

Designator	Description	Manufacturer	PartNumber	Value	Quantity
C1, C14, C30, C31	Multilayer ceramic capacitors C0G $\pm 0.25\text{pF}$, 50V, Multilayer ceramic capacitors C0G $\pm 5\%$, 50V	Murata	GRM1555C1H4R7C Z01D	4.7pF	4
C2, C3, C10, C22, C24, C33, C36, C37	Multilayer ceramic capacitors C0G $\pm 5\%$, 50V	Murata	GRM1555C1H470JZ 01D	47pF	8
C4, C5, C7, C8, C25, C29	Multilayer ceramic capacitors X7R $\pm 10\%$, 16V	Murata	GRM155R71C104K A88D	100nF	6
C6, C17, C27, C38	Multilayer ceramic capacitors X7R $\pm 5\%$, 50V	Murata	GRM155R71H102JA 01D	1nF	4
C9, C11, C32, C34	Multilayer ceramic capacitors C0G $\pm 5\%$, 50V	Murata	GRM1555C1H100JA 01D	10pF	4
C12	Multilayer ceramic capacitors C0G $\pm 0.25\text{pF}$, 50V	Murata	GRM1555C1H2R7C Z01D	2.7pF	1
C13, C40	N/A	Murata	Part#	N/A	2
C15	Multilayer ceramic capacitors C0G $\pm 5\%$, 50V	Murata	GRM1555C1H560JZ 01D	56pF	1
C16		N/A	N/A	N/A	1
C18	Multilayer ceramic capacitors C0G $\pm 5\%$, 50V	Murata	GRM1555C1H5R6C Z01D	5.6pF	1
C19, C20	Multilayer ceramic capacitors C0G $\pm 5\%$, 50V	Murata	GRM1555C1H150JA 01D	15pF	2
C21	Multilayer ceramic capacitors C0G $\pm 5\%$, 50V	Murata	GRM1555C1H101JZ 01D	100pF	1
C23	Multilayer ceramic capacitors X7R $\pm 10\%$, 25V	Murata	GRM155R71E103K A01D	10nF	1
C26	Multilayer ceramic capacitors C0G $\pm 0.25\text{pF}$, 50V	Murata	GRM1555C1H1R3C Z01D	1.3pF	1
C28	Multilayer ceramic capacitors C0G $\pm 5\%$, 50V	Murata	GRM1555C1H240JZ 01D	24pF	1
C35, C41, C42	Multilayer ceramic capacitors C0G $\pm 5\%$, 50V	Murata	GRM1555C1H4R9C Z01D	4.9pF	3
C39	Multilayer ceramic capacitors C0G $\pm 0.25\text{pF}$, 50V	Murata	GRM1555C1H3R3C Z01D	3.3pF	1
J1, J3	Ultra Miniature Coaxial Connector Jack, 60 V, 50 Ohm	N/A	N/A		2
J2, J4	Ultra Miniature Coaxial Connector Jack, 60 V, 50 Ohm	TE Connectivity	1909763-1		2
L1	Wirewound Inductor $\pm 5\%$	Murata	LQW15AN18NJ80D	18nH	1
L2, L11	Wirewound Inductor $\pm 0.2\text{nH}$	Murata	LQG15WH11NH02D	11nH	2
L3	Wirewound Inductor $\pm 5\%$	Murata	LQW15AN22NJ80D	22nH	1
L4	Wirewound Inductor $\pm 5\%$	Murata	LQG15HS12NJ02D	12nH	1
L5	Wirewound Inductor $\pm 5\%$	Murata	LQW15AN11NG00D	11nH	1
L6	Multilayer Inductor $\pm 5\%$	Murata	LQW15AN47NJ00D	47nH	1
L7	Wirewound Inductor $\pm 0.2\text{nH}$	Murata	LQW15AN1N5C00D	1.5nH	1
L8	Wirewound Inductor $\pm 5\%$	Murata	LQW15AN56NJ00D	56nH	1
L9	Wirewound Inductor $\pm 5\%$	Murata	LQW15AN6N5C10D	6.5nH	1

Designator	Description	Manufacturer	PartNumber	Value	Quantity
L10	Wirewound Inductor ±0.2nH	Murata	LQW15AN3N0C00D	3nH	1
L12	Wirewound Inductor ±5%	Murata	LQW15AN10NJ00D	10nH	1
P1	8PIN BOARD TO BOARD MALE CONNECTOR	深圳市山谷道电子有限	SGDBM-08-008P-H20		1
P2	14PIN BOARD TO BOARD MALE CONNECTOR	深圳市山谷道电子有限	SGDBM-08-014P-H20		1
P3	14PIN BOARD TO BOARD FEMALE CONNECTOR	深圳市山谷道电子有限	SGDBF-08-014P-H20		1
Shield	Shield - EMI Gasket - Standard Surface Mount Shields (Size:32.7 x 20.2 x 3mm)				1
U1	10MHz to 3GHz SPDT RF Switch	Peregrine Semi	PE42421	PE42421	1
U2	SX1276 - Low Power Integrated UHF Transceiver with LoRa Modem	SEMTECH	SX1276	SX1276	1
U3	10MHz to 3GHz SPDT RF Switch	Peregrine Semi	PE4259	PE4259	1
Y1	XTAL OSC VCTCXO 32.0000MHZ SNWV	Taitien	TXEABDSANF-32.000000		1
PCB	PCB Material: FR-4 PCB Dimension (mm):70 x 25 PCB Layers: 4 PCB Layer Order: 1. Top = LORA_MODULE_V1.2.GTL 2. GND = LORA_MODULE_V1.2.G1 3. PWR = LORA_MODULE_V1.2.G2 4 BOTTOM = LORA_MODULE_V1.2.GBL PCB Thickness: 1.0mm Copper Weight: 1oz PCB Color: Green Silkscreen: White Surface Finish: Electroless Nickel Immersion Gold (ENIG) RoHS Via solder mask: Solder mask cover				1
PCB ANT	PCB Material: FR-4 PCB Dimension (mm):22 x 70 PCB Layers: 2 PCB Layer Order: TOP BOTTOM PCB Thickness: 0.8mm Copper Weight: 1oz PCB Color: Green Silkscreen: White Surface Finish: Electroless Nickel Immersion Gold (ENIG) RoHS Via solder mask: Solder mask cover				1
RF ANT Cable	IPEX u.fl Female connector cable with Open Wire Impedance :50 ohm Length: 25mm Cable type:RG178				1
PCBA Coating	PCBA Coating with Conformal				2