

No.ICFOSS/76/2025-TC4(IT)Part(1)

23/02/2026

**QUOTATION NOTICE**

Competitive quotations are invited from qualified firms/agencies for LoRaWAN C1\_Board. Specification & technical details attached below:

Sl.No	Description	Quantity
1	LoRaWAN C1_Board	15

<b><u>Technical Details</u></b>	
<b>PCB Fabrication Specifications</b>	Board Size - 64.77 X 64.77 mm Material – FR4 Surface Finish - HASL (SnPb) Layers – 1
<b>PCB Assembly Specifications</b>	Number of Components - 33 Number of TH Components - 1 Number of BGA/QFN/LGA - 2 Number of SMD Components – 30 Component Sourcing - Turnkey

Rate should be quoted in gross amount including GST. Sealed quotation shall be reached this office on or before 4pm on 04/03/2026 to the undersigned marked properly on the cover “Quotation for LoRaWAN C1\_Board”. Technical details attached.

Quotation will be opened on 04/03/2026 at 4.30pm



Bijumon Joseph  
Secretary & Registrar  
ICFOSS

# C1\_Dev\_Board - BILL OF MATERIAL

Item	Quantity	Reference	Value	PART TYPE	PCB Footprint	Manufacturer Part Number	Manufacturer Name	Description
1	1	C10	1μF /6.3V	CAP	Capacitor_S MD:C_0603 _1608Metric	CC0603KRX7R5 BB105	<a href="#">YAGEO</a>	SMD Multilayer Ceramic Capacitor, 1 μF, 6.3 V, 0603 [1608 Metric], ± 10%, X7R, CC Series
2	5	C13, C5, C6, C11	100nF/6.3V	CAP	Capacitor_S MD:C_0603 _1608Metric	C0603C104K9R ACTU	<a href="#">KEMET</a>	SMD Multilayer Ceramic Capacitor, 0.1 μF, 6.3 V, 0603 [1608 Metric], ± 10%, X7R, C Series KEMET
3	2	C3, C15,C7	0ohm	Resistor	Capacitor_S MD:C_0603 _1608Metric	WSL060300000 ZEA9	<a href="#">VISHAY</a>	SMD Current Sense Resistor, Jumper, 0 ohm, WSL-9 Jumper, 0603 [1608 Metric], Metal Strip
4	4	C1, C9, C2, C14	10uF/6.3V	CAP	Capacitor_S MD:C_0603 _1608Metric	GRM188R60J10 6ME47D	<a href="#">MURATA</a>	SMD Multilayer Ceramic Capacitor, 10 μF, 6.3 V, 0603 [1608 Metric], ± 20%, X5R, GRM Series
5	1	C4	10uF/25V	CAP	Capacitor_S MD:C_0805 _2012Metric	GRM21BR61E1 06MA73L	<a href="#">MURATA</a>	SMD Multilayer Ceramic Capacitor, 10 μF, 25 V, 0805 [2012 Metric], ± 20%, X5R, GRM Series
6	1	C12	22uf/25V	CAP	Capacitor_S MD:C_0805 _2012Metric	GRM21BR61E2 26ME44L	<a href="#">MURATA</a>	SMD Multilayer Ceramic Capacitor, 22 μF, 25 V, 0805 [2012 Metric], ± 20%, X5R, GRM Series
7	1	J5		Connector	Connector_ Coaxial:SMA _Amphenol_ 132134-11_ Vertical	132134	<a href="#">AMPHENOL CONNEX</a>	RF / Coaxial Connector, PCB, SMA Coaxial, Straight Jack, Through Hole Vertical, 50 ohm
8	1	L1	2.2uH/	Inductor	Inductor_SM D:L_1210_3 225Metric_ Pad1.42x2.6 5mm_HandS older	BRL3225T2R2M	<a href="#">TAIYO YUDEN</a>	WW INDUCTOR, 2.2UH 1.85A 20% 150MHZ
9	2	L2, L3	120ohm/ 300mA	Inductor	Inductor_SM D:L_0402_1 005Metric	DNP	<b>DNP</b>	

10	1	Q1	20V/4A, 0.031	MOSFET	Package_TO _SOT_SMD: TSOT-23	DMG3415U-7	<a href="#">DIODES INC.</a>	Power MOSFET, P Channel, 20 V, 4 A, 0.031 ohm, SOT-23, Surface Mount
11	1	Q2	50V/130mA, 1.2ohm	MOSFET	Package_TO _SOT_SMD: SOT-23	BSS84	<a href="#">ON SEMICONDUCTOR</a>	Power MOSFET, P Channel, 50 V, 130 mA, 1.2 ohm, SOT-23, Surface Mount
18	1	Q3	N,60V	MOSFET	Package_TO _SOT_SMD: SOT-24	2N7002	<a href="#">ON SEMICONDUCTOR</a>	Power MOSFET, N Channel, 60 V, 115 mA, 1.2 ohm, SOT-23, Surface Mount
19	5	R1, R2, R4, R6, R8	10K	Resistor	Resistor_SM D:R_0603_1 608Metric	CRCW060310K0 FKEA	<a href="#">VISHAY</a>	SMD Chip Resistor, 10 kohm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose
20	1	R3	100K	Resistor	Resistor_SM D:R_0603_1 608Metric	CRCW0603100K FKEA	<a href="#">VISHAY</a>	SMD Chip Resistor, 100 kohm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose
21	2	R5, R7	330ohm	Resistor	Resistor_SM D:R_0603_1 608Metric	CR0603FX3300 ELF	<a href="#">BOURNS</a>	RES, THICK FILM, 330R, 1%, 0.1W, 0603
22	1	R9	150ohm	Resistor	Resistor_SM D:R_0603_1 608Metric	MCWR06X1500 FTL	<a href="#">MULTICOM P PRO</a>	SMD Chip Resistor, 150 ohm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose
23	1	SW1		Reset Button	3x6x2.5mm_ tact_switch	FSMSM	<a href="#">ALCOSWIT CH - TE CONNECTI VITY</a>	Tactile Switch, FSMSM, Top Actuated, Surface Mount, Rectangular Button, 180 gf, 50mA at 24VDC
24	1	U1		RP604K331A	DFN-12-1EP _2.7x3mm_ Pitch0.5mm	RP604K331A-T R	<a href="#">Ricoh Electronic Devices Company</a>	Switching Voltage Regulators (IQ =0.3 uA)
25	1	U3	RF Module	CMWX1ZZAB Z-091	RF_Module: CMWX1ZZA BZ	CMWX1ZZABZ- 091	<a href="#">MURATA</a>	RF Module, FSK, OOK, LoRa, 4.8Kbps, 915MHz, -135.5dBm, 2.2V to 3.6V, I2C, SPI, UART, USB
26	1	D1	2.2V/20mA	RED LED	LED_SMD: LED_0603_1 608Metric	SML-D12U8WT8 6C	<a href="#">ROHM</a>	LED, 0603, Red, SMD, 0603, 20 mA, 2.2 V, 620 nm
27	1	D2	3.2V/20mA	GREEN LED	LED_SMD: LED_0603_1 608Metric	KP-1608SGC	<a href="#">KINGBRIGH T</a>	LED, Low Power, Super Bright Green, SMD, 0603, 20 mA, 2.2 V, 568 nm

## C1\_Dev - PICK AND PLACE

Reference Designator	X	Y	Rotation	Side	Value
	138.6205	-58.6232	0	top	10uF
C1	145.3998	-82.7532	90	top	10uF
C2	145.3871	-86.3523	270	top	0R
C3	167.6147	-88.3336	180	top	10uF
C4	126.8753	-87.1322	180	top	100nF
C5	142.3975	-82.766	90	top	100nF
C6	142.3416	-86.3549	270	top	100nF
C7	137.574	-96.1187	270	top	10uF
C9	145.3591	-89.9974	270	top	1uF
C10	142.2756	-90.0482	270	top	100nF
C11	139.126	-86.3929	270	top	22uF
C12	125.5166	-91.0313	90	top	100nF
C13	145.0415	-99.2251	0	top	10uF
C14	172.72	-72.324	90	top	0R
C15	171.2977	-88.3361	180	top	RED
D1	147.9474	-103.3323	0	top	GREEN
D2	148.2699	-68.6714	0	top	2.2uH
J5	179.1691	-88.3336	0	top	SMA/uFL
L1	134.6403	-90.6535	270	top	L
L2	168.1048	-89.7558	270	top	L
L3	171.7904	-89.7533	270	top	DMG3415U-7
Q1	136.5612	-106.4006	180	top	BSS84
Q2	140.716	-99.8779	90	top	2N7002
Q3	169.0929	-97.028	0	top	10K
R1	141.4881	-95.3821	0	top	10K
R2	145.0847	-95.2398	0	top	100K
R3	140.7134	-103.3526	180	top	10K
R4	153.1263	-73.1088	0	top	330
R5	144.0943	-103.3628	180	top	10K
R6	161.6227	-97.8383	270	top	330
R7	145.5165	-74.676	0	top	10K
R8	158.3487	-97.8331	270	top	150E
R9	165.4683	-96.2985	90	top	RESET
SW1	168.148	-72.39	270	top	RP604K331A
U1	129.1895	-90.8533	0	top	CMWX1ZZABZ-091
U3	154.7637	-84.7052	0	top	10uF