

CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING (C-DAC)

(A Scientific Society under Ministry of Electronics & Information, Technology, Government of India)

C-DAC Knowledge Park, No.1, Old Madras Road, Byappanahalli, Bangalore-560038

Ph: 080-25093400 Fax: 080-25247724

Tender No.: CDACB/BD20/007

C-DAC invites ONLINE bids for PCB Assembly with component procurement

Prospective Bidders may download the Tender Document from www.cdac.in/https://eprocure.gov.in/eprocure/app. Bidders are advised to go through instructions provided at `Instructions for online Bid Submission' and submit duly filled bids online on the website https://eprocure.gov.in/eprocure/app as per the schedule given in the Tender Document.

mmg-blrkp@cdac.in



TENDER SCHEDULE Tender No. CDACB/BD20/007

The details of tender document are as follows:

1.	Issue of Tender Document	:	05.04.2021
2.	Last date and time of receiving pre-bid vendor clarifications in writing	:	12.04.2021
3.	Receipt of Bids	:	Latest by 2.00 pm on 26.04.2021
4.	Technical Bid Opening	:	at 2.30 pm on 27.04.2021

• Instruction for Online Bid Submission:

The bidders are required to submit softcopies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal. More information useful for submitting online bids on the CPP Portal may be obtained at: https://eprocure.gov.in/eprocure/app.

For any technical related queries, please call the Helpdesk. The 24x7 Help Desk Number 0120-4200462, 0120-4001002, 0120-4001005. Mobile: 918826246593.

Note – Bidders are requested to kindly mention the URL of the Portal and Tender Id in the subject while emailing any issue alongwith the Contact details. E-Mail: support-eproc@nic.in.

• In case of any doubts and/or queries pertaining to technical solution, specifications terms & conditions of the tender, prospective bidder may send their queries in writing, e- mail(mmg-blrkp@cdac.in). The queries, requests for clarifications, doubts etc. must be sent within 10 days from the date of publishing the Tender. The bidders are requested to go through the entire tender document thoroughly, before raising any query. C-DAC, Bangalore shall address the queries raised by the bidders. The replies to queries would be made available on C-DAC's website in due course of time. All the queries, doubts, clarifications etc. must be submitted in "xls" format only as below.

Name o	of the bidder:	M/s.		
Sl.No.	Section / Page No	Clause Reference	Query from bidder	C-DAC Response



SECTION I: INVITATION FOR BIDS (IFB)

C-DAC invites the bids from eligible bidders for PCB Assembly with Component Procurement as per terms and conditions specified in this document. The details technical specifications are given in "Section – IV: Schedule of Requirements" of this document.

1. Single e bid System:

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Online submission through https://www.eprocure.gov.in/eprocure/app:

The Single e bid system will be followed for this tender. In this system, bidder must submit their offer-online in single packet as explained below:

- Online-ePacket: "Financial e Bid": (BOQ.xls format only) The Financial e-Bid completed in all respects with Bidder name, email id, contact no. & Date in the BOQ.xls format attached. (In the space provided in the BOQ.xls as Bidder name/address etc.)
- a. Covering letter, as per Annexure-A.
- b. Authority letter, as per Annexure-B.
- c. A copy of Certificate of Incorporation, Partnership Deed/Memorandum and Articles of Association / any other equivalent document showing date and place of incorporation, as applicable of the bidder.
- d. Copies of PAN and GST registration certificates of the bidder.
- e. Duly filled Technical Bid with proper seal and signature of the authorized person (with name, designation, email id & contact no.).

e undertaking from the OEM as per Annexure-CCertificate/Undertaking as per Annexure D as per Office Memorandum No. F.No.6/18/2019-PPD of Public Procurement Division, Department of Expenditure, Ministry of Finance dated 23rd July 2020 and Order (Public Procurement No. 1) No. F.No.6/18/2019-PPD of Public Procurement Division, Department of Expenditure, Ministry of Finance dated 23rd July 2020 and further Order/OMs regarding restrictions on procurement from a bidder of a country which shares a land border with India.

Note: C-DAC reserves the right to reject the bid if any of the above listed document/sis/are not submitted.

2. Last Date of uploading of e bids and opening of the Technical e bids-Online.

Last date (DUE DATE) for uploading of ebids through: www.eprocure.gov.in/eprocure/app-against the tender id, as per the TENDER SCHEDULE above.

Technical e bids will be opened 'Online' through www.eprocure.gov.in/eprocure/app against the tender id, as per 'TENDER SCHEDULE' at:

Manager (Admin.)
Material Management Group
Centre for Development of Advanced Computing
C-DAC Knowledge Park, No.1, Old Madras Road,
Byappanahalli, Bangalore-560038

Phone Nos.:080-25093400 E-mail: mmg-blrkp@cdac.in



The ebids must be submitted on-line. The Tender Fees & EMD must be paid through epayment/NEFT/RTGS in favour of C-DAC and the receipt for the same should be submitted with e-tender documents.

In case bidder requires any clarifications/information, they may contact C-DAC address given in `TENDER SCHEDULE'.

Note: Please do not put "Commercial eBid" (prices quoted) in the technical ebid. If the price quoted is submitted / leaked with technical ebid the bid will be rejected at the sole discretion of C-DAC.

3. Opening of commercial e bids

- a. The bidders whose technical bid is found to meet both the requirements as specified above will qualify for opening of the commercial bid and will be informed about the date and time of the opening of the commercial bid.
- b. The commercial bids will be opened on-line. No bidder is required to be present in CDAC office for any E-tender opening process. Bidders can view the status & tender opening statement by logging on to e-procure site of NIC.

(END OF SECTION I)



SECTION II: INSTRUCTIONS TO BIDDERS (ITB)

1. Locations for supply at:

C-DAC, 68, Electronics City Bangalore 560 100

2. Delivery Period/Commencement of Support

- First 5 PCBs or 1-panel (which ever applicable) prototype assembled cards should be supplied to C-DAC for testing and evaluation within 30 days from the date of P.O.
- C-DAC will confirm the result of testing within 7 days for further process.
- The complete order should be delivered within 7 days from the date of positive confirmation (Successful testing of functionality of the first set of modules) from CDAC.

PCB Assembly with Component Procurement as per specification and as per list should be within 6 weeks from the date of placement of order.

3. Order Placement & Release of Payment:

Material Management Group Centre for Development of Advanced Computing C-DAC Knowledge Park, No.1, Old Madras Road, Byappanahalli, Bangalore-560038 Phone Nos.: 080-25093400

4. Eligibility Criteria:

- The bidder must not be blacklisted by C-DAC or any other Educational/R&D/Govt. Organizations, as on the date of Opening of the bids. A certificate or undertaking to this effect must be submitted.
- The bidder may quote and comply with the <u>items</u> given in Schedule of Requirements—Section IV of this document.

Note: If in the view of bidder, any exemption/relaxation are applicable to them from any of the eligibility requirements, under any Rules / process/ Guidelines/ Directives of Government of India, bidder may submit their claim for the applicable exemption/relaxation, quoting the valid Rule/process/Guidelines/Directives. In this case the bidder must submit necessary and sufficient documents alongwith the technical bid, in support of his claim. The relevant and valid certificates in support of claim of exemption must be submitted as applicable to the requirements of this Tender.

The bidders should provide sufficient documentary evidence to support the eligibility criteria. C-DAC reserves the right to reject any bid not fulfilling the eligibility criteria.

5. Amendment to Bidding Documents

- At any time prior to the deadline for submission of bids, C-DAC may, for any reason, whether on its own initiative or in response to the clarification request by a prospective bidder, modify the bid document.
- The amendments to the tender documents, if any, will be notified by release of PCB Assembly with Component Procurement



Corrigendum Notice on <u>www.eprocure.gov.in/eprocure/app/www.cdac.in/tender</u> against the tender id. The amendments/modifications will be binding on the bidders.

• C-DAC at its discretion may extend the deadline/Due Date for the uploading of ebids if it thinks necessary to do so or if the bid document undergoes changes during the bidding period, in order to give prospective bidders time to take into consideration the amendments while preparing their bids.

6. Preparation of e Bids

A neat and clean e Bid is expected to be uploaded in the form of pdf. Bidder should avoid, as far as possible, corrections, overwriting, erasures or postscripts in the bid documents. In case however, any corrections, overwriting, erasures or postscripts have to be made in the bids, they should be supported by dated signatures of the same authorized person signing the bid documents. However, bidder shall not be entitled to amend/ add/ delete/ correct the clauses mentioned in the entire tender document.

7. Period of validity of bids

- 7.1 Bids shall be valid for minimum <u>90</u> days from the date of submission. A bid valid for a shorter period shall stand rejected.
- 7.2 C-DAC may ask for the bidder's consent to extend the period of validity. Such request and the response shall be made in writing only. A bidder agreeing to the request for extension will not be permitted to modify his bid.

The Bid documents shall be neatly arranged. They should not contain any terms and conditions, printed or otherwise, which are not applicable to the Bid. <u>The conditional bid will be summarily rejected.</u> Insertions, postscripts, additions and alterations shall not be recognized, unless confirmed by bidder's signature.

8. Deadline for Submission of e Bids – Online PDF/BOQ.xls formats only.

- Bids must be uploaded before the due date and time at the address specified in the tender document.
- C-DAC will not be responsible for any issues arising/pertaining with the eprocure.gov.in/e procure/app portal for non-submission, failure in submission of e bids online.
- C-DAC may extend this deadline/Due Date for uploading of bids by amending the bid documents and the same shall be suitably notified.

9. Late Bids

C-DAC shall not be responsible and liable for the delay in receiving the ebid for whatsoever reason.

10. Bid Opening & Evaluation of e Bids

- The bids will be examined based on eligibility criteria stipulated at Para4 of Section–II to shortlist the eligible bidders.
- The technical bids of only the shortlisted eligible bidders shall be evaluated based on technical specifications stipulated at Section–IV.
- The bidders whose technical bid is found to meet both the requirements as specified above will qualify for opening of the commercial bid and will be informed about the date and time



of the opening of the commercial bid.

• The duly constituted Tender Evaluation Committee (TEC) shall evaluate the bids. The TEC shall be empowered to take appropriate decisions on minor deviations, if any.

11. Comparison of Bids

• Only the short-listed bids from the technical evaluation shall be considered for commercial comparison

12. Award of Order

- C-DAC shall award the order to the eligible bidder whose technical bid has been accepted and determined as the lowest evaluated commercial bid based on the total price of each line item + taxes of the Commercial Bid. However, C-DAC reserves the right and has sole discretion to reject the lowest evaluated bid.
- If more than one bidder happens to quote the same lowest price, C-DAC reserves the right to decide the criteria and further process for awarding the contract, decision of C- DAC shall be final for awarding the contract.
- Once the order is released on the L1 vendor, the L1 vendor
 - Should execute Non-Disclosure Agreement with C-DAC for which the format will be provided later
 - Procure all the components as per the part list/BoM.
 - Assemble the components on the PCB as per the BoM and as per the special instructions, if applicable.
 - Do the basic post-assembly hardware testing as per the instructions (will be provided later) and provide test report of each card.
 - For the assembled PCBs which fail in basic post-assembly hardware testing at C-DAC, the vendor should take care of rework, repair and replacement of components at their cost
 - In case of post repair, rework, replacement of components if the hardware fails or non-recoverable damage occurs, the vendor should pay the cost of the damaged bare PCBs. The cost of each bare PCB will be provided to the vendor.
 - The time for repair, rework and replacement of components in the above case should not be more than 3 days
 - Vendor should mention a serial number for each card while supplying to C-DAC. The serial number should be unique across the batches of assembly.
 - · All components should be RoHS compliant.
 - The assembly process should also be RoHS compliant.
 - Vendor Should avoid damages to the PCBs provided to them for job work, otherwise,
 the same amount will be deducted from security deposit.

13. Purchaser's Right to amend/cancel

• C-DAC reserves the right to amend the eligibility criteria, commercial terms & conditions, PCB Assembly with Component Procurement



Scope of Provide, technical specifications etc.

• C-DAC reserves the right to cancel the entire tender at any stage without assigning any reasons thereof.

14. Corrupt or Fraudulent Practices

- It is expected that the bidders who wish to bid for this project have highest standards of ethics.
- C-DAC will reject bid if it determines that the bidder recommended for award has engaged incorrupt or fraudulent practices while competing for this contract;
- C-DAC may declare a vendor ineligible, either indefinitely or for a stated duration, to be awarded a contract if it at any time determines that the vendor has engaged in corrupt and fraudulent practices during the award/execution of contract.

15. Interpretation of the clauses in the Tender Document/Contract Document

In case of any ambiguity/dispute in the interpretation of any of the clauses in this Tender Document, the interpretation of the clauses by Executive Director, C-DAC, Bangalore shall be final and binding on all parties.

(END OF SECTION II)



SECTION III: SPECIAL CONDITIONS OF CONTRACT (SCC)

1. Price

- **1.1** The price quoted shall be considered firm for the next 3 years and no price escalation will be permitted (except Govt. Statutory Levies)
- 1.2 The prices quoted must be on "all inclusive till destination" F.O.R. basis.
- 1.3 The exact rate of GST with the HSN Code, currently applicable must be mentioned in the 'commercial bid format'. The GST at the time of supply of material shall be applicable. TDS@ 2% on the GST will be deducted at source on all supplies, services for value above Rs. 2.50 lacs. TDS Certificate to this effect will be issued by C-DAC in all such cases.
- **1.4** The responsibility, cost and risk of the consignment shall rest with the bidder till receipt of goods is acknowledged.

2. Payments:

- **2.1** Payment Terms: 100% Payment to the contractor shall be paid within 30 days of delivery and acceptance.
- **2.2** All statutory deductions like Income Tax, GST as applicable, other taxes and levies as per Rules etc. will be deducted from Contractor's bills.

3. Security Deposit:

The empanelled bidders shall furnish the Security Deposit of Rs.10,000/- (Rupees Ten Thousand Only) by way of NEFT/RTGS in favor of C-DAC, Bangalore for 3 years on returnable basis after the empanelment. The security deposit will be returned to the unsuccessful bidder within one month from the date of opening of the bids.

The account details for remittance are given below:

Name of the Bank	State Bank of India
Branch	Kasturinagar Branch, Bangalore
Account No	54005316804
IFSC Code No	SBIN0010365

The copy of the transaction slip/receipt evidencing the electronic transfer must be enclosed alongwith the tender document and must reach before the due date & time of bid opening as given in serial no. 3 of NIT above at C-DAC, No.1, Old Madras Road, Byappanahalli, Bangalore 560 038.

- **4. Liquidated Damages:** Any inordinate delay that could be attributable to party shall attract a Liquidated Damage at the rate of 1% (one percent) of the order value (of individual job work) for each fortnight, with a ceiling of 10% (Ten percent) of the order value.
- **5. Confidentiality:**Contractor shall not divulge the information relating to the circuits, layout design, fabrication procedures, quality control methods etc., that are not in public domain and exclusively provided by C-DAC-KP for C-DAC-KP's own requirements, to any third party and shall not use for Contractor's own commercial purpose.



6. Sub-Contract: Bidder shall not sub-contract any work or part of that work contracted by C-DAC to others, or to a third party.

7. Non disclosure Agreement

The technical information, drawings and other related documents given by C-DAC-KP in the course of the work should remain the property of Government of India, Department of Electronics and Information Technology. The given Material / Documents should not be used for any other purpose or be duplicated in any case. All empanelled vendors should execute Non Disclosure Agreement with CDAC.

8. Jurisdiction:

The disputes, legal matters, court matters, if any shall be subject to Bangalore jurisdiction only.

9. Force Majeure:

C-DAC may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that, the delay in performance or other failure to perform its obligations under the contract is the result of an Force Majeure. Force Majeure is defined as an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, storms etc.), acts of states / state agencies, the direct and indirect consequences of wars (declared or undeclared), hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises or any other act beyond control of the bidder.

10. Arbitration:

In the event of any dispute or difference between the Parties in respect of any matter relating to or arising out of this Agreement, they shall endeavour to negotiate a mutually satisfactory solution. If solution cannot be reached within a reasonable time, the said dispute or difference shall be referred to a sole arbitrator to be appointed by the Centre Head of C-DAC, Bangalore Centre, Bangalore. The arbitration proceedings shall take place in Bangalore and be conducted in English language and governed by the provisions of the Arbitration and Conciliation Act, 1996."

11. Indemnity:

Selected bidders shall save, indemnify and hold harmless C-DAC from any third party Govt. Claims, losses penalties, if any, arising in connection with this Contract.

12. Assignment:

Selected bidders/ Parties shall not assign, delegate or otherwise deal with any of its rights or obligation under this Contract without prior written permission of C-DAC.

13. Severability:

If any provision of this Contract is determined to be invalid or unenforceable, it will be deemed to be modified to the minimum extent necessary to be valid and enforceable. If it cannot be so modified, it will be deleted and the deletion will not affect the validity or enforceability of any other provision

(END OF SECTION III)



SECTION IV – SCHEDULE OF REQUIREMENT

Sl.No.	Description	Quantity
1.	PCB assembly and components procurement for the following WIFI MOTE 1V3 UBIMOTE 2X2 UBISENSE 1V1 BLE MOTE 2V1 Details of the requirement as per Attachments below	450 Nos. 450 Nos 450 Nos 450 Nos
	Details of the requirement as per Attachments below	

WiFi mote 1V3 Parts List

Sl. No	Type	Part Name/Number	Description	Comps.	Qty/Board
		GRM155R71H223KA12D/GRM15XR61A223KA12	CAP CER ±10% 50V X7R MLCC	C19	1
1	CAP	D	0402		
		LMK105BJ104KV-F	CAP CER 0.1UF 10% X5R 0402	C38, C1, C2, C6-7, C9-	25
				11, C14-17, C32-33,	
				C36-37, C40-41, C46-	
2	CAP			49, C51-53	
		04023D103KAT2A	CAP CER 10000PF 25V X5R	C39	1
3	CAP		0402		
		GRM1555C1H100JA01D/RFCS04021000BJTT1	CAP CER 10PF 50V 5% NP0	C21-22, C25	3
4	CAP		0402		
5	CAP	GRM188R60J106ME47D	CAP CER 10UF 6.3V X5R 0603	C13, C54-55	3
6	CAP	UMK325BJ106KM-T	CAP CER 10µF ±10% 50V X5R	C8	1
7	CAP	TAJR105K025RNJ	CAP TANT 1UF 25V 10% 0805	C45	1
		C1005X5R1C105K	cap cer 1.0uF 16V X5R 10%	C43	1
8	CAP		0402		
9	CAP	AMK107BBJ226MAHT	CAP CER 22UF 4V X5R 0603	C18, C30	2
		GRM1555C1E270JA01D	CAP CER 27PF 25V 5% NPO	C26,C34	2
10	CAP		0402		
11	CAP	GRM155R60J225ME15D	CAP CER 2.2µF ±20% 6.3V	C20	1



Sl. No	Туре	Part Name/Number	Description	Comps.	Qty/Board
			X5R 04		
12	CAP	CL05B333KO5NFNC	CAP CER 0.033UF 16V X7R 0402	C35	1
13	CAP	GRM32ER61C476KE15L	CAP CER 47UF 16V X5R 1210	C27	1
14	CAP	CL05A475MQ5NRNC	CAP CER 4.7UF 6.3V X5R 0402	C3-5	3
15	CAP	F951E475MPAAQ2	CAP TANT 4.7UF 25V 20% 0805	C12	1
16	CAP	GRM1555C1H6R2BA01D/GCQ1555C1H6R2BB01 D	CAP CER 6.2PF 50V NP0 0402	C23-24	2
17	CRY	ABS07-32.768KHZ-T	CRYSTAL 32.768KHZ 12.5PF SMD	X1	1
18	CRY	CA-301 6.0000M-C:PBFREE	CRYSTAL 6.0000MHZ 18PF T/H	X4	1
19	CRY	ECS-400-8-36CKM/ Q24FA20H000396E	40MHz ±10ppm Crystal 8pF 40 Oh	X2	1
20	DIODE	DFLS240L	DIODE SCHOTTKY 40V 2A POWERDI1	D2	1
21	DIODE	SML-211YTT86	LIGHT EMITTING DIODE YELLOW	D1,D3,D4,D5,D8,D12	6
24	DIODE	CDBU0530	DIODE SCHOTTKY 20V 500MA 0603	D11, D14	2
25	DIODE	CMSH3-40MA TR13	DIODE SCHOTTKY 40V 3A SMA	D13	1
26	DIODE	SESD0402P1BN-0450-090/GG0402052R542P	ESD PROTECTION DIODE	D6, D10	2
27	FB	BLM18PG121SN1D	FERRITE CHIP 120 OHM 2000MA 06	FB1, FB4, FB5	3
28	FB	CIM10U800NC	FERRITE CHIP 80 OHM 600MA 0603	FB2-3	2
29	IC	BA00DD0WHFP-TR	IC REG LDO ADJ 2A HRP5	U10	1
30	IC	CC3200R1M2RGC	WI-FI SOC	U1	1

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Sl. No	Type	Part Name/Number	Description	Comps.	Qty/Board
31	IC	DEA202450BT-1294C1-H	2.4GHZ FILTER	U3	1
32	IC	93LC46B-I/MS	IC SRL EE 1K 64X16 2.5V 8MSOP	U5	1
		M25PX80-VMN6TP / IS25LQ032B-JNLE	IC FLASH 8MBIT 75MHZ 8SO	U2	1
33	IC	FT2232D-REEL	USB Interface IC USB to Dual	U4	1
34	IC IC	LTC2942CDCB#TRPBF	IC FUEL/GAS GAUGE LI-ION 6DFN	U11	1
36	IC	LTC4121EUD-4.2#PBF	IC BATT CHARGER 40V 400MA 16QF	U8	1
37	IC	mcf08062g900-t	IC BATT CHARGER 40V 400MA 16QFN	U7	1
38	IC	SN74LVC125APWR	IC BUS BUFF TRI-ST QD 14TSSOP	U12-13	2
39	IC	SN74LVC126APWR	IC BUS BUFF TRI-ST QD 14TSSOP	U14	1
40	IC	SN74LVC1T45DCKR	IC BUS TRANSCVR TRI-ST SC706	U15-16	2
41	IC	TPD2EUSB30DRTR	TVS DIODE 5.5VWM 8VC SOT3	U6	1
42	IND	LQM2HPN1R0MJ0L	INDUCTOR POWER 1.0UH 1007	L2	1
43	IND	LQM2HPN2R2MG0L	INDUCTOR 2.2UH 20% 1300MA 1008	L1, L3	2
44	IND	LPS4018-333MRC	FIXED IND 33uH 0.8A 20% SMD	L4	1
45	IND	L_DNP_0402	INDUCTOR DO NOT MOUNT	L5	1
46	IND	L_DNP_0805	INDUCTOR DO NOT MOUNT	L6DNM	1
47	MECH	47589-0001	Connector Receptacle USB - mic	P8	1
48	MECH	5-1814832-1	SMA CONNECTOR	P4	1



Sl. No	Туре	Part Name/Number	Description	Comps.	Qty/Board
49	MECH	BERG_2PIN	BERG_2PIN	J1-4,J7,P3	6
50	MECH	SBH11-PBPC-D05-RA-BK	CONN HEADR 2.54MM 10POS GOLD R/A	P6	1
51	MECH	2-644861-2	2 Positions Header, Shrouded C	P1	1
52	MECH	SBH11-PBPC-D07-RA-BK	Male Header_14Pin_DAC 2.54mm R	P2	1
53	MECH	1301-9307	SWITCH	S2, S4	2
54	MECH	206-2RAST	2 POS SPST Switch	S1	1
55	MECH	GPBS850L	SWITCH PUSHBUTTON DPDT 0.3A 30	S3	1
56	MOSFE T	SI2343CDS-T1-GE3/PMV50EPEAR	MOSFET P-CH 30V 5.9A SOT- 23	M1	1
57	RES	ERJ-2GE0R00X/CRCW04020000Z0EDC	RES SMD 0.00HM JUMPER 1/10W 0402	R9	1
58	RES	RK73Z1JTTD	RES 00HM 0603 1W	R11, R22,R63	3
59	RES	CRCW0402100KFKED	RES SMD 100K OHM 1% 1/5W 0402	R1-4, R24, R43, R45, R49	8
60	RES	CRCW040210K0FKED	RES 10.0K OHM 1/16W 1% 0402 SM	R10, R16-17, R37, R39-42, R50-51, R55- 56, R59-60,R64-65	16
61	RES	CRCW0402121KFKED/RT0402FRE07121KL	RES SMD 121K OHM 1% 1/16W 0402	R15	1
62	RES	RC0402FR-071K5L/GWCR0402-1K5FT10	RES 1.50K OHM 1/16W 1% 0402 SM	R28	1
63	RES	RC0402FR-072K7L	RES 2.70K OHM 1/16W 1% 0402 SM	R54	1
64	RES	CRCW0402261KFKED	RES SMD 261K OHM 1% 1/16W 0402	R20	1
65	RES	RC0603FR-07270R/CRCW0603270RFKEAC	RES SMD 270 OHM 1% 1/10W 0603	R25, R47	2

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Sl. No	Type	Part Name/Number	Description	Comps.	Qty/Board
66	RES	RC0402FR-0728RL/ERJ-2RKF28R0X	RES 28.0 OHM 1/16W 1% 0402 SMD	R18-19	2
67	RES	ERJ-2GEJ222X	RES 2.2K OHM 1/10W 5% 0402 SMD	R8	1
68	RES	CRCW0402324KFKED	RES SMD 324K OHM 1% 1/16W 0402	R21	1
69	RES	RK73H1ETTP33R0F	Thick Film Resistors - SMD 33	R29-33, R36, R44, R48, R52-53, R57-58, R61, R62,R66	15
70	RES	CRCW04023K01FKED	RES SMD 3.01K OHM 1% 1/16W 040	R13	1
71	RES	RC0402JR-074K7L/SFR01MZPJ472	RESISTOR SMD 4.7K 0402	R34	1
72	RES	RC0402FR-07470RL/ERJ-2RKF4700X	RES 470 OHM 1/16W 1% 0402 SMD	R26	1
73	RES	CRCW040247K0JNED/CRCW040247K0FKED	RES SMD 47K OHM 5% 1/16W 0402	R27	1
74	RES	CRCW04024K30JNED	RES SMD 4.3K OHM 5% 1/16W 0402	R46	1
75	RES	ERJ-2GEJ561X	RES 560 OHM 1/16W 1% 0402 SMD	R5-7, R35	4
76	RES	CRCW04025K10JNED	RES SMD 5.1K OHM 5% 1/16W 0402	R23	1
77	RES	CRCW04026K65FKED	RES SMD 6.65K OHM 1% 1/16W 040	R38	1
78	RES	CRCW0402787KFKED	RES SMD 787K OHM 1% 1/16W 0402	R14	1
79	RES	SR732ETTER274F	Current Sense Resistors - SMD	R12	1
80	PCB	WiFi_mote_1v3	PCB	PCB	1



Gnd P2.2 Vcc P2.1

UBISENSE 1X1-SENSOR BOARD V1.1 BOARD PARTLIST

SL NO.	PART	DESCRIPTION	PACKAGE	Components	QTY/board
1	CONNECTOR	BERG PIN 4X1	PTH	P1	1
		SFH11-PBPC-D05-RA-			
2	CONNECTOR	BK	PTH	P2	1
3	IC	BMP180	LGA/7	U1	1
4	IC	2SC4116BLTE85LF	SC-70, SOT-323	Q1	1
5	CAP	CC0402KRX5R5BB105	402	C4	1
6	CAP	GRM155R60J475ME87D	402	C5	1
7	CAP	593D106X9016A2TE3	SMD	C7	1
8	CAP	LMK105BJ104KV-F	402	C1-3,C6,C8	5
9	DIODE	SML-211YTT86	805	D3	1
10	IC	PCA9515ADP,118	TSSOP-8	U5	1
11	IC	PS1240P02CT3	PTH	LS1	1
12	RES	ERJ-2GEJ561X	402	R10	1
13	RES	ERJ2GE0R00X	402	R1-3,R6,R8	5
14	RES	ERJ2RKF1501X	402	R11	1
15	RES	RE0402DR-071KL	402	R4-5	1
16	RES	ERJ-2RKF4701X	402	R12DN1, R13DN1	2
17	RES	CRCW040210K0FKED	402	R9,R12-13	3
18	RES	CRCW040222R0FKED	402	R17	1
19	DIODE	SFH 4650-Z	SMD	D1	1

PCB Assembly with Component Procurement



20	IC	SHT21	DFN-6	<u>U</u> 1	1
21	IC	TSL2561T	T Package (6-LEAD TMB)	U4	1
22	IC	TSL26711FN	DFN	U3	1
	РСВ				1

		UBIMOTE 2V2 Co	omponents List		
S NO	Part Name	Part Number	Description	Comps.	Qty/board
1	AP2127	AP2127N-3.3TRG1	AP2127N-3.3TRG1	U4	1
2	BALUN	2450BM15A0002	2450BM15A0002	U3	1
				U2 thermal pad	
3	CC2538	CC2538SF53RTQT	IC RF ZIGBEE/802.15.4 SOC HI P QFN		1
				U10 -thermal	
4	CP2102	CP2102N-A01-GQFN20	IC BRIDGE USB TO UART 20QFN		1
				C2 C4-8 C25 C27 C30-32 C35	
5	C_100N_0402	LMK105BJ104KV-F	CAP CER 0.1UF 10V 10% X5R 0402		12
				C39	
6	C_10N_0402_X7R_K_25	0402YC103JAT2A	CAP CER 10000PF 16V 5% X7R 040		1
				C17-18	
7	C_12pF_0402	GRM1555C1H120JA01D	CAP CER 12PF 50V 5% NP0 0402		2



				C10	
8	C_1NF_0402	GRM155R71H102KA01D	CAP CER 1000PF 50V 10% X7R 040		1
				C1 C19-20	
9	C_1uF_0402	GRM155R61A105KE15D	CAP CER 1UF 10V 10% X5R 0402		3
				C43	
10	C_1uF_0603	GRM188R61A105KA61D	CAP CER 1UF 10V 10% X5R 0603		1
s no	Part Name	Part Number	Description	Comps.	Qty/board
				C33DNM C9 C34	
11	C_2.2uF_0603	GRM188R61A225ME34D	CAP CER 2.2UF 10V 20% X5R 0603		3
				C3	
12	C_220P_0402	GRM1555C1H221JA01D	CAP CER 220PF 50V 5% NP0 0402		1
				C15-16	
13	C_22pF_0402	GRM1555C1H220JA01D	CAP CER 22PF 50V 5% NPO 0402		2
				C11-12	
14	C_47PF_0402	GRM1555C1H470JA01D	CAP CER 47PF 50V 5% NP0 0402		2
				C24	
15	C_4U7_0805	TMK212AB7475KG-T	CAP CER 4.7UF 25V X7R 0805		1
				C26 C28 C36	
16	C_4UF7_0603	CC0603KRX5R6BB475	CAP CER 4.7UF 10V 10% X5R 0603		3
				FB4	
17	FBEAD_PWR_0603	BLM18PG121SN1D	FERRITE CHIP 120 OHM 2000MA 06		1



				FB1 FB5	
19	F_BEAD_0603	BLM18HE152SN1	FERRITE CHIP 1500 OHM 500MA 06		2
				D1 D8-10	
20	LED	SM0805GCL	LIGHT EMITTING DIODE 0805 GREE		4
				D6 D11	
21	LED_G_0603	LTST-C190KGKT	LED GREEN CLEAR 0603 SMD		2
s no	Part Name	Part Number	Description	Comps.	Qty/board
				D7	
22	LED_R_0603	LTST-C190KRKT	LED RED CLEAR 0603 SMD		1
23	LI-ON_2PIN	TS-102-T-A	CONN HEADER VERT 2POS .100 TIN	P1	1
24	MCF08062G900-T	MCF08062G900-T	common mode choke (usb)	U7	1
25	MCP73833	MCP73833-FCI/UN	Battery Management Charge Mana	U6	1
27	MOLEX_47589-0001	MOLEX_47589-0001	Connector Receptacle USB - mic	P3	1
28	PERIPHERAL_CNTR_14_PIN	SBH11-PBPC-D07-RA-BK	Male Header_14Pin_DAC 2.54mm R	P2	1
	TENNITED STATES	551122 51 0 507 11 1 51	Wate Neddel_11111_57(6 215 1111111111	U5	-
29	PUSBM5V5X4-TL	PUSBM5V5X4-TL	TVS DIODE 5.5VWM 12VC 6HXSON		1
				S2	
30	RESET_SW	B3F-1000	SWITCH TACTILE SPST-NO 0.05A 2		1
31	R_00HM_0603	RK73Z1JTTD	RES 00HM 0603 1W	R13	1
32	R_0_0603	RK73Z1JTTD	RES 00HM 0603 1W	R18-19	2



				R3 R16-17	
33	R_10K_0402	CRCW040210K0FKED	RES 10.0K OHM 1/16W 1% 0402 SM		3
				R20	
34	R_10K_0603	CRCW060310K0FKEA	RES SMD 10K OHM 1% 1/10W 0603		1
				R4	
35	R_1K5_0402	RK73H1ETTP1501F	RESISTOR, THICK FILM, 1.5k, -1		1
s no	Part Name	Part Number	Description	Comps.	Qty/board
				R15	
36	R_1K_0603	ERJ-3EKF1001V	RES SMD 1K OHM 1% 1/10W 0603		1
				R11-12 R14	
37	R_221OHM_0402	ERJ-3EKF2210V	RES SMD 221 OHM 1% 1/10W 0603		3
				R1	
38	R_2K2_0402_G	ERJ-2RKF2201X	RES SMD 2.2K OHM 1% 1/10W 0402		1
				R7-8	
39	R_33OHM_0402	RK73H1ETTP33R0F	RESISTOR, THICK FILM, 33, -1%/		2
				R22	
40	R_47KOHM_0402	CRCW040247K0FKEDHP	RES SMD 47K OHM 1% 1/8W 0402		1
				R10 R25-27	
41	R_560OHM_0402	ERJ-2GEJ561X	RES SMD 560 OHM 5% 1/10W 0402		4

Tender No.:CDACB/BD20/007



				R2	
42	R_56K_0402_F	ERJ-2RKF5602X	RES SMD 56K OHM 1% 1/10W 0402		1
				D3-5	
43	SCH_DIODE	CDBU0530	DIODE SCHOTTKY 20V 500MA 0603		3
				P5	
44	SMA CONNECTOR	5-1814832-1	CONN SMA JACK STR 50 OHM PCB		1
S NO	Part Name	Part Number	Description	Comps.	Qty/board
				S3	
45	SWITCH-CD_GPBS850L	GPBS850L	SWITCH PUSHBUTTON DPDT 0.3A 30		1
				D18-19	
46	TVS_DIODE	SESD0402P1BN-0450-090 /GG0402052R542P	ESD Suppressors 0402 PKG 9V 4.		2
				S1	
47	USER_SW	B3F-1000	SWITCH TACTILE SPST-NO 0.05A 2		1
	_			U8	
48	W25Q80DVSNIG	W25Q80DVSNIG	IC FLASH 8MBIT 104MHZ 8SOIC		1
				X1	
49	X_32.768KHZ	FC-12M 32.7680KA-A3	CRYSTAL 32.768KHZ 12.5PF SMD		1
				X2	
50	X_32MHz	FA-128 32.0000MF20X-K3	CRYSTAL 32MHZ 10PF SMD		1



				P6	
		00044 0000 005 04 04			_
51	jlink_debug_connector	SBH11-PBPC-D05-RA-BK	Male Header_10Pin_GP 2.54mm Ri		1

		BLE MOTE 2v1		
SL No	MANU PART NO.	DESCRIPTION		Qty/Board
1	2500AT44M0400	Antennas WIMAX 2300-2700MHz	ANT1	1
2	CGB3B1X5R1A475M055AC/ grm188R61A475KE15D	CAP CER 4.7UF 10V X5R 0603	C1	1
3	GRM1555C1H120FA16J	CAP CER 12PF 50V COG/NPO 0402	C13,C14,C15,C16	4
4	88501 2106017	MLCC - SMD/SMT WCAP-CSGP 1uF 0603 20% 16V	C2,C8,C10	3
5	885012105018/ GRM155R71H104KE14D	CAP CER 0.1UF 25V X5R 0402	C3,C4,C11,C18,C19,C20,C21,C22,C23,C25	10
6	ZRB18AR61A226ME01L /C1608X5R1A226M080AC	CAP CER 22UF 10V X5R 0603	C47	1
7	500R07S1R0BV4T	MLCC - SMD/SMT 200volts 1pF	C5	1
8	GCM155R71E473MA55D	MLCC - SMD/SMT 0402 0.047uF 25volts X7R 20%	C6	1
9	GRM188R61E225MA12D	CAP CER 2.2UF 25V X5R 0603	C60,C79	2



BLE MOTE 2v1 SL No Qty/Board MANU PART NO. **DESCRIPTION** CAP CER 1UF 25V JB 0402 10 CGB2A1JB1E105K033BC/c1005x5r1c105 C62 GCM1555C1H102JA16J /VJ0402Y102KXACW1BC CAP CER 1000PF 50V COG/NPO 0402 11 C7 C9 12 MLCC - SMD/SMT 0402 2200pF 50volts X7R 10% 1 500R07W222JV4T Standard LEDs - Through Hole Blue/ Water Clear 464-476nm1500mcd 13 LTL17KTBS3KS D1 LTL-4222 /WP914HDT D3 Standard LEDs - Through Hole Red Transparent 14 Standard LEDs - Through Hole Orange Diffused LTL-4291/ WP710A10SRC D4 1 15 Diode Schottky 15V 1A Surface Mount DO-LSM115JE3/TR13 214BA D5,D6,D9,D10 16 CG0402MLC-05LG/SESD0402P1BN-ESD Suppressors / TVS Diodes Chip Guard 0402 17 0450-090 5 Volts D7,D8,D11 3 Standard LEDs - Through Hole Green LTL-4232 /WP914GDT Transparent 18 D2 19 61201421721 WR-BHD 2.54mm Male 14P Angld Box Hdr Н1 2 Positions Header Connector Through Hole, 20 Right Angle J2 TSW-101-08-F-D-RA HK100515NJ-T 15n320mA 460 mOhm Max 0402 L1 21 L3 22 0603 10uH 468mOhms 10% 80mA 1 LBMF1608T100K 23 L4 L-07C2N7SV6T 2.7nH 300mA 170 mOhm Max 0402 24 61201021721 WR-BHD 2.54mm Box 10Pin Male Angled Р1 25 47589-0001 / zx62-v-5pa Micro B USB 2.0 Receptacle Connector Р3 1 26 RK73Z1ETTP **RES SMD 0 OHM 0402** R1,R2,R3,R4,R5,R9,R11, 27 CRCW040247K0FKED RES SMD 47K OHM 1% 1/16W 0402 R10 1

PCB Assembly with Component Procurement



_	BLE MOTE 2v1					
SL No	MANU PART NO.	DESCRIPTION		Qty/Board		
28	CRCW040210K0FKED	RES SMD 10K OHM 1% 1/16W 0402	R12,R13	2		
29	ERJ-2RKF1501X	RES SMD 1.5K OHM 1% 1/10W 0402	R27	1		
30	CRCW08053K57FKEA	RES SMD 3.57K OHM 1% 1/8W 0805	R30	1		
31	CRCW0402680RFKEDHP	RES SMD 680 OHM 1% 1/5W 0402	R6,R7,R8	3		
32	TL2243	Tactile Switch SPST x 2 Side Actuated	SW1	1		
33	PN12SHSA03QE	Pushbutton Switches SPDT LOCKING	SW2	1		
34	nRF51822-QFAA-R7	SoC 2.4GHz BT low Energy 256KB Flash 16KB Ram	U1	1		
35	AAT3681AIJS-4.2-T1	Charger IC Lithium-Ion/Polymer 8-SC70JW	U11	1		
36	2450BM14E0003	RF Balun 2.4GHz ~ 2.5GHz	U2	1		
37	AP7333-33SAG-7	LDO SOT-23 3.3V/300MA	U3	1		
38	CP2102-GM	I/O Controller Interface IC USB to UART Bdg Chip	U4	1		
39	PUSBM5V5X4-TL,115	TVS DIODE 5.5VWM 12VC 6HXSON	U5	1		
40	CX2016DB16000D0WZRC1	Crystals AEC-Q200 16000kHz 8pF 2x1.6mm	X1	1		
41	FC-135 32.7680KA-AC3	Crystals 32.768KHz 20ppm 9.0pF -40C -85C	X2	1		



(END OF SECTION IV)



SECTION- V: TECHNICAL BID

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Address: (for release of INR order):

Contact Person:

Mobile No: Email ID:

Part I: Technical Details & Specifications

Sl No	Requirement & conditions		Your Offer's Compliance (Yes/No)	Details
1.	PCB assembly and components procurement for the following WIFI MOTE 1V3 UBIMOTE 2X2 UBISENSE 1V1 BLE MOTE 2V1 Details of the requirement as per Attachments	450 Nos. 450 Nos 450 Nos 450 Nos		
2.	Delivery Schedule PCB assembly and components procurement will be supplied at C-DAC, Electronics City as per details below.			

PCB Assembly with Component Procurement

a. First 5 PCBs or 1-panel (which ever applicable) prototype assembled cards should be supplied to C-DAC for testing and evaluation within 30 days from the date of P.O. b. C-DAC will confirm the result of testing within 7 days for further process. c. The complete order should be delivered within 7 days from the date of positive confirmation (Successful testing of functionality of the first set of modules) from C-DAC.	Tender No.:	CDACB/BD20/007		सी डेक EDAC
	b.	applicable) prototype assembled cards should be supplied to C-DAC for testing and evaluation within 30 days from the date of P.O. C-DAC will confirm the result of testing within 7 days for further process. The complete order should be delivered within 7 days from the date of positive confirmation (Successful testing of functionality of the first set of modules)		

(END OF SECTION V)



Price Bid Format

Ref: CDACB/BD20/007 Assembly of PCBs including component procurement.

Srl	Description	Qty	Rate	HSN Code	Value	GST	Any other Charges	Total Value (Rs.)
1	WIFI MOTE 1V3	450 Nos.						
2	UBIMOTE 2X2	450 Nos.						
3	UBISENSE 1V1	450 Nos.						
4	BLE MOTE 2V1	450 Nos.						
				Total Rs.				

Note: The Quantity of the components listed in the requirement table is for One PCB. Bidders are requested to calculate quantity of the components according to the quantities against each of the PCBs.

Signature of the bidder with rubber Stamp



ANNEXURE - A: COVERING LETTER

Date:

To:

The Executive Director, Centre for Development of Advanced Computing C-DAC Knowledge Park, No.1, Old Madras Road, Byappanahalli, Bangalore-560038 Phone No.:080-25093400

Subject: Submission of bid for PCB Assembly with Component Procurement

Dear Sir.

We, the undersigned, offer to PCB Assembly with Component Procurement, in response to your Tender No.: **CDACB/BD20/007.** We are hereby submitting our proposal for same, which includes Technical bid and the Financial Bid, through **www.eprocure.gov.in/eprocure/app.**

We hereby declare that all the information and statements made in this bid are true and we accept that any misinterpretation contained in it, may lead to our disqualification.

We hereby certify that my/ our firm has not been disqualified and / or blacklisted by any Office/ Department/ Undertaking of the State Government / Central Govt. of India, PSU/ Autonomous Body of Government of India, at the time of submission of this bid.

We agree to abide by all the terms and conditions of the tender document, including corrigenda. We would hold the terms of our bid valid for 90 days as stipulated in the tender document.

We understand you are not bound to accept any Proposal you receive.

The under signed is authorized to sign this bid document. The authority letter to this effect is enclosed.

Yours sincerely,

Authorized

Signatory:

Name and Title of Signatory:

e-mail:

Mobile No:



ANNEXURE-B: AUTHORITY LETTER

Date:
To:
The Executive Director, Centre for Development of Advanced Computing C-DAC Knowledge Park, No.1, Old Madras Road, Byappanahalli, Bangalore-560038 Phone Nos.080-25093400
Subject: Authority Letter
Reference: Tender No. CDACB/BD20/007
Dear Sir,
We, M/s(Name of the bidder) having registered office at(address of the bidder) here with submit our bid against the said tender document.
Mr./Ms(Name and designation of the signatory), whose signature is appended below, is authorized to sign and submit the bid documents on our behalf against said RFP.
Specimen Signature:
The undersigned is authorized to issue such authorization on behalf of us.
For M/s_(Name of the bidder)
Signature and company seal Name Designation Email Mobile No.



ANNEXURE C- DOCUMENTS LIST / INDEX

❖ The Annexure D must be the first page of the Technical Bid to be submitted/uploaded.

Sl.No.	Description	Page No(s)
1	Covering letter, as per Annexure – A.	
2	Authority letter, as per Annexure – B.	
3	A copy of Certificate of Incorporation, Partnership Deed / Memorandum and Articles of Association/any other equivalent document showing date and place of incorporation, as applicable, in support of eligibility criteria.	
4	Copies of PAN and GST registration certificates, as applicable.	
5	The detailed technical solution offered as per format given in Section – V .	
6	Compliance statement indicating the compliance of the solution offered with the tender specifications.	
7	Other documents necessary in support of eligibility criteria, product catalogues, brochures etc.	
8	The bidder must have provided successfully in India, atleast 2 similar orders in last three years.	
9	The bidder must submit all the documents as per Document Checklist - Annexure C, with appropriate page nos. for the same. The flow of the submitted documents must be in the same order.	
10	The bidder must not be black listed by any Govt. Organizations as on date of Submission of the bids. A certificate or undertaking to this effect must be submitted (Annexure – A).	
11	Bank details: Account no. Name of the bank IFSC Code	
e-Pkt-1	PRICE BID IN BOQ.xls FORMAT IN FINANCIAL BID (EPACKET-1)	

(END OF DOCUMENT)