## Bill of Materials

0-4	Part name							Alt. Manufacturer
Ket.	Part name	Pcs/unit	t Description	Manufacturer	Part number	Supplier	Ordering code	Alt. Manufacturer
C11	C_47N_0402_X7R_K_25		Capacitor, 47n, 0402, X7R, 10%, 25V	Murata	GRM155R71E473KA88D			
	0_4110_0402_04110_10_20		Capability, 411, 0402, X11, 1010, 204	minuu	on moon rear available			
C12	C_100N_0402_X5R_K_10	c	Do not mount					
C41	C_10N_0402_X7R_K_25	C	Do not mount					
C51	C_47N_0402_X7R_K_25	1	Capacitor, 47n, 0402, X7R, 10%, 25V	Murata	GRM155R71E473KA88D			
C52	C_2U2_0603_X5R_K_10	1	Capacitor, 2u2, 0603, X5R, 10%, 10V	Murata	GRM188R61A225KE34D			
C53	C_0402	c	Do not mount					
C61	C_220N_0402_X5R_K_10	1	Capacitor, 220n, 0402, X5R, 10%, 10V	Murata	GRM155R61A224KE19D			
C121	C_47N_0402_X7R_K_25	1	Capacitor, 47n, 0402, X7R, 10%, 25V	Murata	GRM155R71E473KA88D			
C131	C_47N_0402_X7R_K_25	1	Capacitor, 47n, 0402, X7R, 10%, 25V	Murata	GRM155R71E473KA88D			
C151	C_47N_0402_X7R_K_25	1	Capacitor, 47n, 0402, X7R, 10%, 25V	Murata	GRM155R71E473KA88D			
C171	C_10N_0402_X7R_K_25	1		Murata	GRM155R71E103KA01D			
C172	C_100P_0402_NP0_J_50	1	Capacitor, 100p, 0402, NP0, 5% 50V	Murata	GRM1555C1H101JZ01D			
C173 C174	C_33P_0402_NP0_J_50 C_15P_0402_NP0_J_50	1	Capacitor, 33p, 0402, NP0, 5%, 50V Capacitor, 15p, 0402, NP0, 5%, 50V	Murata Murata	GRM1555C1H330JZ01D GRM1555C1H150JZ01D			
C174			Capacitor, 15p, 0402, NP0, 5%, 50V	wurata				
C175	C_3P0_0402_NP0_C_50	1	Capacitor, 3p0, 0402, NP0, +-0.25pF, 50V	Murata	GRM1555C1H3R0CZ01D			
C176	C_1P0_0402_NP0_B_50	2	2 Capacitor, 1p, 0402, NP0, +/-0.1pF 50V	Murata	GRM1555C1H1R0BZ01D			
C177 C181	C_0402 C_2P2_0402_NP0_C_50	C	Do not mount		GRM1555C1H2R2CZ01			
C181	C_3P3_0402_NP0_C_50	1	Capacitor, 2p2, 0402, NP0, +-0.25pF, 50V Capacitor, 3p3, 0402, NP0, +-0.25pF, 50V	Murata Murata	GRM1555C1H2R2C2U1 GRM1555C1H3R3CZ01D			
C201	C_3P3_0402_NP0_C_50	1		Murata	GRM1555C1H3R3CZ01D			
C211	C_10N_0402_X7R_K_25	1	Capacitor, 10n, 0402, X7R, 10%, 25V	Murata	GRM155R71E103KA01D			
C221	C_47N_0402_X7R_K_25	1	and and a real root of read and	Murata	GRM155R71E473KA88D			
C231 C251	C_1N8_0402_U2J_J_10 C_47N_0402_X7R_K_25			Murata Murata	GRM1557U1A182JA01D GRM155R71E473KA88D			
C261	C_47N_0402_X7R_K_25			Murata	GRM155R71E473KA88D			
C271	C_47N_0402_X7R_K_25	1		Murata	GRM155R71E473KA88D			
C281 C291	C_47N_0402_X7R_K_25 C_47N_0402_X7R_K_25	1	Capacitor, 47n, 0402, X7R, 10%, 25V Capacitor, 47n, 0402, X7R, 10%, 25V	Murata Murata	GRM155R71E473KA88D GRM155R71E473KA88D			
C301	R_0_0402		Resistor, 0 ohm, 0402	Koa	RK73Z1ETTP	ELFA	60-470-05	
C302	C_0402	C	Do not mount					
C311 C321	C_15P_0402_NP0_J_50	C	Do not mount					
C321 C322	C_100N_0402_X5R_K_10 C_22P_0402_NP0_J_50	1		Murata Murata	GRM155R71A104KA01D GRM1555C1H220JZ01D			
L1	L_BEAD_102_0402		EMI filter bead, 0402 1k ohms Tape GHz Band Gen		BLM15HG102SN1D	ACTE		
L171	L_10N_0402_J_LQW	1		Murata	LQW15AN10NJ00D			
L172 L173	L_7N5_0402_G_LQW L_18N_0402_J_LQW	1		Murata Murata	LQW15AN7N5G00 LQW15AN18NJ00D			
L174	L_12N_0402_J_LQW	1	Inductor, 12n, 0402, ±5%, wire-wound type	Murata	LQW15AN12NJ00D			<u> </u>
L191	L_15N_0402_J_LQW	1	Inductor, 15n, 0402, ±5%, wire-wound type	Murata	LQW15AN15NJ00D			
L192	L_12N_0402_J_LQW	1	Inductor, 12n, 0402, ±5%, wire-wound type	Murata	LQW15AN12NJ00D			
L193 L201	L_12N_0402_J_LQW L_12N_0402_J_LQW	1		Murata Murata	LQW15AN12NJ00D LQW15AN12NJ00D			
P1	SMD_SOCKET_2x10		SMD pinrow socket, .050 spacing, 2x10	Samtec	SFM-110-02-SM-D-A-K-TR	Abacus		
P2	SMD_SOCKET_2x10		SMD pinrow socket, .050 spacing, 2x10	Samtec	SFM-110-02-SM-D-A-K-TR	Abacus		
P3 R12	SMA_SMD R_0_0402		SMA connector, straight SMD-mount					
R141	R_56K_0402_F			Koa	RK73H1ETTP5602F	ELFA	60-488-96	
R171	R_10_0402_J	1	Resistor, 10 ohms, 0402, 5%	Koa	RK73H1ETTP10R0F (±1%)	ELFA	60-470-96	
R321 R322	R_0402	0	Do not mount		RK73Z1ETTP	ELFA	60-470-05	
R322 U1	R_0_0402 CC112X	1		Koa Texas Instruments	RK/321ETTP	ELFA	60-470-05	
U2	TPS79930	G	Do not mount					
X1	X_32.000/15/18/60/10		Do not mount					#N/A
X2	TG_5021CG	1	TCXO 40.000000MHz (2.5x2.0x0.9mm) Supply volta	Epson Toyocom	TG_5021CG	ACTE	X1G003581000300	

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