

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
ISRO INERTIAL SYSTEMS UNIT (IISU)
THIRUVANANTHAPURAM**

Tender for Logic Analyzer (64 channel or higher)

Bids to be submitted online

**Tender No.: IISU/PURCHASE UNIT IX (IISU PURCHASE)/IU202400435601 dated
04-09-2024**

A. Tender Details

Tender No :	IISU/PURCHASE UNIT IX (IISU PURCHASE)/IU202400435601
Tender Date :	04-09-2024
Tender Classification:	GOODS
Purchase Entity :	PURCHASE UNIT IX (IISU PURCHASE)
Centre :	ISRO INERTIAL SYSTEMS UNIT (IISU)

Logic Analyzer (64 channel or higher)

This tender is proposed as a DOMESTIC PUBLIC TENDER. This tender is restricted only to Class-I and Class-II Local Suppliers as defined under DPIIT Order dtd 04/06/2020- Preference to Make in India Order-2017 Revision. Non-Local Suppliers need not quote.

Foreign OEMs/Agents quoting on behalf of Foreign OEMs are not permitted to quote. High Sea Sales Quotes not permitted. The bids shall be in INR only.

Purchase preference to eligible vendors are applicable as per extant notifications issued by the Government of India.

The Class-I/Class-II Local suppliers, at the time of submitting their offer, shall also indicate percentage of local content and provide self-certification that the item (s) offered meets the local content requirement for Class-I/Class-II Local Suppliers as the case may be. They shall also give details of location (s) at which the local value addition is made.

In cases if the item(s) offered exceed Rs. 10 Crores, the Class-I/Class-II Local Suppliers shall provide a Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

False Declarations will be in breach of the Code of Integrity under Rule 175 (1) (i) (h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

Only online tenders will be accepted. No manual / Postal / e-mail / fax offers will be entertained. No manual tender document will be issued. Parties interested to participate in this e-Tender are required to register themselves as vendors, if not already registered, in our e-procurement portal <https://eproc.vssc.gov.in> by downloading plugins and help demos listed on the home page of the e-

procurement link mentioned above to complete the vendor registration process. They can seek help from help desk 0471-2565454 also as provided in the home page of e-procurement portal in case of any problem for registration and subsequent process. Vendors may please note that without registering in our e-procurement portal, they will not be able to quote for this e-tender.

Important Notice : Tender will be automatically closed on the due date, if at least one offer is received. If the tender could not be opened on the first day due to any technical snag, it will be opened on the subsequent day as per the schedule.

This is a two part tender, Technical & Commercial Part (Part-I) and Price Part (Part-II) shall be submitted separately. The tenderers should not attach any documents containing Pricing information along with Technical & Commercial Bid (Part-I). We do not open PART-II (Price Bid), if PART-I (Technical & commercial Offer) does not meet with our technical specification requirements. Cost split up, other price details etc. shall be uploaded as a separate document under COMMERCIAL DOCUMENTS FROM VENDOR tab.

THE TECHNICAL DOCUMENTS NEED TO BE ATTACHED ONLINE AS A SINGLE PDF FILE WITHOUT ANY PRICE INFORMATION, TECHNICAL BID CONTAINING PRICE DETAILS WILL BE TREATED AS REJECTED.

Price bid opening date indicated in the schedule is tentative only. Actual date will determine after evaluation of techno commercial bid.

A.1 Tender Schedule

Bid Submission Start Date :	05-09-2024 20:45
Bid Clarification Due Date :	12-09-2024 10:00
Bid Submission Due Date :	18-10-2024 14:45
Bid Opening Date :	18-10-2024 15:00
Price Bid Opening Date :	25-10-2024 09:45

B. Tender Attachments

NA

Instructions To Vendors

1. Form No 20

1. INSTRUCTIONS TO TENDERERS

1. Quotation/Open Authorization shall be submitted online [only] complying specified schedule.
2. Late tenders and delayed tenders will not be considered.
3. Quotation should be valid for at least 90 days from the date of opening of the tender. [Mandatory]
4. As a Government of India Department, this office is exempted from payment of Octroi and similar local levies. Tenderers shall ensure that necessary Exemption Certificates are obtained by them from the Purchase Officer concerned to avoid any payment of such levies.
5. a) Your quotation should be valid for 90 days (Single Part Tender) / 180 days (Two Part Tender) from the date of opening of the tender. [Mandatory]
b) Prices are required to be quoted according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.
6. Preference will be given to those tenders offering supplies from ready stocks and on the basis of FOR destination/delivery at site.
7. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be attached along with the offer.
(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of non acceptance of tender, the tenderer will have to remove the samples at his own expense.
(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.
(d) Specifications: Stores offered should strictly conform to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.
8. The purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted.
9. The tenderer should supply along with his tender, the name of his bankers as well as the latest Income - Tax clearance certificate duly countersigned by the Income-Tax Officer of the Circle

concerned under the seal of his office, if required by the Purchaser.

10. The Purchaser reserves the right to place order on the successful tenderer for additional quantity up to 25% of the quantity offered by them at the rates quoted.

11. The authority of the person signing the tender, if called for, should be produced.

TERMS & CONDITIONS OF TENDER

1. DEFINITIONS :

(a) The term Purchaser shall mean the President of India or his successors or assigns.

(b) The term Contractor shall mean, the person, firm or company with whom or with which the order for the supply of stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the Contract.

(c) The term Stores shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order including erection of plants & machinery and subsequent testing, should such a condition is included in the Purchase Order.

(d) The term Purchase Order shall mean the communication signed on behalf of the Purchaser by an Officer duly authorized intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the tender or offer of the Contractor for supply of stores or plant, machinery or equipment or part thereof.

2. PRICES:

Tender offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotation with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variation/s.

3. SECURITY DEPOSIT:

On acceptance of the tender, the Contractor shall, at the option of the Purchaser and within the period specified by him, deposit with him, in cash or in any other form as the Purchaser may determine, security deposit not exceeding three percent of the value of the Contract as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to deposit, SECURITY and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor in terms of Sub-Clause (ii) and (iii) of clause 10(b) hereof and/or to recover from the Contractor, damages arising from such cancellation.

4. GUARANTEE & REPLACEMENT :

(a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.

(b) For a period of twelve months after the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months from the date of acceptance thereof by the purchaser who shall state in writing in what respect the stores or any part thereof are faulty.

(c) If, in the opinion of the purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the purchaser,

provided the notice informing the Contractor of the defect is given by the purchaser in this regard within the said period of 14 months from the date of acceptance thereof.

(d) Should the Contractor fail to rectify the defects, the purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.

(e) The decision of the purchaser notwithstanding any prior approval or acceptance or inspection thereof on behalf of the purchaser, as to whether or not the stores supplied by the Contractor are defective or any defect has developed within the said period of 12 months or as to whether the nature of the defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor.

(f) To fulfill guarantee conditions outlined in clause 4 (a) to (e) above, the Contractor shall, at the option of the purchaser, furnish a Bank Guarantee (as prescribed by the purchaser) from a Bank approved by the purchaser for an amount equivalent to 3% of the value of the Contract along with first shipment documents. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.

(g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of the stores at purchaser's site.

(h) Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications then such a specification shall apply in such cases the period of 14 months referred to in Para 4 (b) & (c) shall be the asked for guarantee period plus two months.

5. PACKING FORWARDING & INSURANCE :

The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packages shall be done by and at the expense of the Contractor. The purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Contractor and the Purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract.

6. DESPATCH :

The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods despatched. The consignment should be despatched with clear Railway Receipt/Lorry Receipt. If sent in any other mode, it shall be at the risk of the Contractor. Purchaser will take no responsibility for short deliveries or wrong supply of goods when the same are booked on 'said to contain' basis. Purchaser shall pay for only such stores as are actually received by them in accordance with the Contract.

7. TEST CERTIFICATE :

Wherever required, test certificates should be sent along with the despatch documents.

8. ACCEPTANCE OF STORES:

(a) The stores shall be tendered by the Contractor for inspection at such places as may be specified by the purchaser at the Contractor's own risk, expense and cost.

(b) It is expressly agreed that the acceptance of the stores Contracted for, is subject to final approval by the purchaser, whose decision shall be final.

(c) If, in the opinion of the purchaser, all or any of the stores do not meet the performance or quality

requirements specified in the Purchase Order, they may be either rejected or accepted at a price to be fixed by the purchaser and his decision as to rejection and the prices to be fixed shall be final and binding on the Contractor.

(d) If the whole or any part of the stores supplied are rejected in accordance with Clause No. 8 (c) above, the purchaser shall be at liberty, with or without notice to the Contractor, to purchase in the open market at the expense of the Contractor stores meeting the necessary performance and quality Contracted for in place of those rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

9. REJECTED STORES:

Rejected stores will remain at destination at the Contractor's risk and responsibility. If instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice of rejection, the purchaser or his representative has, at his discretion, the right to scrap or sell or consign the rejected stores to Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actuals.

10. DELIVERY:

(a) The time for and the date of delivery of the stores stipulated in the Purchase Order shall be deemed to be the essence of the Contract and delivery must be completed on or before the specified dates.

(b) Should the Contractor fail to deliver the stores or any consignment thereof within the period prescribed for such delivery, the purchaser shall be entitled at his option either.

(i) to recover from the Contractor as agreed liquidated damages and not by way of penalty, a sum of 0.5% per week of the price of any stores which the Contractor has failed to deliver as aforesaid or during which the delivery of such store may be in arrears subject to a minimum of 10%, or

(ii) to purchase from elsewhere, without notice to the Contractor on the account and at the risk of the Contractor, the stores not delivered or others of a similar description (where others exactly complying with the particulars, are not, in the opinion of the purchaser, readily procurable, such opinion being final) without cancelling the Contract in respect of the consignment (s) not yet due for delivery, or

(iii) to cancel the Contract or a portion thereof and if so desired to purchase or authorise the purchase of stores not so delivered or others of a similar description (where others exactly if complying with the particulars are not, in the opinion of the purchaser, readily procurable, such opinion final) at the risk and cost of the Contractor.

In the event of action being taken under sub-clause (ii) & (iii) of clause 10 (b) above, the Contractor shall be liable for any loss which the purchaser may sustain on that account, provided that the re-purchase or if there is an agreement to repurchase then such agreement is made within six months from the date of such failure. But the Contractor shall not be entitled to any gain on such re-purchase made against default. The manner and method of such re-purchase shall be at the discretion of the purchaser, whose decision shall be final. It shall not be necessary for the purchaser to serve a notice of such re-purchase on the defaulting Contractor. This right shall be without prejudice to the right of the purchaser to recover damages for breach of Contract by the Contractor.

11. EXTENSION OF TIME :

As soon as it is apparent that the Contract dates cannot be adhered to, an application shall be sent by the Contractor to the purchaser. If failure, on the part of the Contractor, to deliver the stores in proper time shall have arisen from any cause which the purchaser may admit as reasonable ground for an extension of the time (and his decision shall be final) he may allow such additional time as he considers it to be justified by circumstances, of the case without prejudice to the purchasers right to recover liquidated damages under clause 10 thereof.

12. ERECTION OF PLANT & MACHINERY :

Wherever erection of a plant or machinery is the responsibility of the Contractor as per the terms of the Contract and in case the Contractor fails to carry out the erection as and when called upon to do so within the period specified by the purchaser, the purchaser shall have the right to get the erection done through any source of his choice. In such an event, the Contractor shall be liable to bear any additional expenditure that the purchaser is liable to incur towards erection. The Contractor shall, however, not be entitled to any gain due to such an action by the purchaser.

13. PAYMENT :

Contractor's bill will be passed for payment only after the stores have been received, inspected and accepted by the Purchaser.

14. MODE OF PAYMENT :

Normally payment will be made for the accepted stores within 30 days from the date of receipt of the materials.

15. RECOVERY OF SUM DUE:

Whenever any claim for the payment of, whether liquidated or not, money arising out of or under this Contract against the Contractor, the purchaser shall be entitled to recover such sum by appropriating in part or whole, the security deposited by the Contractor, if a security is taken against the Contract. In the event of the security being insufficient or if no security has been taken from the Contractor, then the balance or the total sum recoverable as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due to the Contractor under this or any other Contract with the purchaser. Should this sum be not sufficient to cover the full amount recoverable, the Contractor shall pay to the purchaser on demand the remaining balance due. Similarly, if the purchaser has or makes any claim, whether liquidated or not, against the Contractor under any other Contract with the purchaser, the payment of all moneys payable under the Contract to the Contractor including the security deposit shall be withheld till such claims of the purchaser are finally adjudicated upon and paid by the Contractor.

16. INDEMNITY :

The Contractor shall warrant and be deemed to have warranted that all stores supplied against this Contract are free and clean of infringement of any Patent, Copyright or Trademark, and shall at all times indemnify the purchaser against all claims which may be made in respect of the stores for infringement of any right protected by Patent Registration of design or Trade mark and shall take all risk of accidents or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for sufficiency of all means used by him for the fulfillment of the contract.

17. ARBITRATION :

In the event of any question, dispute or difference arising under these conditions or any conditions

contained in the Purchase Order or in connection with this Contract (except as to any matter the decision of which is specially provided for by these conditions), the same shall be referred to the sole arbitration of the Head of the Purchase office or some other person appointed by him. It will be no objection that the arbitrator is a Government servant, that he had to deal with matter to which the Contract relates or that in the course of his duties as Government servant he has expressed views on all or any other matters in dispute or difference. The award of the arbitrator shall be final and binding on the parties of this Contract.

If the arbitrator be the Head of the Centre/Unit

(i) In the event of his being transferred or vacating his office by resignation or otherwise, it shall be lawful for his successor-in-office either to proceed with reference himself, or to appoint another person as arbitrator, or

(ii) In the event of his being unwilling or unable to act for any reason, it shall be lawful for the Head of the Centre/Unit to appoint another person as arbitrator.

If the arbitrator be a person appointed by the Head of the Purchase Office

In the event of his dying, neglecting or refusing to act or resigning or being unable to act, for any reason, it shall be lawful for the Head of the Centre/Unit either to proceed with the reference himself or appoint another person as arbitrator in place of the outgoing arbitrator.

Subject as aforesaid the Arbitration & Conciliation Act 1996 and the rules there under and any statutory modifications thereof for the time being in force shall be deemed to apply to the arbitration proceedings under this Clause. The Arbitrator shall have the power to extend with the consent of the purchaser and the Contractor the time for making and publishing the award. The venue of arbitration shall be the place as purchaser in his absolute discretion may determine. Work under the Contract shall, if reasonably possible, continue during arbitration proceedings.

In the event of any dispute or difference relating to the interpretation and application for the provisions of the Contracts, such dispute or difference shall be referred by either party to Arbitration of one of the Arbitrations in the Department of Public Enterprises. The Arbitration Act 1996 shall not be applicable to arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute provided however any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs. Ministry of Law & Justice, Govt. of India. The parties to the dispute will share equally, the cost of arbitration as intimated by Arbitrator.

18. COUNTER TERMS AND CONDITION OF SUPPLIERS :

Where counter terms and conditions printed or cyclostyled conditions have been offered by the supplier, the same shall not be deemed to have been accepted by the Purchaser, unless specific written acceptance thereof is obtained.

19. SECURITY FOR PURCHASE OF MATERIALS :

Successful tenderer will have to furnish in the form of a bank guarantee or any other form as called for by the purchaser towards adequate security for the materials and properties provided by the Purchaser for the due execution of the Contract.

2. Conditions for BIDDER FROM A COUNTRY WHICH SHARES LAND BORDER WITH INDIA

1. Any bidder from a country which shares a land border with India will be eligible to bid in this tender, only if the bidder is registered with the Competent Authority.

Competent Authority for the purpose of registration shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

2. Any false declaration and non-compliance of the above would be a ground for immediate rejection of offer or termination of the contract and further legal action in accordance with the laws.

3. Validity of Registration: Registration should be valid at the time of submission of bids and should be valid at the time of placement of order.

3. PPP Make in India(Non- Divisible Items-Class I & II Local Suppliers Only)

1. A committee (with an external expert from a practicing cost accountant or practicing chartered accountant, if required) constituted for independent verification shall verify the self-declarations & auditor's / accountant's certificates on random basis, as per the requirements.

2. a) The subject item falls under Non-divisible category. b) The offers sought only from Class-I & Class-II local suppliers

3. Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content: i. Equal to or more than 50%: Class-I local supplier. ii. More than 20% but less than 50%: Class-II local supplier. iii. Less than or equal to 20%: Non-local supplier.

4. False declarations will be in breach of code of the integrity for which a bidder or its successor's will not be eligible/debarred for purchase preference from further tenders / pending tenders for two years along with other actions as may be applicable.

5. In case of a complaint received from any local supplier indicating a need for review / verification of Local content of successful vendor / awarded vendor, for accepting a complaint from such complainant (w.r.t the false declaration given by the successful vendor on the local content), a complaint fee of Rs.2Lakhs or 1% of the locally manufactured items being procured (subject to a maximum Rs. 5Lakhs), whichever was higher, to be paid by demand draft by the complainant. In case, the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

6. In cases the quoted price is in excess of Rs.1000 Lakhs (including duties, taxes and freight & Insurance) the 'Class-I & II local supplier shall provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing

chartered accountant (in case of suppliers other than companies) giving the percentage of local content.

7. In line with Public Procurement (Preference to Make in India), Order 2017 & its amendments issued by Govt. of India from time to time with a view to support the Indian industries, ISRO has implemented "Purchase Preference Policy". The "Purchase Preference" is applicable for the "Class-I Local Supplier" for the goods/ services/ works covered in this tender, subject to the following terms & conditions:-

8. 'L1' means the lowest technically accepted tender / bid / quotation (i.e. lowest landed cost including duties, taxes and freight & Insurance).

9. 'Local content' means the amount of value added in India (i.e. indigenous items/services added in the offered products/ services/ works) be the total value of the item offered (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties/IGST) as a proportion of the total value (excluding net domestic indirect taxes), in percent.

10. 'Margin of purchase preference' means the maximum extent to which the price quoted by the "Class-I local supplier" above the L1 (landed cost).

11. Purchase Preference Policy:- Goods/Works which are not divisible (ie., required quantity is 1 or as a package) and Services:

a) If L1 is from a 'Class-I local supplier', the contract will be awarded to L1 bidder.

b) If L1 is not from a 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference (i.e. 20%) and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price (inclusive of duties, taxes and freight & insurance).

c) In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on, and order/contract shall be awarded accordingly. In case where none of the 'Class-I local supplier' within the margin of purchase preference agree to match the L1 price, then the order/contract shall be awarded to the original L1 Bidder.

12. The 'Class-I & II local supplier' should provide a "Self Certification" along with technical offer indicating that the item offered meets the minimum local content [as per Sl. No.(3)] as called for in the tender and provide the percentage of local content along with details of the location(s) at which the local value addition is made. In case of two bid tenders, it is mandatory to indicate compliance to MLC(minimum Local Content) in technical bid zone.

13. The ink-signed certificate shall be provided on vendors letter head along with the offer (in case of online tender, copy of ink-signed certificate shall be uploaded along with your offer under concerned tab. Original in Hard copy shall be produced on request). In case of non-submission of certificate, the

purchase preference shall not apply.

14. The margin of Purchase Preference shall be up to 20%.

15. The Public Procurement (Preference to Make in India), Order 2017 issued by Govt. of India indicates that if there are any general or specific restrictive clauses to restrict participation of Indian companies in those countries procurement tenders, reciprocity clause need to be invoked as per the order. Hence, if ISRO or Govt. of India come across that Indian suppliers of an item are not allowed to participate and / or compete in procurement by your government, the bid submitted by you will be not be considered and excluded from eligibility for procurement. Please note this point.

16. Works means all works as per Rule 130 of GFR- 2017, and will also include 'turnkey works'. Works includes Engineering, Procurement and Construction (EPC) contracts and services include System Integrator (SI) contracts.

C. Bid Templates

C.1 Technical Bid - Logic Analyzer (64 channel or higher)

1. Logic Analyzer (with 3 year warranty)

Item specifications for Logic Analyzer

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Number of channels	64 channel or higher	Yes / No / Explain		
2	Sampling rate	2.5 GHz or higher for full channels 5 GHz or higher for Half channels	Yes / No / Explain		
3	Logic Analyzer should support synchronous (DDR memory capturing etc) and asynchronous modes	Yes	Yes / No / Explain		
4	Memory Depth for each channel	2 Mb minimum	Yes / No / Explain		
5	Data rate	350 Mbps or better	Yes / No / Explain		
6	Sampling Clock Options	Single Clock and Multiple clock	Yes / No / Explain		
7	Number of clocks to be supported in single clock mode	1	Yes / No / Explain		
8	Number of clocks to be supported in multiple clock mode	4 or higher	Yes / No / Explain		
9	Maximum state data rate –single clock (synchronous mode)	up to 350 Mbps on either edge of a clock up to 350 MHz	Yes / No / Explain		
10	Maximum state data rate –multiple clock (synchronous mode)	up to 700 Mbps on any combination of multiple clocks up to 350 MHz	Yes / No / Explain		
11	Maximum trigger sequencer speed (synchronous mode)	700 MHz or higher	Yes / No / Explain		
12	setup time (synchronous mode)	80 ps or lesser - single clock, 250 ps or lesser- Multiple clock	Yes / No / Explain		

13	hold time (synchronous mode)	80 ps or lesser - single clock, 250 ps or lesser- Multiple clock	Yes / No / Explain		
14	Minimum required data valid window (synchronous mode)	160 ps or lesser - single clock, 500 ps or lesser- Multiple clock	Yes / No / Explain		
15	Internal timetag resolution (synchronous mode)	80 ps or lesser	Yes / No / Explain		
16	Required number of trigger sequence steps (synchronous mode)	8 or higher	Yes / No / Explain		
17	Trigger sequence step branching (synchronous mode)	Arbitrary 4-way if/then/else	Yes / No / Explain		
18	Trigger position (synchronous mode)	Start, center, end or user-defined	Yes / No / Explain		
19	Trigger resources (synchronous mode)	Evaluation of patterns with Equal to, not equal to, greater than or equal to, less than or equal to, greater than, less than. Following trigger resources to be supported: 1. within range/out of range 2. Edge detector 3. Occurrence counter 4. Timer 5. Flags 6. Arm in 7. Burst patterns 8. Event counters	Yes / No / Explain		
20	Range width for trigger (synchronous mode)	64 bit or higher	Yes / No / Explain		
21	Pattern width for trigger (synchronous mode)	128 bits or higher	Yes / No / Explain		
22	Timer resolution (synchronous mode)	5ns or lower	Yes / No / Explain		
23	Timer accuracy (synchronous mode)	± (8 sample clock period + 2 ns)	Yes / No / Explain		
24	Timer reset latency (synchronous mode)	80 sample clock period or lower	Yes / No / Explain		
25	Minimum data pulse width (asynchronous mode)	1 sample period + 200 ps or lesser	Yes / No / Explain		

26	Timing interval accuracy : Within a 16 channel pod	\pm (1 sample period + 500 ps)	Yes / No / Explain		
27	Timing interval accuracy : across 16 channel pods (asynchronous mode)	\pm (1 sample period + 1 ns)	Yes / No / Explain		
28	trigger sequencer speed (asynchronous mode)	to be specified	Yes / No / Explain		
29	Required number of trigger sequence steps (asynchronous mode)	8 or higher	Yes / No / Explain		
30	Trigger sequence step branching (asynchronous mode)	Arbitrary 4-way if/then/else	Yes / No / Explain		
31	Trigger position (asynchronous mode)	Start, center, end or user-defined	Yes / No / Explain		
32	Trigger resources (asynchronous mode)	Evaluation of patterns with Equal to, not equal to, greater than or equal to, less than or equal to, greater than, less than. Following trigger resources to be supported: 1. within range/out of range 2. Edge detector 3. Occurrence counter 4. Timer 5. Flags 6. Arm in 7. Burst patterns 8. Event counters	Yes / No / Explain		
33	Trigger resource conditions (asynchronous mode)	Arbitrary Boolean combinations	Yes / No / Explain		
34	Trigger actions (asynchronous mode)	Go to Trigger and fill memory Trigger and go to Trigger, send e-mail and fill memory Occurrence counter reset	Yes / No / Explain		
35	Flag actions (asynchronous mode)	Set Clear Pulse set Pulse clear	Yes / No / Explain		

36	Range width for trigger (asynchronous mode)	64 bit or higher	Yes / No / Explain		
37	Pattern width for trigger (asynchronous mode)	128 bits or higher	Yes / No / Explain		
38	Timer resolution (asynchronous mode)	5ns or lower	Yes / No / Explain		
39	Timer accuracy (asynchronous mode)	± (8 sample clock period + 2 ns)	Yes / No / Explain		
40	Timer reset latency (asynchronous mode)	80 sample clock period or lower	Yes / No / Explain		
41	Waveform Views	Integrated display of data as digital waveforms, analog waveforms imported from an external oscilloscope, and/or as a chart of a bus values over time	Yes / No / Explain		
42	Listing Views	Display data as a state listing	Yes / No / Explain		
43	Compare Views	Compares data from different acquisitions and highlights differences	Yes / No / Explain		
44	Eye scan	Display eye diagrams across all buses and signals simultaneously	Yes / No / Explain		
45	Numeric bases for data display	Binary, hex, octal, decimal, signed decimal (two's complement), ASCII, symbols and processor mnemonics	Yes / No / Explain		
46	Symbolic support/object file format compatibility	IEEE-695, Aout, Omf86, Omf96, Omf386, Sysrof, ELF/DWARF1 1, ELF/DWARF2 1, ELF/Stabs1, ELF/Stabs2, ELF/Mdebug Stabs, TICOFF/COFF, TICOFF/Stabs	Yes / No / Explain		
47	data/file format support	Xml- configuration portability and programmability csv- transferring data to other applications like Microsoft Excel	Yes / No / Explain		

48	Internal Hard disk	256 GB SSD or higher capacity for data storage	Yes / No / Explain		
49	Internal RAM of OS in which the Logic Analyzer application is running	8 GB or higher	Yes / No / Explain		
50	Display Requirements	38.1-cm (15-in.) or higher size touch-screen. Separate display unit with touch based interface also acceptable. Resolution: 1024 X 768 or higher	Yes / No / Explain		
51	Front-panel hot key and knobs	Keys for selecting run mode and knob for adjusting viewing and measurement parameters	Yes / No / Explain		
52	Keyboard and mouse support	USB keyboard and USB mouse To be supported	Yes / No / Explain		
53	External display support	Should simultaneously support display to an external monitor	Yes / No / Explain		
54	Programmability support	Should support writing programs to control the logic analyzer application from remote computers on the local area network using COM. All measurement functionality should be controllable via the COM interface	Yes / No / Explain		
55	Peripheral interfaces	Display: 15-pin XGA connector /one Display Port connector/ HDMI USB : USB 3.0 min: 2 no.s, USB 2.0 min: 2 no.s,	Yes / No / Explain		
56	LAN	1 no.s, Connector: RJ45	Yes / No / Explain		
57	Trigger input	Rising edge or falling edge, ± 6 V max , Thresholds: Selectable: ECL, LVPECL, LVTTTL, PECL, TTL User defined (± 5 V in 50 mV increments) , Connector: BNC	Yes / No / Explain		

58	Trigger Output	Output: logic analyzer trigger or one of the flags, Output signal : VOH (output high level) 2.0 V min VOL (output low level) 0.5 V max , Connector: BNC	Yes / No / Explain		
59	Power input	100 to 240 V \pm 10% 50/60 Hz	Yes / No / Explain		
60	Operating Temperature	Operating 5 °C to 40 °C Non-operating -40 °C to +65 °C	Yes / No / Explain		
61	Humidity Conditions	Operating up to 90% relative humidity (non-condensing) at 40 °C . Non-operating up to 90% relative humidity (non-condensing) at 65 °C	Yes / No / Explain		

2. PROBES AND ACCESSORIES- 34 channel probe, flying lead, single ended, 160-pin direct connect

Item specifications for PROBES AND ACCESSORIES

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Flying lead type end connectors to DUT with Single ended data and differential clock	Total number of probe channels should be equal to or greater than number of channels quoted for logic analyzer.	Yes / No / Explain		

3. Taxes and Other Charges

Item specifications for Taxes and Other Charges

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	GST charges of all items as per government rules		-		

Common Specifications (Applicable for all items)

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Warranty on total product for minimum of 3 year required.		-		
2	Item to be delivered in safe packing to avoid transit damage.		-		
3	Authorization certificate from the OEM should be attached along with technical bid		-		
4	The item should qualify as Class -1 (>50 % local content) or Class-2 (>20% local content) as per local content requirement		-		

Supporting Documents required from Vendor

1. Certificate specifying Local content percentage

2. Authorization certificate from OEM (original equipment manufacturer)

3. Datasheet of the offered product

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	Item to be delivered in safe packing to avoid transit damage.	Yes / No / Explain	
2	Tax: IGST is charged at 5 % in terms of Notification No. 01/2017-IGST dated 28-06-2017 as amended by Notification No. 07/2018 IGST dated 25-01-2018 and Notification No. 25/2018 IGST dated 31-12-2018, necessary IGST/CGST/SGST certificate will be issued.	Yes / No / Explain	
3	Delivery period: (Please specify the applicable delivery period)	Yes / No / Explain	
4	Security Deposit: In the event of placement of order, for PO value above INR 5.0 lakh you should submit Security Deposit at 10% of the order value of the P.O. The Security Deposit shall valid for a period of 60 days beyond the date of completion and acceptance of P.O/Contract. The Security Deposit will be discharged without any interest after completion and acceptance of the Contractual obligations.	Yes / No / Explain	
5	Liquidated Damages: (L/D clause @ 0.5% per week subject to a maximum of 10% of the order value is applicable for delays beyond the promised delivery schedule.)	Yes / No / Explain	
6	Delivery Term: (Please accept our preferred delivery term i.e., FOR IISU. In case of Ex Works, please mention the applicable freight/ P&F values for delivering upto IISU Thiruvananthapuram)	Yes / No / Explain	
7	Warranty: (The items supplied against this purchase order shall be covered under warranty for a minimum period of 1 year from the date of receipt of items at our Stores.)	Yes / No / Explain	
8	Performance Bank Guarantee: (Supplier shall provide a Performance Bank Guarantee for 3 % of the PO value, valid upto 60 days beyond the date of completion of guarantee/ warranty period for ensuring the due performance of the supplied items during the warranty period.)	Yes / No / Explain	

9	Payment Term: (Our standard payment term is 100% within 30 days from the date of receipt & acceptance of items at our Site for indigenous orders)	Yes / No / Explain	
10	Make/ Country of Origin: (Please mention make of the quoted product and Country of Origin for import components)	Yes / No / Explain	
11	Local Content: Indicate the percentage of local content in the quote. Please certify the same in your letterhead and enclose the same with bid documents.	Yes / No / Explain	
12	Authorization Certificate: In case of Indian Agents are quoting, copy of Authorization letter from OEM/ Principal and a copy of Agency Agreement shall be uploaded.	Yes / No / Explain	
13	PO ordering address in full with Contact Person Name, E-mail id, Phone No. [also attach your Quotation in PDF format]	Yes / No / Explain	
14	Quote Validity: Minimum 90 days	Yes / No / Explain	

C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	Logic Analyzer (with 3 year warranty)	1.00 Nos.		-		
2	PROBES AND ACCESSORIES- 34 channel probe, flying lead, single ended, 160-pin direct connect	2.00 Nos.		-		
3	Taxes and Other Charges	1.00 Nos.		-		

Common charges (Applicable for all items)

Freight charge	
P&F Charges	