

Reach  
Bluetooth  
Bridge Rev A

BOM

Main Board

5/5/2015

revised 7/13/2015

Item	Qty	Part Type	Designator	Footprint	Description	Mfg	Mfg. Part #
1	2	15pF	C13, C14	0402s	Chip Cap 0402 NP0	Murata Electronics North America	GRM1555C1H150JA01D
	2	12pf	C1,C2	0402s	Chip Cap 0402 NP0	Murata Electronics North America	GRM1555C1H120JA01D
2	1	2.2nF	C3	0402s	Chip Cap 0402 X7R 10%	Murata Electronics North America	GRM155R71H222JA01J
3	1	N/C	C4	0402s	Not used	GENERIC	
4	1	1.8pF	C5	0402s	Chip Cap 0402 NP0 +/-0.1pF	Murata Electronics North America	GRM1555C1H1R8BA01D
5	1	1.2pF	C6	0402s	Chip Cap 0402 NP0 5%	Murata Electronics North America	GRM1555C1H1R2BA01D
6	16	.1uf	C7, C15, C16, C17, C18, C20, C21, C22, C23, C24, C25, C26, C29, C30, C32, C36	0603/mm1608	CAP CER 0.1UF 50V 10% X5R 0603	Murata Electronics North America	GRM188R61E104KA01D
7	1	1.0nF	C8	0402s	Chip Cap 0402 X7R 10%	Murata Electronics North America	GRM155R71H102KA01D
8	3	100nF	C9, C10, C12	0402s	Chip Cap 0402 X7R	Murata Electronics North America	GRM155R71C104KA88D
9	1	33nF	C11	0402s	Chip Cap 0402 X7R	Murata Electronics North America	GRM155R71C333KA01J
10	1	.001uf	C19	0603/mm1608	CAP CER 0.001UF 50V 10% X5R 0603	Murata Electronics North America	GRM1885C1H102JA01D
11	1	22uf	C27	1206	CAP CER 22UF 35V 20% JB 1206	Murata Electronics North America	GRM31CR61E226KE15L
12	1	4.7uf	C28	0805/mm2012	CAP CER 4.7UF 6.3V 10% X5R 0805	Murata Electronics North America	GRM219R60J475KE19D
13	3	10uf	C31, C34, C35	0805/mm2012	CAP CER 10UF 10V 10% X5R 0805	Murata Electronics North America	GRM219R60J106KE19D
14	1	1uf	C33	0805/mm2012	CAP CER 1UF 10V 10% X5R 0805	Murata Electronics North America	GRM216R61E105KA12D
15	1	LED Yellow	D4	0603/mm1608	LED YELLOW CLEAR THIN 0603 SMD	Lumex Opto/Components Inc	SML-LXFP0603SYC-TR
16	3	LED Green	D6,D8,D10	0603/mm1608	LED GREEN CLEAR THIN 0603 SMD	Lumex Opto/Components Inc	SML-LXFP0603UPGCTR
17	2	LED Red	D3, D7	0603/mm1608	LED SUPER RED CLR THIN 0603 SMD	Lumex Opto/Components Inc	SML-LXFP0603SIC-TR
18	1	LED Blue	D5	0603/mm1608	LED BLUE CLEAR THIN 0603 SMD	Lumex Opto/Components Inc	SML-LXFP0603USBCTR
19	1	Diode	D1	SMA	DIODE GEN PURP 50V 1A SMA	Diodes Incorporated	S1A-13-F
20	1	Diode	D9	DIODE SOD123	SCHOTTKY RECTIFIER 2.0 AMP, 30V,SOD123	ON Semi	MBR230LSFT1
21	1	USB Conn	J1	440478	USB 2.0, Right Angle, SMT, A Type, Recep, 5 Pos,Black	TE Connectivity	1734035
22	1	8.2nH	L1	0402s	High frequency chip inductor ± 5%	Johanson Technology Inc	L-07C8N2JV6T
23	1	5.6nH	L2	0402s	High frequency chip inductor ± 5%	Johanson Technology Inc	L-07C5N6SV6T
24	1	3.9nH	L3	0402s	High frequency chip inductor ± 5%	Johanson Technology Inc	L-07C3N9SV6T
25	1	22uH	L4	INDC4018N	SMD Power Inductor	Laird/Generic	TYS4018220M-10
26	1	SMA	P1	SMB_V-RJ45	SMA, PCB, Right Angle, Jack, Revers Polar.	Molex	<a href="#">SMA-J/RA/PCB</a>
27	1	RF Debug	P2	HDR1X3	Not used		
28	1	SPI JUMP 2	P3	HDR2X3	Not used		
29	1	ICSP	P4	HDR2X3	Header, 3-Pin, Dual row, 0.1 inch pitch	Samtec Inc	MTLW-103-05-G-D-170

30	1	Header 6	P5	HDR1X6	Not used		
31	1	Header 8	P6	HDR1X8 - OST Screw term	3.5mm pitch solid block screw terminal	Phoenix Contact	5442675
32	10	2N7002	Q1, Q2, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11	SOT23_N	N-channel Enhancement Mode Field-effect Transistor	ON Semi	2N7002E
33	4	BSS84	Q3, Q12, Q13, Q14	SOT23_N	Power MOSFET Single P-Channel SOT-23	ON Semi	BSS84LT1G
34	1	22k	R1	0603/mm1608	Resistor	GENERIC	
35	15	10K	R2, R19, R20, R21, R22, R23, R24, R25, R26, R28, R29, R34, R35, R36, R37	0603/mm1608	Resistor	GENERIC	
36	1	1M	R3	0603/mm1608	Resistor	GENERIC	
37	9	100K	R14,R15	0603/mm1608	Resistor	GENERIC	
38	6	220	R5, R6, R16, R17, R18,R32	0603/mm1608	Resistor	GENERIC	
39	1	120	R7	0603/mm1608	Resistor	GENERIC	
40	1	0	R27	0603/mm1608	Resistor, 0 ohm, 0602	GENERIC	
41	1	9.53k	R30	0603/mm1608	Resistor	GENERIC	
42	1	49.9k	R31	0603/mm1608	Resistor	GENERIC	
43	1	4.7k	R33	0603/mm1608	Resistor	GENERIC	
44	1	nRF8001	U1	Nordic_QFN50P500X500X	nRF8001 Bluetooth LE chip, Rev D	Nordic Semiconductor	nRF8001-R2Q32 Rev D
45	1	M24M02-DR	U2	SOP8_N	2-Mbit serial I²C bus EEPROM	ST Micro	M24M02-DR
46	1	FT232RL	U3	SSOP-28_N	USB UART Serial Data Transfer Chip, SSOP-28	FTDI Chip	FT232RL
47	1	MAX232CSE	U4	NSO16_N	+5V Powered, Multi-Channel RS-232 Driver/Receiver	ST Micro	ST232BDR
48	1	DC to DC AOZ1282	U5	SOT23-6_L	1.2A buck regulator, SOT23-6L	Alpha & Omega	AOZ1282CI
49	1	ATMEGA2560-16AU	U6	TQFP100	8-bit Atmel Microcontroller, 16 MHz	Atmel	ATmega2560-16AU
50	1	Volt Reg 1 GND	VR1	SOT23_N	300mA, 3.3v, positive voltage regulator	BCD	AP2125N-3.3
51	1	16MHz	X1	BT-XTAL_3225	SMD-3225, 16 MHz, CL=9 pF, ± 40 ppm	Epson	TSX-3225
52	1	32.768kHz	X2	FC-135	FC-135 32.768KHZ ±20PPM,9.0PF - CRYSTAL, SM	Epson	FC-135 32.7680KA-AC
53	1	CSTCE16M0V53-R0 16MHZ	Y1	RESONATOR	CER RESONATOR 16.0MHZ SMD	Murata	CSTCE16M0V53-R0
54	1	PCB		PCB			