



**International Centre for Free and Open Source Solutions**

Swatantra,  
South Pavilion, Sports Hub, Karyavattom,  
Trivandrum - 695 581  
Kerala, India.  
Phone No: +91 471 2700013  
Email: info@icfoss.in

**NOTICE INVITING TENDER**

For the supply of LoRaWAN C1 PCB

Tender No: ICFOSS/89/2019-TC4(IT) Part (1) Dated 05/06/2026

<b>Name of the material</b>	<b>LoRaWAN C1 PCB</b>
<b>Quantity</b>	<b>1 Unit</b>
<b>Delivery time</b>	<b>Within 4 weeks</b>
<b>Availability of Tender documents</b>	Can be downloaded from the website <a href="http://icfoss.in">http://icfoss.in</a> up to 15/06/2026 03:00 PM
<b>Date of Publishing</b>	<b>06/06/2026</b>
<b>Last date &amp; time of submission of bids</b>	<b>15/06/2026 at 04:00PM</b>
<b>Date &amp; time of opening of bids</b>	<b>15/06/2026, 04:30PM</b>
<b>EMD (Earnest Money Deposit ) Amount</b>	<b>1 % (rounded to the nearest rupees) of the total Quoted amount or Rs.1,500/- whichever is maximum.</b>
<b>Tender Fee</b>	<b>Rs. 400/-</b>
<b>Tender Validity</b>	<b>6 Months</b>



All communications shall be addressed to the Secretary & Registrar, ICFOSS, Swatantra, South Pavilion, Sports Hub, Karyavattom, Trivandrum - 695 581 Kerala, India.

The bid documents and other details may be downloaded from the website <http://icfoss.in/tenders>. All bid documents along with EMD and Tender fee are to be submitted as **hard copy** and in the designated covers/envelops on the below address. The EMD amount and non-refundable Tender fee of Rs. 400.00/- shall be remitted only as Demand Draft separately in favour of “**ICFOSS**” and payable at Thiruvananthapuram. Bidder should ensure that Tender fees and EMD are remitted as separate transactions/DDs, such that EMD should be a separate DD and Tender Fee shall be separate DD. Combined remittance for Tender fee and EMD shall be treated as invalid transaction. Only manual submission shall be entertained. Late submissions will not be considered

**Secretary & Registrar**

Swatantra,  
South Pavilion, Sports Hub,  
Karyavattom, Trivandrum - 695 581  
Kerala, India.  
Phone No: +91 471 2700013  
Email : info@icfoss.in

A handwritten signature in blue ink, appearing to read 'Bijin M D'.

Place: Trivandrum  
Date: 05/06/2026

**Procurement Officer**  
ICFOSS

**Note:** - If the date of opening of bids happens to be a holiday; the actual date for the same will be the next working day. No separate intimation in this regard will be issued.



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**TENDER DOCUMENT**

Tender No: ICFOSS/76/2025-TC4(IT) Dated 05/06/2026  
(e-Procurement)

**Item required**

<b>SI No</b>	<b>Item</b>	<b>Technical Details</b>	<b>Quantity</b>
1	C1_Dev PCB	LoRaWAN based PCB Manufacturing, Assembly and component sourcing. Design , BoM will be provided by ICFOSS	80



## **Terms & Conditions**

- **Submission of bids**

The Tender should be submitted with the following documents. The documents shall include the following:

- 1) Company registration details \*
- 2) Detailed specification of the item quoted \*
- 3) Copy of Permanent Account Number (PAN) \*
- 4) Copy Of GST Registration Documents \*
- 5) Signed Tender document with Tender form. \*
- 6) Financial bid in format given in **Annexure I** (BOQ Template) \*
- 7) Previous work orders supplied to any Government departments if any

- **Earnest Money Deposit (EMD)**

The Tender should submit an EMD amount of 1 % (rounded to the nearest rupees) of the total Quoted amount or Rs.1,500/- whichever is maximum. The EMD amount should only be remitted as Bank Drafts in favour of “**ICFOSS**” payable at Thiruvananthapuram and shall be enclosed with the bid.

### **Forfeiture of EMD**

EMD of a tenderer shall be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender. Further, if the successful tenderer fails to furnish the required performance security within the specified period, its EMD shall be forfeited.

### **Refund of EMD**

EMD furnished by all unsuccessful tenderer shall be returned to them without any interest whatsoever, at the earliest after expiry of the final tender validity period but not later than 30 days after conclusion of the contract. EMD of the successful tenderer shall be returned, without any interest whatsoever, after receipt of performance security from it as called for in the contract.

- **Tender Fee**



The Tender should submit a non-refundable Tender Fee of Rs.400/- . The Tender Fee should only be remitted as Bank Drafts in name of “ICFOSS” payable at Thiruvananthapuram and shall be enclosed with the bid.

- The supplier should supply the item with the same rate for a period of six months, against the purchase order.
- Item offered must be standard, proven product and already available in the market.
- Items offered must follow the required specifications
- Tender Documents shall be available only on the Internet and shall not be available for sales elsewhere.
- No price rise except Govt. levies will be allowed once order has been placed during the validity of the claim.
- Materials must be properly packed against any damage and insured except where hand delivery is proposed.
- Delivery / installation (If applicable) at the store should strictly be completed within the stipulated period of delivery
- Supplier will have to pay penalty on non-delivery after expiry of delivery date @ 1% of quoted price per week subject to maximum of 10%.
- Stores should be supplied to the “The Director, ICFOSS, Swatantra, South Pavilion, Sports Hub, Karyavattom, Trivandrum - 695 581 Kerala, India”.
- Equipment / stores supplied will be subjected to performance tests and in case the articles do not function / reach the expected standard, the suppliers are liable to replace the items free of cost at site. Cost of returning faulty goods will be to supplier’s account.
- Prompt and efficient after sales service must be rendered free within the guarantee period.
- If any equipment or part thereof is lost or rendered defective during transit, the supplier shall immediately arrange for the supply of the equipment or part thereof as the case may be.
- Purchaser reserves the right to cancel the order without any liability in case the materials are not supplied within the stipulated period or non - fulfillment of contractual obligations.
- **Payment:** The payment shall be made against completion of the entire supplies. The complete payment shall only be made against successful checking of the items supplied. In case of any defects the L1 bidder shall replace the item prior to the payment.



- **Warranty/ Support:** The items dispatched by the schedule of requirement shall carry minimum one year of replacement warranty from the date of acceptance of the items by ICFOSS. Warranty shall include free maintenance of the whole assembly supplied including free replacement of parts. The defects, if any, shall be attended to on immediate basis but in no case any defect should remain unattended for more than 48 hours. The defects, if any, during the guarantee/ warranty period are to be rectified free of charge by arranging the replacement wherever necessary. This includes cost, insurance, freight, custom duty, octroi, local taxes if any, should be borne by the bidder. A clear confirmation should be given for this item. The warranty certificate should be furnished along the bills.
- **Quoted rate:** The quoted rates shall be **inclusive** of all taxes and also the bidder shall include charges like duties, freight, handling, loading, unloading, insurance premium along with the quoted rate.

**Note:** ICFOSS holds the DSIR certificate which makes ICFOSS eligible for tax exemptions, Seller is responsible for cross checking the category codes and HSN numbers and apply appropriate exemptions

The Taxes may include (excise duty, sales tax, service tax, entry tax etc), duties, levies, freight, handling, loading, unloading, insurance premiums etc complete and shall remain firm throughout the contract period. No compensation will be paid in case of any upward revision in the statutory taxes and levies or introduction of new taxes and levies.

**I / We hereby declare that I/We have read and understood the above instructions for the guidance of tenders.**

**Place :**

**Date :**

**Name, Signature and seal of Tenderer**

Please submit the hardcopy of this document duly signed by the authorized signatory to the following address:

**Secretary & Registrar  
ICFOSS  
Swatantra,  
South Pavilion, Sports Hub,  
Karyavattom,**



**Trivandrum - 695 581**  
**Kerala, India.**



## **TENDER FORM**

To,  
Secretary & Registrar  
Swatantra,  
South Pavilion, Sports Hub,  
Karyavattom,  
Trivandrum - 695 581  
Kerala, India.

Dear Sir,

Sub: Bid form

Ref:

1. Having examined the conditions of tender contract, the receipt of which is hereby duly acknowledged. i/we undersigned, offer to supply all hardware & software and execute all works in conformity with tender specifications referred above and also to the said terms & conditions from the sum shown in the commercial bid(s) attached herewith and made part of this bid.
2. I / We undertake, if our Bid is accepted to complete delivery & commissioning of all Items specified in the contract within 4 weeks calculated from the date of issue of your purchase order/LOI.
3. We understand that you are not bound to accept the lowest or any bid, you may receive.
4. I / We affirm that I / We have enclosed the acceptance of all terms and conditions and also all brochures detailing the technical specification of the items quoted by me/us.
5. I / We hereby confirm that all the items supplied are in proper working condition and tested successfully.
6. The tender document for the works mentioned above have been obtained by me from the URL: <http://icfoss.in/tenders>, the official website of ICFOSS and I / we hereby certify that I / we have read the entire terms and conditions of the tender document, which shall form part of the contract agreement and I / we shall abide by the conditions / clauses contained therein.
7. My /our GST & PAN Numbers are as follows.
8. GST Registration Number. ....



9. PAN Number. ....

10. Dated ...../...../ 2026

11. Duly authorized to sign the bid for and on behalf of .....

12. Witness 1. ....

13. Signature

14. Witness 2. ....

15. Signature

## C1\_Dev - PICK AND PLACE

Reference Designator	X	Y	Rotation	Side	Value
	333.8005	-31.4032	0	top	
C1	142.9258	-78.7655	90	top	10uF
C2	142.9258	-81.915	90	top	10uF
C3	149.593	-74.8538	180	top	10uF
C4	129.1613	-101.9048	180	top	10uF
C5	145.7706	-78.7653	90	top	100nF
C6	145.796	-81.9149	90	top	100nF
C7	149.5805	-76.6572	180	top	100nF
C8	140.7414	-85.1024	-90	top	10uF
C9	143.5354	-85.0899	-90	top	1uF
C10	146.2786	-85.0901	-90	top	100nF
C11	132.0039	-94.615	180	top	22uF
C12	162.5346	-79.0448	90	top	0.1uF
C13	165.3032	-82.4231	90	top	1uF
C14	162.5346	-82.4354	90	top	0.1uF
D1	137.6681	-103.1748	0	top	RED
D2	160.8329	-69.3674	180	top	GREEN
J1	129.54	-105.664	0	top	JST-XH-2.54
J2	153.67	-64.77	90	top	Pins
J3	166.116	-64.77	90	top	Conn_01x04
J4	179.578	-112.776	180	top	Conn_01x04
J5	171.3484	-81.153	0	top	Ext_Aref
J6	173.5582	-69.6722	0	top	RST
J7	135.9408	-84.8614	-90	top	~
J8	137.16	-64.77	90	top	SWD
J9	160.274	-116.84	-90	top	UART_1_Sensor
J10	125.476	-70.612	0	top	Conn_01x04
J11	165.862	-116.84	90	top	Conn_01x04
J12	147.32	-116.84	-90	top	Conn_01x06
J13	179.16906	-88.33358	90	top	SMA/uFL
JP3	135.9154	-98.5012	90	top	Jumper
JP4	157.4746	-72.492	90	top	Jumper
JP6	164.0586	-72.4916	90	top	Jumper
L1	127.0762	-96.7597	90	top	2.2uH
L2	168.0464	-90.3962	-90	top	L
L3	172.5676	-90.3708	-90	top	L
Q1	135.37	-107.58	-90	top	DMG3415U-7
Q2	157.734	-102.6828	-90	top	2N7002
R1	157.9119	-98.933	180	top	150E
R2	165.3794	-79.0449	-90	top	10K
R3	153.2636	-75.8951	90	top	10K
R4	167.2589	-88.3412	0	top	150E

R5	136.0933	-101.3206	180	top	330
R6	171.7801	-88.3412	0	top	0R
R7	165.7605	-69.5452	180	top	330
R8	162.6362	-99.4409	-90	top	10K
R9	166.3192	-99.4278	-90	top	10K
SW1	178.2826	-72.898	-90	top	RESET
U1	131.445	-98.5266	180	top	RP605K333B-TR
U2	154.7637	-84.70524	0	top	CMWX1ZZABZ-091

## Bill of Materials

Item	Quantity	Reference	Value	PART TYPE	PCB Footprint	Manufacturer Part Number	Manufacturer Name	Description
1	4	C1,C2,C3,C8	10uF	Capacitor	Capacitor_SMD: C_0603_1608Metric	GRM188R60J106ME47D	Murata	SMD Multilayer Ceramic Capacitor, 10 µF, 6.3 V, 0603 [1608 Metric], ± 20%, X5R
2	1	C4	10uF	Capacitor	Capacitor_SMD: C_0805_2012Metric	GRM21BR61E106MA73L	Murata	SMD Multilayer Ceramic Capacitor, 10 µF, 25 V, 0805 [2012 Metric], ± 20%, X5R
3	6	C5,C6,C7,C10,C12,C13	100nF	Capacitor	Capacitor_SMD: C_0603_1608Metric	C0603C104K9RACTU	Kemet	SMD Multilayer Ceramic Capacitor, 0.1 µF, 6.3 V, 0603 [1608 Metric], ± 10%, X7R
4	2	C9,C13	1uF	Capacitor	Capacitor_SMD: C_0603_1608Metric	CC0603KRX7R5BB105	Yageo	SMD Multilayer Ceramic Capacitor, 1 µF, 6.3 V, 0603 [1608 Metric], ± 10%, X7R
5	1	C11	22uF	Capacitor	Capacitor_SMD: C_0805_2012Metric	GRM21BR61E226ME44L	Murata	SMD Multilayer Ceramic Capacitor, 22 µF, 25 V, 0805 [2012 Metric], ± 20%, X5R
6	1	D1	2.2v/20mA	RED LED	LED_SMD:LED_0603_1608Metric	SML-D12V1WT86	Rohm	LED, Red, SMD, 0603 [1608 Metric], 20 mA, 2.2 V, 630 nm
7	1	D2	3.2v/20mA	GREEN LED	LED_SMD:LED_0603_1608Metric	150060GS73220	Wurth Elektronik	LED, Green, SMD, 0603 [1608 Metric], 20 mA, 3.2 V, 525 nm
8	1	J13	SMA/uFL	SMA Connector	Connector_Coaxial: SMA_Ampheno1_132134-11_Vertical	5-1814832-2	TE Connectivity	RF / Coaxial Connector, SMA Coaxial, Straight Jack, Through Hole Vertical, 50 ohm
9	1	L1	2.2uH	Inductor	Inductor_SMD: L_1210_3225Metric_Pad1.42x2.65mm_HandSolder	BRL3225T2R2M	Taiyo Yuden	Power Inductor (SMD), 2.2 µH, 1.6 A, Wirewound, 1.85 A, LSQPB Series, 1210 [3225 Metric]
10	2	L2,L3	L	Inductor	Inductor_SMD: L_0402_1005Metric	DNP	DNP	
11	1	Q1	DMG3415U-7	MOSFET	Package_TO_SOT_SMD:TSOT-23	DMG3415U-7	Diodes INC.	20V 4A 42.5mΩ@4.5V,4A 900mW 1V 1 P-Channel SOT-23 MOSFETs ROHS
12	1	Q2	2N7002	MOSFET	Package_TO_SOT_SMD:SOT-23	2N7002	On Semiconductor	MOSFET, N, 60V, SOT-23
13	1	R1	150E	Resistor	Resistor_SMD: R_0603_1608Metric	MCWR06X1500FTL	Multicomp Pro	SMD Chip Resistor, 150 ohm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose
14	4	R2,R3,R8,R9	10K	Resistor	Resistor_SMD: R_0603_1608Metric	CRCW060310K0FKEA	Vishay	SMD Chip Resistor, 10 kohm, ± 1%, 125 mW, 0603 [1608 Metric], Thick Film, General Purpose
15	2	R5,R7	330	Resistor	Resistor_SMD: R_0603_1608Metric	CR0603FX3300ELF	Bourns	SMD Chip Resistor, 330 ohm, ± 1%, 100 mW, 0603 [1608 Metric], Thick Film, General Purpose
16	2	R4,R6	0R	Resistor	Resistor_SMD: R_0603_1608Metric	CRCW04020000ZSTD	Vishay	Zero Ohm Resistor, Jumper, 0402 [1005 Metric], Thick Film, 63 mW, 1.5 A, Surface Mount Device
17	1	SW1	RESET	Switch	User:3x6x2.5mm_tact_switch	FSMSM	Alcoswitch-TE Connect	SWITCH, SPST, 0.05A, 24VDC, SMD
18	1	U1	RP605K333B-TR	voltage Converter	User:DFN-12-1EP_2.7x3mm_Pitch0.5mm	RP605K333B-TR	Nisshinbo	IC REG BUCK BST 3.3V 300MA 12DFN
19	1	U2	CMWX1ZZABZ-091	Chipset	RF_Module:CMWX1ZZABZ	CMWX1ZZABZ-091	Murata	RF TXRX MOD ISM<1GHZ SMD

**ANNEXURE I (BOQ TEMPLATE)**

Date:

<b>Tender Inviting Authority: ICFOSS</b>					
<b>Name of Work: For the supply of C1_Dev PCB</b>					
<b>Contract No: ICFOSS/76/2025-TC4(IT) Dated 05/06/2026</b>					
<b>Bidder Name :</b>					
<b><u>PRICE SCHEDULE</u></b> <b><u>(This BOQ template must not be modified/replaced by the bidder and the same should be submitted after filling)</u></b>					
Sl. No.	Item Description (as specified in Tender documents)	Quantity	Units	BASIC RATE Per Kit (inclusive of all Taxes)	TOTAL AMOUNT (inclusive of all Taxes)
1	C1_Dev PCB	80	Nos		
<b>Grand Total</b> (inclusive of all Taxes)					
<b>Quoted Rate in Words</b>					

**Authorized Signature**  
(With Signature and Seal)

\*Envelope should be marked with the heading **SHORT TENDER FOR supply of C1\_Dev PCB**