-8	Analog Devices	AD835ARZ	AD835AR	SOIC127P600-8			U17,U41
1	5C-0054	IC VLDO Linear Regulator Low Noise Adjustable TSOT-23	Linear Tech	LTC1844ES5-SD#TRMPBF	LTC1844ES5-SD	SOT23-5			U53
2	6F-0041	Crystal Oscillator VCTCXO CMOS Output 24.000 MHz 1.0ppm	Mercury	VM572T33-24.000-1.0/-30+85	VM572T33-24.000-1.5/-30+85	OSC_VM572			Y1,Y2
1	71-0022	IC Amplifier MMIC Low Noise 50MHz to 6GHz 20mA	Mini-Circuits	PMA-5454+	PMA-5454+	QFN65P300X300-9			U4
2	71-0030	IC RF Dual Amplifier Voltage Controlled QSOP-16	THAT	2162Q16-U	THAT2162	SOP635P600-16			U9,U34
2	72-0218	Attenuator Voltage Controlled 50MHz to 4GHz 30dB QFN-16	RFMD	RFSA2013TR7	RFSA2013	QFN50P300X300-17			U2,U28
1	74-0422	RF Power Splitter/Combiner 2 Way 0 Degree 5 to 1000 MHz	Mini-Circuits	SBTC-2-10+	SBTC-2-10+	XFMR_SBTC-2-10			T1
2	76-0024	IC Dual Band RF Synthesizer with VCO QFN-28	Silicon Labs	Si4133-D-GM	Si4133-GM	QFN50P500X500-29			U55,U56
2	7A-0111	IC Quadrature Demodulator 40 MHz to 900 MHz	Linear Tech	LT5517EUF#PBF	LT5517EUF	QFN65P400X400-17			U3,U29
8	C7-0201	Do Not Install - C0402			DNI	CC0402			C20,C21,C22,C23,C165,C166,C167,C168
10	C7-0202	Do Not Install - CR0402			DNI	CR0402		N/A	R4,R30,R60,R71,R104,R131,R161,R170,R207,R214
1	C7-0213	Do Not Install - Test Point TH 62 mil			62 mil TH-TP	TP62-TH			TP1
1	C7-0214	Do Not Install - Test Point SM 70 mil			Test Pad-SM-70mil	TP70-SM			TP6
3	C7-0215	Do Not Install - Test Point SM 40 mil			Test Pad-SM-40mil	TP40-SM			TP3,TP4,TP5
1	C7-0241	Do Not Install - SC70-6			DNI	SC70-6			U51