

												Bill of Materials C209-V2_R2-BOM-5.xls		Last Rev: 02-June-2021	
												Corresponding Schematic: C209_Schematic.pdf		Review Report: 1	
												Part 1/1: Detailed Bill of Materials		By asoh	
Project name												Description			
C209												C209 Rev.A			
Nr	Refdes	UBX	Description	Remarks	Manufacturer	Part Number	Second Source	X	Y	Rotation	Position				
1	A1	UBXHXX-XXXXXXX	SHORT RANGE BLE MODULE U-BLOX NINA-B406-00B		u-blox	NINA-B406-00B		26600	6975	0	BOT				
2	BAT1	UBXHXX-XXXXXXX	COIN CELL, HOLDER	Second source added	MPD (Memory Protection Devices)	BU2032SM-BT-GTR	BU2032SM-JJ-GTR	27300	15605	90	TOP				
3	C1	UBXH01-2022001	CAP CER X7R 0603 100N 10% 50V		Samsung Electro-Mechanics	CL10B104KB8NFNC		32515	-1325	90	BOT				
4	C2	UBXH01-0000245	CAP CER X5R 0201 100N 10% 10V		Murata Manufacturing Company, Ltd.	GRM033R61A104KE84		23630	115	0	BOT				
5	C3	UBXH01-0001022	CAP CER COG 0201 47P 5% 25V		Murata Manufacturing Company, Ltd.	GRM0335C1E470JA01		26220	1000	180	BOT				
6	C4	UBXH01-0000243	CAP CER X5R 0402 4U7 20% 10V		Murata Manufacturing Company, Ltd.	GRM155R61A475MEAA		23230	915	0	BOT				
7	C5	UBXH01-0001022	CAP CER COG 0201 47P 5% 25V		Murata Manufacturing Company, Ltd.	GRM0335C1E470JA01		28820	1000	0	BOT				
8	C6	UBXH01-0000245	CAP CER X5R 0201 100N 10% 10V		Murata Manufacturing Company, Ltd.	GRM033R61A104KE84		14900	-425	270	BOT				
9	C7	UBXH01-0000245	CAP CER X5R 0201 100N 10% 10V		Murata Manufacturing Company, Ltd.	GRM033R61A104KE84		39700	-425	270	BOT				
10	C8	UBXH01-0000245	CAP CER X5R 0201 100N 10% 10V		Murata Manufacturing Company, Ltd.	GRM033R61A104KE84		23220	4220	180	BOT				
11	C9	UBXH01-0000245	CAP CER X5R 0201 100N 10% 10V		Murata Manufacturing Company, Ltd.	GRM033R61A104KE84		35100	26990	90	BOT				
12	C10	UBXH01-0000245	CAP CER X5R 0201 100N 10% 10V		Murata Manufacturing Company, Ltd.	GRM033R61A104KE84		35100	25350	270	BOT				
13	C11	UBXH01-0000245	CAP CER X5R 0201 100N 10% 10V		Murata Manufacturing Company, Ltd.	GRM033R61A104KE84		15850	6300	180	BOT				
14	C12	UBXH01-0000245	CAP CER X5R 0201 100N 10% 10V		Murata Manufacturing Company, Ltd.	GRM033R61A104KE84		18450	5450	0	BOT				
15	C13	UBXH01-0000245	CAP CER X5R 0201 100N 10% 10V		Murata Manufacturing Company, Ltd.	GRM033R61A104KE84		28135	9070	90	BOT				
16	C14	UBXHXX-XXXXXXX	CAP CER X5R 1206 4U7 10% 16V		Samsung Electro-Mechanics	CL31A475K0CLNNC		15700	4000	90	BOT				
17	C17	UBXH01-0000245	CAP CER X5R 0201 100N 10% 10V		Murata Manufacturing Company, Ltd.	GRM033R61A104KE84		33275	23850	270	BOT				
18	C18	UBXH01-0000245	CAP CER X5R 0201 100N 10% 10V		Murata Manufacturing Company, Ltd.	GRM033R61A104KE84		31975	23850	270	BOT				
19	C19	UBXH01-0000272	CAP CER X5R 0201 1U0 10% 6.3V		AVX	02016D105KAT2A		37305	9980	90	BOT				
32	D1	UBXHXX-XXXXXXX	DIODE SCHOTTKY 30V 200mA		ON Semiconductor	NSR0230M2T5G		22920	3470	180	BOT				
21	DS1	UBXH11-0000019	SMLP36 RGB LED RGB 3.1V		ROHM	SMLP36RGB1W3		38700	7500	180	BOT				
22	FB1	UBXH08-0000036	FERRITE BEAD, 0402, 600 OHM AT 100MHZ 600OHM		TDK Corporation	MMZ1005A601ET000		23280	1915	180	BOT				
23	J1	UBXH04-0000168	CON USB RECEPTACLE MICRO B TYPE SMD 5P REVERSE TOP MOUNT		Hirose	ZX62R-B-5P		27300	-3900	0	BOT				
24	J2	UBXH04-0000194	2-ROWS SMD-PCB CONNECTOR 50MIL GRID 10 PINS 0.41MM SQUARE 4.0MM KEYED		Samtec	FTSH-105-01-L-DV-K		19125	24430	180	BOT				
25	J3		DO NOT INSTALL												
26	J4		DO NOT INSTALL												
27	J5		DO NOT INSTALL												
28	J6		DO NOT INSTALL												
29	J7		DO NOT INSTALL												
30	Q1	UBXHXX-XXXXXXX	P-CHANNEL MOSFET 1V GATE RATED SOT23		Toshiba Semiconductor and Storage	SSM3J378R.LF		18700	1150	0	BOT				
31	R2	UBXH18-0000470	RES THICK FILM CHIP 0201 27R 5%		Samsung Electro-Mechanics	RC0603J270CS		27195	1275	270	BOT				
32	R3	UBXH18-0000470	RES THICK FILM CHIP 0201 27R 5%		Samsung Electro-Mechanics	RC0603J270CS		27845	1275	270	BOT				
33	R5	UBXH18-0003002	RES THICK FILM CHIP 0402 0R 0		KOA	RK73Z1ETTD		31600	5990	180	BOT				
34	R6	UBXH18-0003002	RES THICK FILM CHIP 0402 0R 0		KOA	RK73Z1ETTD		31600	4090	180	BOT				
35	R7	UBXH18-0003002	RES THICK FILM CHIP 0402 0R 0		KOA	RK73Z1ETTD		31600	5040	180	BOT				
36	R8	UBXH18-0003002	RES THICK FILM CHIP 0402 0R 0		KOA	RK73Z1ETTD		31600	3140	180	BOT				
37	R9	UBXH18-0000007	RES THICK FILM CHIP 0201 1K0 5%		KOA	RK73B1HTTC102J		38250	5700	90	BOT				
38	R10	UBXH18-0000007	RES THICK FILM CHIP 0201 1K0 5%		KOA	RK73B1HTTC102J		38150	9650	270	BOT				
39	R11	UBXH18-0000027	RES THICK FILM CHIP 0201 2K7 5%		KOA	RK73B1HTTC272J		38700	9650	270	BOT				
40	R12	UBXH18-0003002	RES THICK FILM CHIP 0402 0R 0		KOA	RK73Z1ETTD		38085	27690	180	BOT				
41	R13	UBXH18-0003002	RES THICK FILM CHIP 0402 0R 0		KOA	RK73Z1ETTD		38085	24240	180	BOT				
42	R14	UBXH18-0003002	RES THICK FILM CHIP 0402 0R 0		KOA	RK73Z1ETTD		32100	29255	270	BOT				
43	R15	UBXH18-0003002	RES THICK FILM CHIP 0402 0R 0		KOA	RK73Z1ETTD		31150	29255	270	BOT				
44	R16	UBXH18-0003002	RES THICK FILM CHIP 0402 0R 0		KOA	RK73Z1ETTD		19250	18400	180	BOT				
45	R17	UBXH18-0007169	RES THICK FILM CHIP 0603 10M 5%		KOA	RK73B1JTTD106J		33890	-1325	270	BOT				
46	R18	UBXH18-0001097	RES THICK FILM CHIP 0201 10K 5%		KOA	RK73B1HTTC103J		20505	5150	90	BOT				
47	R19		DO NOT INSTALL												
48	R20	UBXH18-0001097	RES THICK FILM CHIP 0201 10K 5%		KOA	RK73B1HTTC103J		37300	4800	180	BOT				
49	R22	UBXH18-0003002	RES THICK FILM CHIP 0402 0R 0		KOA	RK73Z1ETTD		34290	10655	270	BOT				
50	R23	UBXH18-0003002	RES THICK FILM CHIP 0402 0R 0		KOA	RK73Z1ETTD		35450	10655	270	BOT				
51	R24	UBXH18-0001089	RES THICK FILM CHIP 0201 4K7 5%		KOA	RK73B1HTTC472J		26115	19530	270	BOT				
52	R25	UBXH18-0001097	RES THICK FILM CHIP 0201 10K 5%		KOA	RK73B1HTTC103J		24115	19530	90	BOT				
53	R26	UBXH18-0001089	RES THICK FILM CHIP 0201 4K7 5%		KOA	RK73B1HTTC472J		25115	19530	270	BOT				
54	S1	UBXH19-0000021	PUSHBUTTON SPST SMD C&K MINATURTASTER 32V		C&K Components	KMR221G LFS		13000	-2200	90	BOT				
55	S2	UBXH19-0000021	PUSHBUTTON SPST SMD C&K MINATURTASTER 32V		C&K Components	KMR221G LFS		41600	-2200	270	BOT				
56	TP1		DO NOT INSTALL												
57	TP2		DO NOT INSTALL												
58	TP3		DO NOT INSTALL												
59	TP4		DO NOT INSTALL												
60	TP5		DO NOT INSTALL												
61	TP6		DO NOT INSTALL												

62	TP7		DO NOT INSTALL								
63	TP8		DO NOT INSTALL								
64	TP9		DO NOT INSTALL								
65	TP10		DO NOT INSTALL								
66	U2	UBXHXX-XXXXXXX	COMBINED HUUMIDITY PRESSURE AND TEMP SENSOR		Bosch	BME_280		32300	26605	270	BOT
67	U3	UBXHXX-XXXXXXX	AMBIENT LIGHT SENSOR		Avago	APDS-9306-065		36565	7490	0	BOT
					FTDI Future Technology Devices						
68	U5	UBXH05-0000098	USB INTERFACE IC USB TO BASIC SERIAL UART		International	FT234XD-T		27520	4400	180	BOT
69	U6	UBXH06-0000042	TRIPLE BUFFER WITH OPEN-DRAIN OUTPUT 74LVC3G07		NXP	74LVC3G07DC		37950	13550	90	BOT
70	U8	UBXHXX-XXXXXXX	3-AXIS ACCELEROMETER		STMicroelectronics	LIS2DW12		36720	25965	0	BOT
71	U9		DO NOT INSTALL								
Additional Components											
1	PCB	UBXH60-0000622	PCB FOR C209 REV. A								
1		UBXHXX-XXXXXXX	u-blox standard label "MAX" 7x7mm with CE mark	MAX label 7x7	Scanfil						
Total		56									
Notes											
Position units in micrometers											