



**SEMI-CONDUCTOR LABORATORY**  
**Ministry of Electronics and Information Technology**  
**Government of India**  
**Sector 72, S.A.S. Nagar – 160 071, Punjab, India**  
**E-mail: [harjeet@scl.gov.in](mailto:harjeet@scl.gov.in)**

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## **INVITATION TO TENDER**

E-tender /Online bid is invited for “**EPI READY WAFERS**”.

Please note all bid related documents scanned copy is to be submitted on the online portal, only Demand draft has to reach physical on mentioned address. (If applicable)

The tender document along with other details may be downloaded from the CPP Portal: <https://eprocure.gov.in/eprocure/app>

The acceptance of the quotation will rest with the competent authority of SCL, S.A.S. Nagar who does not bind himself to accept the lowest quotation and reserves the right to himself to reject, or partially accept any or all the quotations received without assigning any reasons.

**SPSO**



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## **Public Tender Enquiry**

**TENDER DOCUMENT**  
**For**  
**EPI READY WAFERS**  
**TENDER NO.: SCL/PS/44973/TDD/2024**

### **TENDER INVITING AUTHORITY**

**SEMI-CONDUCTOR LABORATORY**  
**MINISRTY OF ELECTRONICS AND INFORMATION TECHNOLOGY**  
**GOVERNMENT OF INDIA**  
**SECTOR 72, SAS NAGAR MOHALI**  
**PUNJAB – 160 071**  
**Mr. Harjeet Singh**  
**DIRECT - 0172-2296183**  
**Email: [harjeet@scl.gov.in](mailto:harjeet@scl.gov.in)**

## **INSTRUCTION FOR ONLINE BID SUBMISSION**

The bidders are required to submit softcopies of their bids electronically on the Central Public Procurement (CPP) Portal i.e. <https://eprocure.gov.in/eprocure/app>, 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.

### **REGISTRATION**

- (i) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal ([URL:https://eprocure.gov.in/eprocure/app](https://eprocure.gov.in/eprocure/app)) by clicking on the link “Online Bidder Enrolment” option available on the home page. **Enrolment on the CPP Portal is free of charge.**
- (ii) During enrolment/registration, the bidders should provide the correct/true information including valid email-id, mobile no. All the correspondence shall be made directly with the contractors/bidders through email-id provided.
- (iii) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- (iv) Any bidder from a country which shares a land borders with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the competent authority as mentioned in the GFR 2017 Rule 144(xi).
- (v) For e-tendering possession of valid Digital Signature Certificate (Class III Certificates with signing key usage) is mandatory which can be obtained from SIFY /nCode/eMudra or any Certifying Authority recognized by CCA India on e-Token/Smartcard.
- (vi) Upon enrolment on CPP Portal for e-tendering, the bidders shall register their valid Digital Signature Certificate with their profile.
- (vii) Only one valid DSC should be registered by a bidder. Bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse and should ensure safety of the same.
- (viii) Bidders can then login to the site through the secured login by entering their user ID/password and the password of the DSC/e-Token.

### **SEARCHING FOR TENDER DOCUMENTS**

- 1) There are various search options built in the CPP Portal to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords, etc., to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

#### **PREPARATION OF BIDS:**

- (i) For preparation of bid Bidders shall search the tender from published tender list available on site and download the complete tender document and should take into account corrigendum if any published before submitting their bids.  
After selecting the tender document same shall be moved to the 'My favorite' folder of bidders account from where bidder can view all the details of the tender document.
- (ii) Bidder shall go through the tender document carefully to understand the documents required to be submitted as part of the bid. Bidders shall note the number of covers in which the bid documents have to be submitted, the number of documents – including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- (iii) Any pre-bid clarifications if required, then same may be obtained on line through the tender site, or through the contact details given in the tender document.
- (iv) Bidders should get ready in advance the bid documents in the required format (PDF/xls/rar/dwf/jpg formats) to be submitted as indicated in the tender document/schedule.
- (v) Bidders can update well in advance, the documents such as experience certificates, annual report, PAN, EPF other details etc., under "My Space/ Other Important Document" option, which can be submitted as per tender requirements. This will facilitate the bid submission process faster by reducing upload time of bids.

## SUBMISSION OF BIDS:

- (i) Bidder should log into the site well in advance for bid submission so that he/ she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay.
- (ii) Bidder should prepare the EMD as per the instructions specified in the NIT/tender document. The details of the DD/BC/BG/ others physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- (iii) While submitting the bids online, the bidder shall read the terms conditions (of CPP portal) and accepts the same in order to proceed further to submit their bid.
- (iv) Bidders shall select the payment option as offline to pay the EMD and enter details of the DD/BC/BG/others.
- (v) Bidder shall digitally sign and upload the required bid documents one by one as indicated in the tender document.
- (vi) Bidders shall note that the very act of using DSC for downloading the tender document and uploading their offers is deemed to be a confirmation that they have read all sections and pages of the tender document without any exception and have understood the complete tender document and are clear about the requirements of the tender document.
- (vii) **If price quotes are required in XLS format, utmost care shall be taken for uploading Schedule of quantities and Prices and any change/modification of the price schedule shall render it unfit for bidding.**  
**Bidders shall download the Schedule of Quantities and Prices i.e. Schedule-A, in XLS format and save it without changing the name of the file. Bidder shall quote their rate in figures in the appropriate cells, thereafter save and upload the file in financial bid cover (Price bid) only.**  
**If the template of Schedule of Quantities and Prices file is found to be modified/corrupted in the eventuality by the bidder, the bid will be rejected and further dealt as per provision of clause no 23.0 of ITB including forfeiture of EMD if any.**
- (viii) Bidders shall submit their bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission end date time (as per Server System Clock). **The TIA will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders at the eleventh hour.**
- (ix) After the bid submission (i.e. after Clicking “Freeze Bid Submission” in the portal), the bidders shall **take print out of**

**system generated acknowledgement** number and keep it as a record of evidence for online submission of bid, which will also act as an entry pass to participate in the bid opening.

- (x) Bidders should follow the server time being displayed on bidder's dash board at the top of the tender site, which shall be considered valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system.
- (xi) All the documents being submitted by the bidders would be encrypted using PKI (Public Key Infrastructure) encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology.

**ASSISTANCE TO BIDDERS:**

- (i) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for tender or the relevant contract person indicated in the tender.
- (ii) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24X7 CPP Portal Helpdesk. The 24 x 7 Help Desk Number 0120-4200462, 0120-4001002 and 0120-4001005. The helpdesk email id is [support-eproc@nic.in](mailto:support-eproc@nic.in)

## **INSTRUCTION FOR e-PROCUREMENT**

### **1. PREPARATION AND SUBMISSION OF BIDS:**

- a. The detailed tender documents may be downloaded from <https://eprocure.gov.in/eprocure/app> till the last date of submission of tender. The Tender may be submitted online through CPP Portal <https://eprocure.gov.in/eprocure/app>
- b. The bidder should submit the bid online in **two part** viz. Technical Bid and Financial Bid. Technical Bid and Financial Bid should be uploaded online in separately.

### **2. SUBMISSION OF THE BID :** All interested eligible bidders are requested to submit their bids online on CPP Portal: <https://eprocure.gov.in/eprocure/app> as per the criteria given in this document:

- a. Technical Bid and Financial Bid should be upload online in separately. Both Technical and Financial Bid cover should be placed online on **the CPP Portal** (<https://eprocure.gov.in/eprocure/app>).

### **3. TECHNICAL BID:** Signed and Scanned copies of the Technical bid documents as under must be submitted online on CPP Portal: <https://eprocure.gov.in/eprocure/app>.

- a) **List of Documents to be scanned and uploaded (Under Cover-1) within the period of bid submission: -**
  - i. Scanned copy of Bank details. (Bank details of principal supplier in case of Import shipments)
  - ii. Scanned copy of certificate of GST. (GSTIN of Indian Agent in case of Import Shipments) (Not applicable in case of foreign vendor)
  - iii. Scan copy of tender acceptance letter.
  - iv. Scanned copy of specifications or brochures (if any).
  - v. Scanned copy of other document mentioned in tender document (if any)

### **4. Financial Bid**

**The currency of all quoted rates should be in USD. All payments shall be made in USD.**

In preparing the financial bids, bidders are expected to take into account the requirements and conditions laid down in this Tender document. The financial bids should be uploaded online as per the specified “.Xls” format i.e. Price Bid Excel sheet attached as ‘Xls’ with the tender and based on the scope of work, service conditions

and other terms of the Tender document. It should include all costs associated with the Terms of Reference/Scope of Work of the assignment.

**5. Last Date for Submission of Tender:**

- a. Online bids complete in all respects, must be submitted on or before the last date and time specified in the schedule of events.
- b. The SCL, S.A.S. Nagar may, at its own discretion, alter/extend the last date for submission of ~~tender~~.

**6. Bid Validity**

- a. All the Bids must be valid for a period of 120 day's from the last date of submission of the tender for execution of Contract. However, the quoted rates should be valid for the initial/ extended period of the Contract from the effective date of the Contract. No request will be considered for price revision during the original Contract period.
- b. A bid valid for a shorter period shall be declared as non-responsive.
- c. In exceptional circumstances, prior to expiry of the original time limit, SCL, Mohali may request the bidders to extend the period of validity for a specified additional period beyond the original validity of 120 days. The request and the bidders' responses shall be made in writing. The bidders, not agreeing for such extensions will be allowed to withdraw their bids without forfeiture of their Bid Security.

**7. Modification / Substitution/ Withdrawal of bids:**

- a. No Bid shall be modified, substituted or withdrawn by the Bidder after the Bid's due Date.
- b. Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid's due Date, unless the same has been expressly sought for by the Authority, shall be disregarded.

**8. Rejection of the Bid:** The bid submitted shall become invalid and ~~tender fee~~ shall not be refunded if:-

- a. The bidder is found ineligible.
- b. The bidder does not upload all the documents as stipulated in the bid document.

**9. Evaluation of Price Bids:**

The following elements shall be considered for evaluation of Price Bids:

<https://www.scl.gov.in>

- a) Price quoted by the bidder in the price bid template is for meeting the functionalities given in the Tender and Technical Specifications sheet.
- b) In case quotations are submitted in foreign currencies, during preparation of price tabulation, Foreign Exchange (FE) conversion rate vis-a-vis Indian currency (INR) will be worked out on the basis of FE TT selling rate prevailing on the day of opening of technical bids.
- c) Compliance with the Payment Terms prescribed in this tender document. In the event, the bidder offers Payment Terms stringent than SCL prescribed Payment Terms, the bid of the bidder shall be loaded as per prime lending rate of Reserve Bank of India (RBI) and added to the landed cost.
- d) In the event of the bidder requiring SCL to bear bank charges outside India (foreign bank charges), the bidders bid shall be loaded suitably on the quoted price towards bank charges outside India.
- e) In case, the price quoted is FCA/FOB/Ex-works, the charges towards Freight as quoted or a maximum of 5% of price quoted, Customs Duty taxes as applicable shall be taken into account to arrive landed cost.
- f) Comparison between Indigenous Imported Offers: If both indigenous offers and imported offers are to be compared, 2% of the total landed cost of foreign offers shall be added towards charges for Customs clearance and local transportation for delivery at SCL.
- g) Post warranty AMC charges and cost of recommended spares and Consumables shall not be taken into account for evaluation of price bids.
- h) Calibration charges at user site after warranty shall not be taken into account for evaluation of price bid.



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**Tender document**

No: TENDER NO.: SCL/PS/44973/TDD/2024

January 02, 2024

Sub: Quotation for “**EPI READY WAFERS**” - reg.

Our Tender Enquiry No: SCL/PS/44973/TDD/2024 dated 02.01.2024

We are interested in procuring the below mentioned material(s). Kindly submit your quotation online on or before bid closing date and time .

Sl. No.	SCL's Material Code	Brief description of the material (s)	Qty. (Nos.)
1	210211207	Epi Ready 150mm Silicon <111> wafer with 650 um thickness	500
2	210211231	Epi Ready 150mm Silicon <111> wafer 1 mm thickness	500

**Terms and Conditions:**

1. SCL reserves the right of accepting or rejecting any quotations without assigning any reason thereof.
2. Samples, if called for, shall be submitted free of charge and with no obligation to SCL basis.
3. **For any queries please mail us at [harjeet@scl.gov.in](mailto:harjeet@scl.gov.in),**

**Contact No: 0172-2296183**

4. Tender conditions (printed on the reverse), if any, or otherwise sent along with the tender shall not be binding on us.
5. This is only an enquiry and not a purchase order.
6. The Purchaser reserves the right at the time of Contract award to increase or decrease the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions.

7. The Purchaser reserves the right to accept or reject any bid, and to amend the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders.

**Filled up response fully stamped and signed by authorized bidder to be scanned and uploaded.**



## STANDARD TERMS AND CONDITIONS (FOR IMPORTED STORES)

### 1. DEFINITIONS:

- a) The term 'Purchaser' shall mean the President of India or his successors or assignees.
- 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, representatives, heirs, executors and administrators unless excluded by the Contract.
- c) 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 of plant, machinery or equipment of part thereof.
- d) The term 'Stores' shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order.

### 2. PRICES:

Tenders offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotations 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 variations.

### 3. TERMS OF PAYMENT:

- 3.1 Being a Department of the Government of India, the normal terms of payment are by Sight Draft. However other terms of payment like establishment of Letter of Credit may be considered by the Purchaser on such terms and conditions as may be agreed upon.
- 3.2 The Sight Draft / Letter of Credit will be operative on presentation of the under mentioned documents:
  - a) Original Bill of Lading / Airway Bill
  - b) Commercially certified invoices describing the stores delivered, quantity, unit rate and their total value, in triplicate. The invoice should indicate the discounts, if any, and Agency Commission separately.
  - c) Packing List showing individual dimensions and weight of packages.
  - d) Country of Origin Certificate in duplicate.
  - e) Test Certificate.
  - f) Declaration by the Seller that the contents in each case are not less than those entered in the invoices and the quality of the Stores are guaranteed as per the specifications asked for by the Purchaser.
  - g) Warrantee and guarantee Certificate/s vide Clause 20 herein below

### 4. IMPORTANT LICENCE:

Reference to Import License No. & date and Contract number & date shall be prominently indicated in all the documents **vide para 3.2.**

5. DEMURRAGE:

Supplier shall bear demurrage charges, if any, incurred by the purchaser due to delayed presentation of shipping documents as prescribed in para 3.2 to the bankers within a reasonable time (say within 10-12 days) from the date of bill of lading for sea consignments and within 3-4 days from the date of Air Way Bill for air consignments.

6. ADDRESS OF INDIAN AGENTS: .....

7. GUARANTEED TIME DELIVERY:

The time for and the date of delivery stipulated in the Purchase Order shall be deemed to be the essence of the Contract. Delivery must be completed within the date specified therein.

8. INSPECTION AND ACCEPTANCE TEST:

- 8.1. The Purchaser's representatives shall also be entitled at all reasonable times during manufacture to inspect, examine and test on the Contractor's premises the material and workmanship of all stores to be supplied under this Contract and if part of the said stores is being manufactured on other premises, the Contractor shall obtain for the purchaser's representative permission to inspect, examine and test as if the equipment were being manufactured on the Contractor's premises. Such inspection, examination and testing shall not release the Contractor from the obligations under this Contract.
- 8.2. For tests on the premises of the Contractor or of any of his sub-Contractors, the Contractor shall provide free of cost assistance, labour, material, electricity, fuel and instruments as may be required or as may be reasonably needed by the purchaser's representative to carry out the tests efficiently.
- 8.3. When the stores have passed the specified test, the purchaser's representative shall furnish a certificate to the effect in writing to the Contractor. The Contractor shall provide copies of the test/s certificates to the purchaser as may be required.

9. MODE OF DESPATCH:

Generally, stores should be despatched through Indian Flagged Vessel / Air India or through any other Agency nominated by the purchaser. A copy of the invoice and packing list should invariably be kept inside each of the packages.

10. PORT OF ENTRY: IGI airport New Delhi.

11. CONSIGNEE:

Purchase & Stores Officer ( Main Stores),  
Semi-Conductor Laboratory,  
Sector 72, S.A.S. Nagar (Mohali), Punjab,  
India - 160 071

12. SHIPPING MARKS.

The mark on the shipping documents such as invoice, bill of lading and on the

<https://www.scl.gov.in>

packages should be as follow:

PURCHASE ORDER NO. .... DATED .....

SEMI-CONDUCTOR LABORATORY,  
SECTOR 72, S.A.S. NAGAR (MOHALI), PUNJAB,  
INDIA - 160 071

Destination: ..... & Port of Entry: .....

13. INSURANCE OF THE STORES:

The necessity or otherwise of insurance will be as indicated in the Purchase Order.

14. CONTRACTOR'S DEFAULT LIABILITY:

The purchaser may upon written notice of default to the Contractor terminate the Contract in whole or in part in circumstances detailed hereunder:

a) If in the judgement of the Purchaser the Contractor fails to make delivery of Stores within the time specified in the Contract/agreement or within the period for which extension has been granted by the Purchaser to the Contractor.

b) If in the judgment of the Purchaser the Contractor fails to comply with any of the other provisions of this Contract.

15. In the event the Purchaser terminates the Contract in whole or in part as provided in **Clause 14** the Purchaser reserves the right to Purchase, upon such terms and in such a manner as he may deem appropriate, stores similar to that terminated and the Contractor shall be liable to the Purchaser for any additional costs for such similar stores and/or for liquidated damages for delay as defined in **Clause 19** until such reasonable time as may be required for the final supply of stores.

15.1 If this Contract is terminated as provided in **Clause 14** the Purchaser in addition to any other rights provided in this Article, may require the Contractor to transfer title and deliver to the Purchaser under any of the following clauses in the manner and as directed by the Purchaser:

a) Any completed stores.

b) Such partially completed stores, drawing, information and Contract rights (hereinafter called manufacturing material) as the Contractor has specifically produced or acquired for the performance of the Contract as terminated. The Purchaser shall pay to the Contractor the Contract price for completed stores delivered to and accepted, by the purchaser and for manufacturing material delivered and accepted.

15.2 In the event the Purchaser does not terminate the Contract as provided in **Clause 14**, the Contractor shall continue the performance of the

Contract in which case he shall be liable to the purchaser for liquidated damages for delay as set out in **Clause 19 until** the stores are accepted.

**16. REPLACEMENT:**

If the stores or any portion thereof is damaged or lost during transit, the Purchaser shall give notice to the Contractor setting forth particulars of such stores damaged or lost during transit. The replacement of such stores shall be effected by the Contractor within a reasonable time to avoid unnecessary delay in the intended usage of the Stores. In case the purchaser agrees, the price towards replacement items shall be paid by the purchaser on the basis of original price quoted in the tender or as reasonably worked out from the tender.

**17. REJECTION :**

In the event that any of the stores supplied by the Contractor 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. If the Contractor fails to do so, the purchaser may at his option either –

- a) replace or rectify such defective stores and recover the extra cost so involved from the Contractor, or
- b) terminate the Contract for default as provided under **clause 14** above, or
- c) acquire the defective stores at a reduced price considered equitable under the circumstances. The provision of this article shall not prejudice the Purchaser's rights under **clause 19.**

**18. EXTENSION OF TIME:**

If the completion of supply of stores is delayed due to reason of *force majeure* such as acts of god, acts of public enemy, acts of Government, fires, floods, epidemics, quarantine restriction, strikes, freight embargoes, etc., the Contractor shall give notice within 15 days to the purchaser in writing of his claim for an extension of time. The purchaser on receipt of such notice after verification, if necessary, may agree to extend the Contract delivery date as may be reasonable but without prejudice to other terms and conditions of the Contract.

**19. DELAY IN COMPLETION / LIQUIDATED DAMAGES:**

If the Contractor fails to deliver the stores within the time specified in the Contract or any extension thereof, the purchaser shall recover from the Contractor as liquidated damages a sum of one-half of one percent (0.5 percent) of the Contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed ten percent (10

percent) of the Contract price of the unit or units so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.

## 20. 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 **six months** after the acceptance of the stores, if any defects are discovered therein or any defects therein are found to have developed under proper use arising from faulty materials, 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 parts thereof are faulty.
- c) If in the opinion of the purchaser it becomes necessary to replace or renew any defective stores, such replacements or renewals 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 defects has developed within the said period of **06 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 20 (a) to (e)** above, the Contractor shall, at the option of the purchaser, furnish a Bank Guarantee (as prescribed by the purchaser - Bank Guarantee format enclosed) from a Bank approved by the purchaser for an amount equivalent to 10% 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 06 months** from the date of arrival of stores at purchaser's site.
- h) Even while the **06 months guarantee** applies to all stores, in case where a greater period is called for by our specifications, then such a specification shall apply, and in such cases, the period of **14 months** referred to in **Clause 20 (b) and (c)** shall be asked for guarantee period plus two months.

## 21. REQUIREMENT OF ADDITIONAL NUMBERS OF THE STORES/SPARE PARTS ORDERED:

The Contractor shall also undertake the supply of additional number of items covered by the order as considered necessary by the purchaser at a later date, the actual price to be paid shall be mutually agreed to after negotiations.

## 22. PACKING:

- a) The Contractor wherever applicable shall pack and crate all stores for sea /air shipment as applicable in a manner suitable for export to a tropical humid climate, in accordance with internationally accepted export practices and in such a manner so as to protect it from damage and deterioration in transit by road, rail or sea for space qualified stores. The Contractors shall be held responsible for all damages due to improper packing.
- b) The Contractor shall ensure that each box / unit of shipment is legible and properly marked for correct identification. The failure to comply with this requirement shall make the Contractor liable for additional expenses involved.
- c) The Contractor shall notify the purchaser of the date of shipment from the port of embarkation as well as the expected date of arrival of such shipment at the designated port of arrival.
- d) The Contractor shall give complete shipment information concerning the weight, size, content of each packages, etc.
- e) Transshipment of equipment shall not be permitted except with the written permission of the purchaser.
- f) Apart from the despatch documents negotiated through Bank, the following documents shall also be airmailed to the purchaser within 7 days from the date of shipment by sea and within 3 days in case of air-consignments:
- g) Commercial Bill of Lading / Air Way Bill / Post parcel Receipt. (Two non-negotiable copies)
  - b) Invoice (3 copies)
  - c) Packing List (3 copies)
  - d) Test Certificate (3 copies)
  - e) Certificate of Origin.

The Contractor shall also ensure that one copy of the packing list is enclosed in each case.

## 23. ARBITRATION:

If at any time any question, dispute or difference whatsoever shall arise between the purchaser and the Contractor upon or in connection with this Contract, either party may forthwith give to the other notice in writing of the existence of such question, dispute or difference and the same shall be referred to the adjudication of two arbitrators, one to be nominated by purchaser, other by a Contractor and in the event of any difference of opinion, the arbitrators will refer the matter to the umpire. The arbitration shall be conducted in accordance with the rules and procedure for

arbitration of the International Chamber of Commerce at Paris. The expenses of the arbitrators and umpire shall be paid as may be determined by them. However, the venue of such arbitration should be in India.

24. LANGUAGE AND MEASURES:

All documents pertaining to the Contract including specification, schedule, notice, correspondence, operating and maintenance instructions, drawings or any other writings shall be written in English language. The metric system of measurement shall be used exclusively in the Contract.

25. 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 trade mark and shall at all times indemnify the purchaser against all claims which may be made in respect of stores for infringement of any right protected by Patent, Registration of design or Trade Mark, and shall take all risk of accident or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all the means used by him for the fulfillment of the Contract.

26. COUNTER TERMS AND CONDITIONS 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.

27. SECURITY INTEREST:

On each item to be delivered under this Contract, including an item of work in progress in respect of which payments have been made in accordance with the terms of the Contract, purchaser shall have a security interest in such items which shall be deemed to be released only at the time when the applicable deliverable item is finally accepted and delivered to the purchaser in accordance with the terms of the Contract. Such security interest of the purchaser shall constitute a prior charge as against any other charge or interest created in respect of such items by any entity.

28. BANK CHARGES:

While the purchaser shall bear the bank charge payable to his Bankers (State Bank of India), the Contractor shall bear the Bank charges payable to his Bankers including the cheques towards advising amendment commissions.

29. TRAINING:

The Contractor shall, if required by the purchaser, provide facilities for the practical training of Purchaser's engineering / technical personnel from India and for their active association on the manufacturing processes throughout the manufacturing period of the Contract / stores, number of such personnel to be mutually agreed upon.

30. APPLICABLE LAW:

The Contract shall be interpreted, construed and governed by the laws of India.

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**Commercial Terms & Conditions to Tender Ref. No. SCL/P&S/44973/TDD/2024**

**Filled up response fully stamped and signed by authorized bidder to be scanned and uploaded**

Sl. No.	Description	Vendor's response
1.	<p>This being two part Tender Technical and Commercial parts separate, the bidder should not attach any document(s) containing pricing information alongwith Technical Part. The tenders containing price information in Technical Part will be summarily rejected. Prices should be indicated in the Price Bid format only.</p> <p>If any pricing information, Vendors like to provide shall be uploaded in BOQ (Commercial).</p>	
2.	<p><b>Delivery Term:</b></p> <p>For imported stores, prices shall be quoted on FCA nearest International/Gateway airport basis inclusive of all taxes, levies, duties arising in the tenderer country.</p> <p>For indigenous stores, The prices should be quoted on F.O.R. SCL, S.A.S. Nagar basis and hence delivery of material should be arranged by the vendor to SCL's works at Sector – 72, S.A.S. Nagar (Mohali) Punjab. Insurance, if any shall be to vendor's account.</p>	
3.	Vendors who are offering the delivery term as DDP/FOR basis, please note that, Purchaser is	

	<p>eligible to issue Customs duty exemption certificate (CDEC) to the contractor under customs notification no.51/96 dated 23.07.1996 and subsequent amendments to enable the contractor to avail off the benefit of concessional rate of customs duty under this notification. Under this notification Basic Customs Duty shall be applicable at the rate 5.5 percent plus GST as applicable. While offering the price, vendor shall take into consideration the same.</p> <p>In addition to the above CDEC, any documentary support requested by the contractor from the purchaser for customs clearance of goods against the above CDEC shall be provided by the purchaser.</p> <p>(Purchaser will provide Customs Duty Exemption Certificate in case of Import Orders/ imported supplies/ High Sea Sales).</p>	
4.	<p><b>Goods and Service Tax (GST) for Indigenous material:</b></p> <p>GST shall be payable extra as applicable. Please mention percentage of applicable GST along with HSN Code in your response.</p>	
5.	<p><b>Export Formalities, Taxes Duties:</b></p> <p>Any export approvals/Govt. clearances required, Taxes and duties as per laws of the exporting country shall be the responsibility of Vendor. Any Govt. formalities/Clearances required, Taxes and duties etc. payable as per Indian Laws shall be PURCHASERS responsibility.</p>	
6.	<p><b>Security Deposit (SD):</b></p> <p>On acceptance of the tender, the Vendor shall submit security deposit for three percent (03% percent) value of the Purchase Order (PO) within 15 days from the date of PO towards successful execution of the PO. Security Deposit shall be submitted through Demand Draft /Bankers Cheque/ fixed deposit receipt or Bank Guarantee from any of the Scheduled Banks</p>	

	<p>executed on non-judicial stamp paper of appropriate value, and shall be valid till execution of PO and should remain valid for a period of sixty (60) days beyond the date for completion of the Purchase Order. This will be returned by SCL immediately on execution of the PO satisfactorily as per order terms. If not, the amount will be forfeited.</p> <p><b>Note:</b></p> <p>In case, Security Deposit is submitted in the form of Bank Guarantee (BG) and Issuing Bank utilizes SFMS (Structured Financial Messaging Solution) Gateway for issuing the BG in favour of SCL and mention IFSC code of SCL banker i.e. State Bank of India, SBIN00061229, and genuineness of the BG will be verified by SCL's banker by checking into SFMS gateway.</p> <p>In case, Security Deposit is submitted in the form of Bank Guarantee (BG) and Issuing Bank not utilizes SFMS (Structured Financial Messaging Solution) Gateway for issuing the BG, Vendor to ensure that the issuing bank shall communicate the genuineness of BG through e-mail from issuing bank domain e-mail ID to sunitagaur@scl.gov.in and copy to harjeet@scl.gov.in followed by hard copy to Shri Harjeet Singh Sr. Purchase and Stores Officer, Semi-Conductor Laboratory, Sector -72, Mohali-160071.</p> <p>In addition the banker may send a scanned copy of the BG as an attachment.</p>	
7.	<p><b>Validity of Offer:</b></p> <p>The offer should be valid for a minimum period of 120 days from the date of opening of Techno-Commercial bids and 90 days after opening of Price Bid.</p>	
8.	<p><b>Payment Term, for foreign vendors:</b> 100% Payment shall be made through Sight Draft within 30 days upon receipt</p>	

	<p>of shipment and against presentation of shipping documents to Purchaser bank routed through contractor bank.</p> <p>All bank charges outside India related to the payment shall be borne by the Contractor and all bank charges in India shall be borne by the purchaser.</p>	
9.	<p><b>Payment Term, for indigenous vendors:</b> 100% Payment shall be made for the accepted stores within 30 days from the date of receipt of the materials at SCL.</p>	
10.	<p><b>Delivery Period:</b> The vendor shall specify their best delivery period inclusive of all Govt. formalities of the exporting country.</p>	
11.	<p><b>Liquidated Damages (LD):</b>  If the Contractor fails to deliver the stores within the time specified in the contract or any extension thereof, the purchaser shall recover from the Contractor as liquidated damages a sum of one-half of one percent (0.5percent) of the Contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed ten percent (10 percent) of the Contract price. Delivery of stores means supply, installation, commissioning &amp; acceptance as applicable.</p>	
12.	<p><b>Extension of Time:</b>  If the completion of supply of stores is delayed due to reason of force majeure such as acts of god, acts of public enemy, acts of Government, fires, floods, epidemics, quarantine restriction, strikes, freight embargoes, etc., the Contractor shall give notice within 15 days to the purchaser in writing of his claim for an extension of time. The purchaser on receipt of such notice after verification, if necessary, may agree to extend the Contract delivery date as may be reasonable but without prejudice to other terms and conditions of the Contract.</p>	
13.	<p><b>Mode of Despatch:</b>  Stores should be dispatched to IGI Airport, New</p>	

	<p>Delhi through freight forwarder nominated by the purchaser whose details shall be indicated in the purchase order.</p> <p>In case of indigenous orders, vendor shall deliver the material on FOR SCL, SAS Nagar basis.</p>	
14.	<p><b>Packing and Forwarding:</b></p> <p>The Contractor shall pack and crate all stores for air/sea/road shipment as applicable in a manner suitable for export to a tropical humid climate, in accordance with internationally accepted export practices and in such a manner so as to protect it from damage and deterioration in transit by road, rail, air or sea. The Contractors shall be responsible for all damages due to improper packing.</p>	
15.	<p><b>Extension of Time:</b> If the completion of supply of stores is delayed due to reason of force majeure such as acts of god, acts of public enemy, acts of Government, fires, floods, epidemics, quarantine restriction, strikes, freight embargoes, etc., the contractor shall give notice within 15 days to the purchaser in writing of his claim for an extension of time. The purchaser on receipt of such notice after verification, if necessary, may agree to extend the Contract delivery date as may be reasonable but without prejudice to other terms and conditions of the Contract.</p>	
16.	<p><b>REJECTION :</b></p> <p>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. If the Vendor fails to do so, the purchaser may at his option either :</p> <p>a. replace or rectify such defective stores and recover the extra cost so involved from the Contractor, or</p>	

	<p>b. terminate the Contract for default or</p> <p>c. acquire the defective stores at a reduced price considered equitable under the circumstances.</p> <p>The provision of this article shall not prejudice the Purchasers rights under LD clause.</p>	
17.	<p><b>Replacement:</b></p> <p>If the stores or any portion thereof is damaged or lost during transit, the Purchaser shall give notice to the Vendor setting forth particulars of such stores damaged or lost during transit. The replacement of such stores shall be effected by the Vendor within a reasonable time to avoid unnecessary delay in the intended usage of the Stores. In case the Purchaser agrees, the price towards replacement items shall be paid by the Purchaser on the basis of original price quoted in the tender or as reasonably worked out from the tender.</p>	
18.	<p><b>Arbitration:</b></p> <p>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</p>	

	<p>final and binding between the Parties. The applicable language for Arbitration shall be English only.</p> <p>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.</p>	
19.	<p><b>Applicable Law:</b></p> <p>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.</p>	
20.	<p>Whether the Vendor / Supplier is from any country sharing land boundary with India or whether the vendor / supplier is representing any principal vendor /principal supplier sharing land boundary with India. If the vendor / supplier is from any country which shares land border with India or if the vendor /supplier is and Indian Agent representing principal vendor/principal supplier of a country which shares land border with India they need to submit a photo copy documentary proof of Registration with Registration Committee constituted by Department of promotion of Internal Industry and Trade DPIIT. Offers received from vendors who fall in this category but does not submit copy of documentary proof of registration shall be rejected.</p> <p>Note: Vendors are requested to submit their response as per latest instructions issued by DPIIT and Government of India in this regard.</p>	
21.	<p>a. Name and address of Indian agent, if any.</p> <p>b. Percentage of Indian agent Remuneration/Service Charge, if any: Indian agent remuneration/service charge shall</p>	

	be payable by the Purchaser directly to the Indian agent in Indian Rupees based on T.T buying rate of exchange prevailing on the date of placement of purchase order within 30 days of acceptance of material at purchaser site.	
22.	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.	
23.	<b>Technical Documentation:</b> The vendor shall provide technical documentation covering operation, maintenance and schematic as specified in the technical specifications. All documentation shall be in English language only.	
24.	Special Instructions:  (i) Contractor shall provide quotation for new item. (ii) Contractor to provide CoA (Certificate of Analysis) prior to shipment of material to SCL. (iii) Vendor to provide compliance to technical specifications attached alongwith tender.	
25.	Any Other Term:	

**Yours Faithfully,  
(Signature of the Bidder, with  
Official Seal)**

**TENDER ACCEPTANCE LETTER**  
**(To be given on Company Letter Head)**

Date: \_\_\_\_\_

To,

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Sub: Acceptance of Terms Conditions of Tender.

Tender Reference No: \_\_\_\_\_

Name of Tender / Work:- \_\_\_\_\_

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: \_\_\_\_\_ as per your advertisement

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. \_\_\_\_\_ to \_\_\_\_\_ (including all documents like annexure(s), schedule(s), etc .), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organization too has also been taken into consideration, while submitting this acceptance letter.


4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted/ debarred/ terminated/ banned by any Govt. Department/Public Sector Undertaking.

6. I / We certify that all information furnished by our Firm is true correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

**Yours Faithfully,**

**(Signature of the Bidder, with  
Official Seal)**

 <b>SEMI-CONDUCTOR LABORATORY</b> DEPARTMENT OF SPACE, GOVT. OF INDIA SECTOR - 72, S.A.S NAGAR – 160071	<b>MATERIAL CODE</b> 210211207		
	<b>DRG NO.</b>		
<b>MATERIAL SPECIFICATIONS</b> TITLE: Epi Ready 150mm Silicon <111> wafer	<b>ISSUE</b> 0	<b>REV.</b> A	<b>Page</b> 1 of 3

1. **Purpose:** The specification defines the wafer parameters of Epi-Ready 150 mm Silicon wafers used for Hetro-epitaxial Growth of AlGaIn/GaN thin films on <111> Silicon wafers for (HEMT) Power Device applications.

2. **Specifications:** Following tables describe wafer specifications for standard epi ready Si substrate


Parameters	Target
<b>Epi Ready Silicon Wafer</b>	
Grade	Prime Epi-ready
Material	Silicon
Orientation	<111>
Size	6 inch (150mm) Semi-Standard
Crystal Growth Method	CZ
Dopant	P-Type (Boron Doped)
Resistivity	0.003-0.005 Ohm.cm
Diameter	150 mm $\pm$ 0.1
Thickness	650 $\pm$ 25 $\mu$ m
Front Finish	Epi-Ready
Back Side Finish	Etched
BOW	$\pm$ 30 $\mu$ m
Warp	Max 30 $\mu$ m
Flat System	SEMI Standard
Flat Details	Primary Flat, Location : {1,1,0} $\pm$ 1°
Flat Length	Length : 57.5 $\pm$ 2.5 mm
Edge	Rounded edge
Laser Marking	Back side
Total C concentration	Max 5E16 at/cm <sup>3</sup>
Slice orientation	0.2° off orientation toward {11-2}

<b>ORIGINATOR:</b>  Dr D. Sathish kumar DESIG: Sci/Engr 'SE' DATE: 01-01-2024	<b>APPROVER:</b>  Dr Manish Hooda DESIG: Head TDD <b>DATE: 01-01-2024</b>	<b>AUTHORISED:</b>  Anil Singh DESIG: GD, R&QA as MR DATE:	<b>DCC:</b>  DESIG: DATE:	<b>DATE:</b>
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FORM NO: DCC/ 09


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 <b>SEMI-CONDUCTOR LABORATORY</b> DEPARTMENT OF SPACE, GOVT. OF INDIA SECTOR - 72, S.A.S NAGAR – 160071	<b>MATERIAL CODE</b> 210211231																																										
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<p><b>1. Purpose:</b> The specification defines the wafer parameters of Epi-Ready 150 mm Silicon wafers with 1mm thickness to be used for Hetero-epitaxial Growth of AlGaIn/GaN thin films on &lt;111&gt; Silicon wafers for HEMT Power Device applications..</p> <p><b>2. Specifications:</b> Following tables describe wafer specifications for standard epi Ready Silicon substrate.</p> <table border="1"> <thead> <tr> <th>Parameters</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td colspan="2"><b>Silicon Wafers</b></td> </tr> <tr> <td>Crystal Growth Method</td> <td>CZ Silicon single Crystal wafer</td> </tr> <tr> <td>Grade</td> <td>Prime Epi- Ready</td> </tr> <tr> <td>Crystal Orientation</td> <td>&lt;111&gt;</td> </tr> <tr> <td>Dopant</td> <td>P-Type (Boron Doped)</td> </tr> <tr> <td>Resistivity @ 22°C (Ω-cm)</td> <td>0.003-0.005 Ohm.cm</td> </tr> <tr> <td>Wafer Diameter</td> <td>150 ± 0.2 mm</td> </tr> <tr> <td>Flat System</td> <td>SEMI Standard</td> </tr> <tr> <td>Flat Details</td> <td>Primary Flat, Location : {1,1,0} +/- 1°</td> </tr> <tr> <td>Length of MF</td> <td>Length : 57.5 +/- 2.5 mm</td> </tr> <tr> <td>Wafer Thickness</td> <td>1000 ± 50 µm</td> </tr> <tr> <td>Edge</td> <td>Rounded Edge</td> </tr> <tr> <td>Surface Finish Front Side (Side One)</td> <td>Epi-Ready</td> </tr> <tr> <td>Surface Finish Back Side (Side Two)</td> <td>Etched</td> </tr> <tr> <td>Bow</td> <td>+/-30 µm</td> </tr> <tr> <td>Warp</td> <td>Max 30 µm</td> </tr> <tr> <td>Laser Marking</td> <td>Back side</td> </tr> <tr> <td>Total C concentration</td> <td>Max 5E16 at/cm<sup>3</sup></td> </tr> <tr> <td>Slice orientation</td> <td>0.2° off orientation toward {11-2}</td> </tr> </tbody> </table>				Parameters	Target	<b>Silicon Wafers</b>		Crystal Growth Method	CZ Silicon single Crystal wafer	Grade	Prime Epi- Ready	Crystal Orientation	<111>	Dopant	P-Type (Boron Doped)	Resistivity @ 22°C (Ω-cm)	0.003-0.005 Ohm.cm	Wafer Diameter	150 ± 0.2 mm	Flat System	SEMI Standard	Flat Details	Primary Flat, Location : {1,1,0} +/- 1°	Length of MF	Length : 57.5 +/- 2.5 mm	Wafer Thickness	1000 ± 50 µm	Edge	Rounded Edge	Surface Finish Front Side (Side One)	Epi-Ready	Surface Finish Back Side (Side Two)	Etched	Bow	+/-30 µm	Warp	Max 30 µm	Laser Marking	Back side	Total C concentration	Max 5E16 at/cm <sup>3</sup>	Slice orientation	0.2° off orientation toward {11-2}
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 <b>SEMI-CONDUCTOR LABORATORY</b> DEPARTMENT OF SPACE, GOVT. OF INDIA SECTOR - 72, S.A.S NAGAR – 160071	<b>MATERIAL CODE</b> 210211231		
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<b><u>MATERIAL SPECIFICATIONS</u></b> TITLE: Epi Ready 150mm Silicon <111> wafer 1mm thickness	<b>ISSUE</b> 0	<b>REV.</b> A	<b>Page</b> 2 of 3
<p><b>3. Shelf Life</b> : Vendor to Specify</p> <p><b>4. Packing Requirement</b> : SEP A2 or SEP A5 or Entegris (Empak or Ultrapak) boxes. Each cassette should have label with Customer's part number ID and brief description, Vendor and Customer name, PO number, wafer quantity and date of manufacturing.</p> <p><b>5. Safety/Handling Requirement</b> : Vendor to Specify</p> <p><b>6. Storage Conditions</b> : Vendor to Specify</p> <p><b>7. Test Specifications</b> : Vendor to provide COA before shipment specifications.</p> <p><b>End of Section-1, Section-2 for internal circulation only.</b></p>			
<b>ORIGINATOR:</b>  Dr. D. Sathish kumar DESIG: Sci/Engr 'SE' DATE:	<b>APPROVER:</b>  Dr Manish Hooda DESIG: Head, TDD DATE:	<b>AUTHORISED:</b>  Anil Singh DESIG: GH, QARG as MR DATE:	<b>DCC:</b>  DESIG: DATE:
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