

Radio board

Board Number MB1414-B
BOM release 01
Oct-19

Designator	Quantity	Description	Manufacturer	Manufacturer Part Number	2nd Source	NOT FITTED	ST/SUBCO proc.
C302, C308, C315	3	LXRW0YV201-059	muRata	LXRW0YV201-059			
C304, C310	2	d.n.p.	muRata	LXRW0YV201-059		X	
D300	1	BAV70W_SOT323	BAV70WT1G	On semi	doublesourcing allowed		
J201, J204, J205, J300, J303, J304, J305	7	closed 0R	Multicomp	MC00625W040210R			
J207	1	closed 0R	Multicomp	MC00625W040210R			
LED100, LED101	2	Green	Lite-On	LTST-C190KGKT			
Q300	1	NX3008NBK	Nexperia	NX3008NBK			
S100	1	PCM125MTR	C & K COMPONENTS	PCM125MTR			
U200	1	ST25R3916	STMicroelectronics	ST25R3916-AQFMCT-ND			ST
R204, R205, R206, R207, R208, R209, R210	7	0R	MULTICOMP	MC00625W040210R	0 ohm, 50 V, 0402, >62.5 mW		
L300, L301	2	270n	TDK	MLJ1608WR27JT000	0.27 uH 5 % 0.55A 0603		
R100	1	1k	Panasonic	ERJ2GEJ102X	1 kohm, 50 V, 0402, >100 mW, ± 5%		
R201, R202	2	1k65	MULTICOMP	MC00625W040211K65	1.65 kohm, 50 V, 0402, >62.5 mW, ± 1%		
R300, R301	2	2R2	Vishay Dale	CRCW06032R20FKEA	2.2 Ohm ±1% 0.1W, 1/10W Chip Resistor 0603		
C217, C218	2	C_10p_0402	MURATA	GRM1555C1H100GA01D	10pF ±2% 50V COG, NP0 0402		
C307, C312	2	C_27p_0603	MURATA	GRM1885C1H270FA01D	27pF ±2% 50V COG, NP0 0603		
R303	1	47k			47k 0402		
C303, C314	2	C_47p_0603	MURATA	GRM1885C1H470FA01D	47pF ±2% 50V COG, NP0 0603		
R200, R203	2	50R	MULTICOMP	MCMR04X49R9FTL	49.9 ohm, 50 V, 0402, >62.5 mW, ± 1%		
R302	1	100R			100R 0402		
C300, C317	2	C_120p_0603	MURATA	GRM1885C1H121GA01D	120pF ±2% 50V COG, NP0 0603		
C305, C313	2	C_220p_0402	MURATA	GRM1885C1H221FA01D	220pF ±2% 50V COG, NP0 0402		
C309	1	d.n.p.	MURATA	GRM1885C1H221FA01D	220pF ±2% 50V COG, NP0 0402	X	
C201, C202, C204, C206, C208, C211, C213, C215	8	C_10n_0402_X7R	AVX	04023C103KAT2A	0402, 0.01 µF, 25 V, ± 10%, X7R		
C209, C210	2	d.n.p.	AVX, MURATA	04023C103KAT2A, GRM155R60J225	0402, 0.01 µF, 25 V, ± 10%, X7R, 0402, 2.2 µF, 6.3 V, ± 20%, X5R	X	
C200	1	C_1µ_0402_X5R	MURATA	GRM155R61C105KA12D	0402, 1 µF, 16 V, ± 10%, X5R		
C100, C203, C207, C212, C214, C216	6	C_2µ2_0402_X5R	MURATA	GRM155R60J225ME15D	0402, 2.2 µF, 6.3 V, ± 20%, X5R		
C205	1	C_4µ7_0402_X5R	TDK	C1005X5R0J475K050BC	0402, 4.7 µF, 6.3 V, ± 10%, X5R		
C301, C316	2	C_10p_0603	MULTICOMP	MC0603N100F500CT	0603, 10pF, 50 V, 1%, COG / NP0		
R101	1	680R	Yageo	RC0402JR-07680RL	680 Ohm ±5% 0.063W, 1/16W Chip Resistor 0402		
C306, C311	2	C_680p_0603	MURATA	GRM1885C1H681GA01D	680pF ±2% 50V COG, NP0 0603		
J100, J102	2	Male Single Row Horizontal	Samtec	TSW-105-08-G-S-NA	doublesourcing allowed		
J101	1	Male Single Row Horizontal	Samtec	TSW-114-08-G-S-NA	doublesourcing allowed		
P100, P101, P102, P103	4	Spacer	3M	SJ5303TRANS	doublesourcing allowed - same than MB1396		
Y200	1	NDK 27,12MHz Crystal	MURATA	NX2016SA STD-CZS-5 27.12MHz	Murata XRCGB27M120F3M00R0		
P200, P201, P202, P203	4	U.FL-R-SMT-1	HIROSE(HRS)	U.FL-R-SMT-1(10)	yes	X	

Mother board

Designator	Quantity	Description	Manufacturer	NOT FITTED
C1, C10, C13, C17, C41, C56	6	CAPACITOR 1uF 25V 10% X5R 0603	MULTI-SOURCES	
C2	1	CAPACITOR 2.2uF 16V 10% X7R 1206	MULTI-SOURCES	
C3	1	CAPACITOR 10nF 16V 10% X7R 0402	MULTI-SOURCES	
C4, C5, C6, C7, C8, C11, C12, C14, C15, C16, C19, C22, C23, C24, C25, C26, C27, C28, C31, C35, C36, C38, C42, C43, C44, C45, C46, C47, C50, C51	30	CAPACITOR 100nF 16V 10% X7R 0402	MULTI-SOURCES	
C9, C37, C48, C49, C54, C55	6	CAPACITOR 10uF 25V 10% X7R 0603	MULTI-SOURCES	
C18, C33	2	CAPACITOR 4.7nF 50V 5% NPO 0402	MULTI-SOURCES	
C20, C21, C30, C32	4	CAPACITOR 10pF 50V 5% NPO 0402	MULTI-SOURCES	
C29	1	CAPACITOR 20pF 0402 NOT FITTED	MULTI-SOURCES	X
C34	1	CAPACITOR 4.7uF 25V 10% X7R 0603	MULTI-SOURCES	
C39, C40	2	CAPACITOR 100nF 0402 NOT FITTED	MULTI-SOURCES	X
C52, C53	2	CAPACITOR 4.7pF +/-0.25pF 50V NPO 0402	MULTI-SOURCES	
D1, D2, D3, D4, D5	5	DIODE BAT60JFILM	ST MICRO	
J1	1	MICRO USB AB 47590-0001	MOLEX	
J2	1	MINI USB B 5075BMR-05-SM	NELTRON	
J4	1	CONNECTOR SSW-114-02-G-S-RA	SAMTEC	
J5, J6	2	CONNECTOR SSW-105-02-G-S-RA	SAMTEC	
JP1, JP2, JP3, JP10, JP13, JP15	6	CONNECTOR TSW-102-07-G-S 1x2Pts	SAMTEC	
JP4	1	CONNECTOR TSW-104-07-G-S 1x4Pts	SAMTEC	
JP5	1	CONNECTOR TSW-105-07-G-S NOT FITTED	SAMTEC	X
JP6, JP7, JP8, JP9	4	CONNECTOR TSW-101-07-G-S 1Pt	SAMTEC	
JP11	1	CONNECTOR TSW-104-07-G-D 2x4Pts	SAMTEC	
JP12	1	CONNECTOR CES-107-01-L-D	SAMTEC	
JP14	1	CONNECTOR TSW-1xx-07-G-S 1x3Pts & 1x1PT	SAMTEC	
JP16	1	CONNECTOR TSW-103-07-G-S 1x3Pts	SAMTEC	
L1, L3	2	EMI FERRITE BEAD 600 Ohms 742792042	WURTH	
L2, L6, L8	3	COMMON MODE FILTER 744232090	WURTH	
L4, L7	2	EMI FERRITE BEAD 300 Ohms 742792641	WURTH	
L5	1	FERRITE CHIP BEAD FCM1608KF-601T03	TAI TECH	
L9	1	SELF BLM18EG471SN1D	MURATA	
LCD1	1	LCD MODULE FRD24048TP	SHENZHEN FRIDA	
LD1	1	LED GREEN 19-21SYGC/S530-E1/TR8	EVERLIGHT	
LD2	1	LED YELLOW TLMY1000-GS08	VISHAY	
LD3	1	LED ORANGE 19-217/S2C-AM2N2VY/3T	EVERLIGHT	
LD4	1	LED BICOLOR HSMF-A201-A00J1	AVAGO	
LD6, LD7, LD8	3	LED GREEN 19-21SYGC/S530-E1/TR8 NOT FITTED	EVERLIGHT	X
PEG1, PEG2, PEG3, PEG4, PEG5	5	SELF ADHESIVE RUBBER BUMPER SJ5306	3M	
Q1	1	Transistor MMBT9013L-G-AE3 SOT23	UNISONIC TECH.	
Q2	1	Transistor STR2P3LLH6 SOT23	ST MICRO	
R1, R3, R9, R12, R13, R14, R15, R20, R21, R23, R27, R41, R42, R46, R47, R49, R50, R53, R54, R56, R71, R72, R77, R78, R86, R104, R113	27	RESISTOR 0R 0402	MULTI-SOURCE	
R2, R110	2	RESISTOR 510R 1% 0402	MULTI-SOURCE	
R4, R25, R33, R39, R43, R48, R51, R52, R62, R65, R67, R70, R74, R75, R83, R97, R109, R122	18	RESISTOR 0402 NOT FITTED	MULTI-SOURCES	X
R5, R7, R36, R37, R103	5	RESISTOR 10R 1% 0402	MULTI-SOURCE	
R6	1	RESISTOR 47R 1% 0402	MULTI-SOURCE	

R8, R40, R118, R119, R120, R121	6	RESISTOR 0R 0402 NOT FITTED	MULTI-SOURCES	X
R10, R38	2	RESISTOR 1M 1% 0402	MULTI-SOURCE	
R11	1	RESISTOR 360R 1% 0402	MULTI-SOURCE	
R16, R105, R106, R107, R108, R114	6	RESISTOR 1K5 1% 0402	MULTI-SOURCE	
R17, R90, R91, R93	4	RESISTOR 680R 1% 0402	MULTI-SOURCE	
R18, R24, R26, R63, R64, R66, R68, R69, R73, R76, R79, R80, R81, R82, R89, R112	16	RESISTOR 4K7 1% 0402	MULTI-SOURCE	
R19, R28, R30, R117	4	RESISTOR 100R 1% 0402	MULTI-SOURCE	
R22	1	RESISTOR 4.3 Ohms 1% 0402	MULTI-SOURCE	
R29	1	RESISTOR 100R 0402 NOT FITTED	MULTI-SOURCES	X
R31, R32, R35, R55, R84, R85, R87, R88	8	RESISTOR 100K 1% 0402	MULTI-SOURCE	
R34, R94, R95, R98, R99, R100, R101, R102, R115	9	RESISTOR 10K 1% 0402	MULTI-SOURCE	
R44, R96	2	RESISTOR 47K 1% 0402	MULTI-SOURCE	
R45	1	RESISTOR 15K 1% 0402	MULTI-SOURCE	
R57, R58, R59, R60, R61	5	RESISTOR 220R 1% 0402	MULTI-SOURCE	
R92	1	RESISTOR 4K7 1% 0402 NOT FITTED	MULTI-SOURCES	X
R111	1	RESISTOR 2K7 1% 0402	MULTI-SOURCE	
R116	1	RESISTOR 36K 1% 0402	MULTI-SOURCE	
SB1, SB2, SB3, SB4, SB5, SB6, SB7, SB8, SB9, SB10, SB11, SB12, SB13, SB14	14	SOLDER BRIDGE OPEN SIZE 0603	N/A	
SW1	1	PUSH BUTTON TD-0341X BLUE BUTTON	WEALTHMETAL	
SW2	1	PUSH BUTTON TD-0341X BLACK BUTTON	WEALTHMETAL	
SW3	1	PUSH BUTTON TD-0341X BLACK BUTTON NOT FITTED	WEALTHMETAL	X
SW4	1	JOYSTICK MT-008A	WEALTHMETAL	
TP1, TP2, TP3, TP4, TP5	5	PLATED HOLE DIAM. 1.0mm	N/A	
TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP17, TP18, TP19, TP20, TP21, TP22, TP23, TP26	17	TESTPOINT COPPER LAND DIAM. 0.8mm	N/A	
U1	1	REGUL LDO LD39050PUR	ST MICRO	
U2	1	IC STM32L476VGT6 LQFP100	ST MICRO	
U3	1	DIGITAL POT AD5112BCPZ10	ANALOG DEV.	
U4	1	LEVEL SHIFTER SN74LVC2T45DCUT VSSOP8	TEXAS	
U5	1	IC STM32F103CBT6 LQFP48	ST MICRO	
U6	1	TOUCHSCREEN CONTROLLER STMPE811QTR	ST MICRO	
U7	1	WIFI MODULE SPWF01SA.11 NOT FITTED	ST MICRO	X
U8	1	BLUETOOTH MODULE SPBTLE-RF NOT FITTED	ST MICRO	X
Y1, Y2	2	SMD CRYSTAL NX3225GD-8MHZ-EXS00A-CG04874	NDK	
Y3	1	SMD CRYSTAL NX3215SA 32.768KHZ	NDK	