

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SEMI-CONDUCTOR LABORATORY (SCL)  
CHANDIGARH**

**Tender for N Type DSP HC Thin Wafers**

**Bids to be submitted online**

**Tender No.: SCL/PurUnit-2/SC202200009101 dated 19-07-2022**

## **A. Tender Details**

Tender No : **SCL/PurUnit-2/SC202200009101**

Tender Date : **19-07-2022**

Tender Classification: **GOODS**

Purchase Entity : **PurUnit-2**

Centre : **SEMI-CONDUCTOR LABORATORY (SCL)**

### **Procurement of N Type DSP HC Thin Wafers**

Tender for procurement of N Type DSP HC Thin Wafers is published herewith. Interested vendors may submit their bids as per schedule mentioned in the tender.

#### **A.1 Tender Schedule**

Bid Submission Start Date : **23-08-2022 17:00**

Bid Clarification Due Date : **13-09-2022 14:30**

Bid Submission Due Date : **20-09-2022 15:00**

Bid Opening Date : **20-09-2022 15:30**

Price Bid Opening Date : **27-09-2022 15:00**

## **B. Tender Attachments**

### **Technical Write-up/Drawings**

**Document : Scan Spec**

### **Instructions To Vendors**

#### **2. INSTRUCTIONS TO TENDERERS AND TERMS CONDITIONS OF TENDER**

1. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.
- (b) 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.
- (c) Specifications: Stores offered should strictly confirm 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.

#### **2. 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 shall be rejected.
- (d) If the whole or any part of the stores supplied are rejected in accordance with Clause No. 6 (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.

3. (a) Your quotation should be valid for 90 days (single part tender) and 120 days (two part tender) from the date of opening of the tender.
- (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.

4. 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.

5. DEFINITIONS:

(a) The term PURCHASER shall mean Semi-Conductor Laboratory, Sector-72, Mohali, Punjab-160071, under the administrative control of MEITY, Government of India.

(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. (d) The term PURCHASE ORDER shall mean the communication signed on behalf of the Purchaser by an Officer duly authorised 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.

6. 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 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

(ii) 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 (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.

7. DESPATCH: The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods dispatched. The consignment should be dispatched 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. Any dispatch action shall start only after receipt of purchase order signed by competent authority and as per terms and conditions.

8. **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 purchaser's right to recover liquidated damages under clause 09 thereof.

9. **GST and/or other duties/levies** legally leviable and intended to be claimed should be distinctly shown separately in the tender.

10. **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 fulfilment of the contract.

11. **ARBITRATION:** In the event of any dispute/s, difference/s or claim/s arising out of or relating to the interpretation and application of the Contract, such dispute/s or difference/s or claim/s shall be settled amicably by mutual consultations of the good Offices of the respective Parties and recognizing their mutual interests attempt to reach a solution satisfactory to both the parties. If such a resolution is not possible, within 30 days from the date of receipt of written notice of the existence of such dispute/s, then the unresolved dispute/s or difference/s or claim/s shall be referred to the Sole Arbitrator appointed by the Parties by mutual consent in accordance with the rules and procedures of Arbitration and Conciliation Act 1996 as amended from time to time. The arbitration shall be conducted in New Delhi in the Arbitration and Conciliation Centre New Delhi (Domestic and International) as per its rules and regulations. The expenses for the Arbitration shall be shared equally or as may be determined by the Arbitrator. The considered and written decision of the Arbitrator shall be final and binding between the Parties. The applicable language for Arbitration shall be English only.

Work under the Contract shall be continued by the CONTRACTOR during the pendency of arbitration proceedings, without prejudice to a final adjustment in accordance with the decision of the Arbitrator unless otherwise directed in writing by the DEPARTMENT or unless the matter is such that the works cannot be possibly continued until the decision (whether final or interim) of the Arbitrator is obtained.

12. **MODE OF PAYMENT:** Normally payment will be made for the accepted stores within 30 days from the date of receipt of the materials.

13. **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

14. **Applicable Law:** The Contract shall be interpreted, construed and governed by the laws of India.

The contract shall be subject to exclusive jurisdiction of the Court of S.A.S. Nagar (Mohali), Punjab irrespective of anything mentioned in any correspondence or otherwise.

15. **PRICES:** Tenderer 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.

16. **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.

17. **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.

18. **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.

19. TEST CERTIFICATE: Wherever required, test certificates shall be uploaded in EGPS.

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

21. 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.

22. 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.

23. 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.

## C. Bid Templates

### C.1 Technical Bid - N Type DSP HC Thin Wafers

#### 1. N Type DSP HC Thin Wafers

##### Item specifications for N Type DSP HC Thin Wafers

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Growth method:	CZ	Yes / No / Explain		
2	Orientation:	<111> +/- 0.1 deg	Yes / No / Explain		
3	Wafer diameter:	150 +/- 0.3 mm	Yes / No / Explain		
4	Wafer Thickness:	350 +/- 10 micron	Yes / No / Explain		
5	Resistivity:	0.001 - 0.005 Ohm cm	Yes / No / Explain		
6	Type/ Dopant:	N Type/ Phosphorus, Arsenic	Yes / No / Explain		
7	Oxygen content:	28 +/- 5 PPMA	Yes / No / Explain		
8	Carbon content:	0.5 PPMA	Yes / No / Explain		
9	Wafer Flat :	As per SEMI Standards	Yes / No / Explain		
10	Primary Flat :	{110} +/- 1deg as per SEMI STD.	Yes / No / Explain		
11	Primary Flat Length :	57.5 +/- 2.5 mm	Yes / No / Explain		
12	Secondary Flat:	None	Yes / No / Explain		
13	BOW/ Warp:	40μ (max.)	Yes / No / Explain		
14	Total thickness variation TTV :	10μ (max.)	Yes / No / Explain		
15	Taper:	10μ (max.)	Yes / No / Explain		



16	Radial resistivity variation :	8 % (max.)	Yes / No / Explain		
17	Dislocation density:	100/cm2 (max.)	Yes / No / Explain		
18	Finish:	Double Side Mirror Polished (DSP)	Yes / No / Explain		
19	Appearance:	No particle, haze stains or scratches visible under bright collimated light	Yes / No / Explain		
20	SAFETY/HANDLING :	Vendor to provide details of any special handling requirements recommended for minimizing particle generation and wafer breakage.	Yes / No / Explain		
21	TEST SPECIFICATION:	Vendor to provide the certificate of conformance to the specification for the product lots shipped	Yes / No / Explain		
22	STORAGE CONDITION:	Any specific requirements should be specified by the vendor.	Yes / No / Explain		
23	PACKING REQUIREMENT:	Should be vacuum-sealed in class 10 environment in double layer packing. Wafers should be shipped in fluor ware Orion two wafer shippers or equivalent boxes made from ultra clean polypure polypropylene.	Yes / No / Explain		

## Supporting Documents required from Vendor

### 1. Supporting Documents

### 2. CoA/ CoC

5 additional documents can be uploaded by the vendor

## C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	new	Yes / No / Explain	
2	This being a two-part tender- Technical and Commercial part separate, the Technical part should not contain Pricing information. The tenders containing Price details in Technical part will be summarily rejected. The prices should only be quoted in Price Bid template only.	Yes / No / Explain	
3	Eligibility Criteria: (a) Bidder shall be manufacturer of Silicon/SOI/DSP wafers and/or supplier of Silicon/SOI/DSP wafers manufactured in India. (b) List of Customers (domestic/foreign) to whom wafers have been supplied by the vendor in past duly supported with POs etc. to be submitted along with the bid. (c) Bidder shall fully comply with the tendered specifications and provide certificate of Conformance (CoC) along with the bid/ shipment.	Yes / No / Explain	
4	Delivery Term: Price shall be quoted on F.O.R SCL, S.A.S Nagar basis exclusive of GST as may be applicable.	Yes / No / Explain	
5	GST: Vendor shall mention the applicable rate of GST.	Yes / No / Explain	
6	Delivery Period: Vendor shall indicate their minimum delivery period.	Yes / No / Explain	
7	Liquidated Damages (LD): If the Vendor fails to deliver the stores within the time specified in the contract or any extension thereof, the purchaser shall recover from the Vendor as liquidated damages a sum of one-half of one percent (0.5 percent) of the Contract price for each calendar week of delay. The total liquidated damages shall not exceed ten percent (10 percent) of the Contract price.	Yes / No / Explain	
8	Terms of payment : 100 percent payment within 30 days after receipt and acceptance of material at SCL.	Yes / No / Explain	

9	<p><b>REJECTION:</b> In the event that any of the stores supplied by the Vendor is found defective in material or workmanship or otherwise not in conformity with the requirements of the Contract specifications, the purchaser shall either reject the stores or request the Contractor, in writing, to rectify the same. The Contractor, on receipt of such notification, shall either rectify or replace the defective stores free of cost to the purchaser.</p>	Yes / No / Explain	
10	<p><b>Validity:</b> The offer should be valid for a minimum period of 120 days from the date of opening of Tehno-Commercial bid and 90 days after opening of Price Bid.</p>	Yes / No / Explain	
11	<p>Indicate the Name and address of the vendor for placing purchase order along with their e-mail ID , contact person name and designation , Telephone no. and fax no.</p>	Yes / No / Explain	
12	<p>In case the vendor falls under MSME Category, the vendor shall clearly indicate the same and also submit documentary evidence in support of their claim.</p>	Yes / No / Explain	
13	<p>Any Other Term:</p>	Yes / No / Explain	

### C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	N Type DSP HC Thin Wafers	25.00 Nos.		-		