Signer: HARJEET SINGH
Wed Feb 01 16:31:50 IST 2023

GOVERNMENT OF INDIA

SEMI-CONDUCTOR LABORATORY (SCL)
CHANDIGARH

Tender for Augmentation of 8 inch CMOS Wafer Fab and Embedded NVM (Single- Poly) Technology acquisition as per enclosed detailed Request for Proposal (RFP) including Scope of Work

Bids to be submitted online

Tender No.: SCL/PurUnit-2/SC202200026101 dated 01-02-2023

A. Tender Details

Tender No :	**SCL/PurUnit-2/SC202200026101**
Tender Date :	**01-02-2023**
Tender Classification:	**GOODS**
Purchase Entity :	**PurUnit-2**
Centre :	**SEMI-CONDUCTOR LABORATORY (SCL)**

Augmentation of 8 inch CMOS Wafer Fab and Embedded NVM (Single- Poly) Technology acquisition as per enclosed detailed Request for Proposal (RFP) including Scope of Work

1.E-Procurement Tender No. SCL/PurUnit-2/SC202200026101; SEMI-CONDUCTOR LABORATORY [SCL], India invites ONLINE offers in TWO part system through e-tender portal https:// eproc.vssc.gov.in for Augmentation of 8 inch CMOS Wafer Fab and Embedded NVM (Single-Poly) Technology acquisition as per tender (RFP) including Scope of Work. Bid can be submitted from 01.02.2023 - 1730 hrs. to 17.03.2023 upto 1500 hrs. The vendors need to get enrolled in the e tender portal to access tender and submit their offer online. Vendors need to have Digital Signature Certificate as detailed on our e-portal and corporate e-mail ID to register on the above portal. Only online tenders will be accepted. No Manual/Postal/ courier/ e-mail/fax tender will be entertained. Please note Tender fee shall not be applicable for tenders submitted on-line through this portal.
Vendors 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 plug in and help demos listed on the home page of the e- procurement link mentioned above to complete the vendor registration process. Vendors may please note that without registering in our E-procurement portal they will not be able to quote for this tender.

2.A Pre-bid conference shall be held with the prospective bidders on 22.02.2023 at Semi-Conductor Laboratory, S.A.S. Nagar (Mohali), Punjab, India to clarify issues regarding the specifications and other associated technical/commercial details of the subject Tender. The prospective bidders must, therefore, ensure that they or their authorized representatives attend the said pre-bid conference physically at SCL, S.A.S. Nagar or Online (preferably on Webex), as per the given schedule. Bidders who want to attend, online pre-bid conference, are advised to send their willingness at the e-mail ID fab_pm@scl.gov.in. Online conference details shall be shared in advance to them over email.

3.In case bidder encounters any technical snag pertaining to e-procurement system while acting on the tender, computer screen shot of the error message with date & time stamp on the web- browser along with the query shall be e-mailed by the bidder to the help desk, for resolution of the problem, at least 2 working days before the due date and time of bid submission. The contact detail of the help desk is available on the home page of the e-procurement website. Purchaser will make all efforts to resolve technical queries reported by the bidders but will not be bound to do so if the problems are reported beyond the time mentioned above. Purchaser will not be responsible for non-submission of bids for such cases.

The time taken to ascertain, evaluate and suggest a solution for the problem reported by bidder may vary from case to case. Hence bidders are advised to submit the bid well in advance before closing date and time to avoid last minute issues.

A.1 Tender Schedule

Tender Publish Date :	**01-02-2023 17:30**
Bid Clarification Due Date :	**17-02-2023 17:30**
Bid Submission Start Date :	**01-02-2023 17:30**
Bid Submission Due Date :	**17-03-2023 15:00**
Bid Opening Date :	**17-03-2023 15:30**
Price Bid Opening Date :	**04-04-2023 11:00**

A.2 Pre-bid Meeting Details

Date :	**22-02-2023 11:00**
Place :	**Semi-Conductor Labotory, Sector- 72, S.A.S.Nagar (Mohali) , Punjab, India**
Location :	**Semi-Conductor Labotory, Sector- 72, S.A.S.Nagar (Mohali) , Punjab, India**
Centre :	**SEMI-CONDUCTOR LABORATORY (SCL), CHANDIGARH, PUNJAB**

Details :	**A Pre-bid conference shall be held with the prospective bidders as per schedule given in the Tender Notification, at Semi-Conductor Laboratory, S.A.S. Nagar (Mohali), Punjab, India to clarify issues regarding the specifications and other associated technical/commercial details of the subject Tender. The prospective bidders must, therefore, ensure that they or their authorized representatives attend the said pre-bid conference physically at SCL, S.A.S. Nagar or Online (preferably on Webex), as per the given schedule. Bidders who want to attend, online pre-bid conference, are advised to send their willingness at the e-mail ID. fab_pm@scl.gov.in Online conference details shall be shared in advance to them over email fab_pm@scl.gov.in**

B. Tender Attachments

Technical Write-up/Drawings

Document : Technical Compliance

Document : RFP Technical

Instructions To Vendors

3. 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)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 available. If dimensional details are available the same should also be indicated in your offer.
(d) 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. Bid shall be submitted on-line only complying specified schedule.

3. 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.

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

5. SCL reserves the right to defer or to cancel this Tender. Jobs covered by this Tender are being treated by SCL as one project and SCL shall award the contract for the complete project to only one contractor. Only those vendors who can execute the complete project shall submit their proposals.

Proposals received for part work shall not be considered.

6. 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 contact.

7. LATE BIDS: Bidders are advised in their own interest to ensure that theirbids are uploaded in system before the closing date and time of the bid. The documents in physical form if received by the Company after the deadline for submission prescribed by the Company shall be rejected and shall be returned to the Bidders in unopened condition immediately.

8. 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.

9. TERMS CONDITIONS OF TENDER

10. TEST CERTIFICATE:
Wherever required, test certificates should be sent along with the dispatch documents.

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

12. 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.

13. 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 - Augmentation of 8 inch CMOS Wafer Fab and Embedded NVM (Single- Poly) Technology acquisition as per enclosed detailed Request for Proposal (RFP) including Scope of Work

1. WTPD1,Batch processing ,1.O3 generator

Item specifications for WTPD1,Batch processing ,1.O3 generator

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to Upgrade the existing Ozone generator integrated with WTPD101		-		

2. WTPD1,Batch processing ,2. Mega sonic generator

Item specifications for WTPD1,Batch processing ,2. Mega sonic generator

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. Vendor to upgrade the existing magasonic generator and vibrator attached with the DIW bath. Details of existing model is as follows: - Vibrator existing model "KOKUSAI DENKI ALPHA" Input 600W frequency 730KHz - Generator existing model "KOKUSAI DENKI ALPHA" input 600W frequency 730Khz Need to integrate with mentioned equipment i.e WTPD1 (SES make Model Techno200).		-		

3. WTPD1,Batch processing ,3. CD upgrade

Item specifications for WTPD1,Batch processing ,3. CD upgrade

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Vendor to upgrade the CD (Centrifugal Dryer) with IPA dryer.		-		

4. WTRS1,Batch processing ,1. CD upgrade

Item specifications for WTRS1,Batch processing ,1. CD upgrade

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Vendor to upgrade the CD (Centrifugal Dryer) with IPA dryer.		-		

5. WTRS1,Batch processing ,2. Mega sonic generator

Item specifications for WTRS1,Batch processing ,2. Mega sonic generator

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Vendor to upgrade the existing magasonic generator and vibrator attached with the DIW bath. Details of existing model is as follows: - Vibrator existing model "KOKUSAI DENKI ALPHA" Input 600W frequency 730KHz - Generator existing model "KOKUSAI DENKI ALPHA" input 600W frequency 730Khz Need to integrate with mentioned equipment i.e WTRS1 (SES make Model Techno200).		-		

6. YEDR1,CP measurement upgraded for Computer hardware, Windows Operating Syasuremeupgraded for Compstem and Hard Disk Storage

Item specifications for YEDR1,CP measurement upgraded for Computer hardware, Windows Operating Syasuremeupgraded for Compstem and Hard Disk Storage

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. Vendor to upgrade existing computer system/CPU cardd supporting SATA HDD of minimum 250 GB Capacity and latest compatible processor. It should support USB drive for data backup. 2.Match the performance & recipe with additional Similar equipment being procured 3.vendor to provide MX4.2 Application Software. Match the performance & recipe with additional Similar equipment being procured 4.Vendor to provide latest windows operating system supporting MX4.2 Application Software. Match the equipment with additional similar equipment being procured		-		

7. YEOI1,Optical Inspection Station,1. Upgrade YEOI1 for Bevel Inspection

Item specifications for YEOI1,Optical Inspection Station,1. Upgrade YEOI1 for Bevel Inspection

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Vendor to provide additional module for both front & back wafer edge inspection		-		

8. YEOI1,Optical Inspection Station,2. Optics needs to be upgraded for existing system

Item specifications for YEOI1,Optical Inspection Station,2. Optics needs to be upgraded for existing system

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	1. Vendor to supply the new optics module along with lenses and replace existing Optics module with this new optics module along with lenses. 2.Vendor to demonstrate the functionality of the new integrated optics modules .		-		

9. YESR1,SEM Review Station,1. IP computer

Item specifications for YESR1,SEM Review Station,1. IP computer

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Image processing computers with highest compatible configuration to be supplied and installed by vendor.		-		

10. YESR1,SEM Review Station,2. HDD higher capacity for all computers

Item specifications for YESR1,SEM Review Station,2. HDD higher capacity for all computers

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Vendor to supply and install the High Capacity (Minimum 250 GB) SATA HDD & USB for backup		-		

11. YESR1,SEM Review Station,3. EDX software and computer

Item specifications for YESR1,SEM Review Station,3. EDX software and computer

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	1.Vender to supply and install the EDX computer hardware for supporting latest EDX capturing and analysis software. 2.Vendor to supply and install the latest software with feature of auto capturing and saving EDX image and data file to be provided.		-		

12. YESR1,SEM Review Station,4. Optical Microscope replacement

Item specifications for YESR1,SEM Review Station,4. Optical Microscope replacement

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to supply the new optical module and replace existing Optics module with this new optical module. 2.Vendor to demonstrate the functionality of the new integrated optical modules .		-		

13. YESR1,SEM Review Station,5. OS system upgrade (O2)

Item specifications for YESR1,SEM Review Station,5. OS system upgrade (O2)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	vendor to supply and install the latest compatible Operating system (Solaris/Linux)		-		

14. YEOR1,Optical Review Station,1. Optical module needs to be upgraded.

Item specifications for YEOR1,Optical Review Station,1. Optical module needs to be upgraded.

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	1.Vendor to supply the new optics module along with lenses and replace existing Optics module with this new optics module along with lenses. 2.Vendor to demonstrate the functionality of the new integrated optics modules .		-		

15. YEOR1,Optical Review Station,2. ADR software needs to be upgraded

Item specifications for YEOR1,Optical Review Station,2. ADR software needs to be upgraded

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to supply, integrate and install the ADR software and demonstrate the functionality. 2.Vendor to demonstrate automatic review of defects on given wafer having sampled Klarf File and automatic saving of same. 3.Vendor to demonstrate that more than 90% images are captured and images saved.		-		

16. YEOR1,Optical Review Station,3. Upgrade YEOI1 for Bevel Inspection

Item specifications for YEOR1,Optical Review Station,3. Upgrade YEOI1 for Bevel Inspection

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Vendor to supply additional module for both front & back wafer edge inspections. 2.Vendor to integrate and install the modules and demonstrate the functionality		-		

17. Supply and installation of MES, as per SOW given in the tender

Item specifications for Supply and installation of MES, as per SOW given in the tender

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	As per Annexure G : MES Specification of RFP document		-		

18. Supply of IPs for NVM (Single Poly non-volatile memory, as per SOW and specifications given in the tender

Item specifications for Supply of IPs for NVM (Single Poly non-volatile memory, as per SOW and specifications given in the tender

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Supply and qualification of NVM IP as per Section 4 : Embedded Single-Poly MTP-NVM IP Acquisition of RFP		-		

19. Supply, Installation, testing and commissioning of Cleanroom modifications and Utilities for Equipment Movement

Item specifications for Supply, Installation, testing and commissioning of Cleanroom modifications and Utilities for Equipment Movement

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	8â Wafer Fab need to be fingerprinted before de-hooking, de-hooked/de-installed, Roll out of the clean-room from the current location and some of the equipment need to be crated or re-installed in another location (upon necessary clean-room & Utilities augmentation/ modification) As per Section 1 : Equipment Relocation of RFP		-		

20. De-hook, Move out and Crate 2 old 8” Equipment and re-locate of old 8" Equipment (as per layout drawings given in the tender)

Item specifications for De-hook, Move out and Crate 2 old 8” Equipment and re-locate of old 8" Equipment (as per layout drawings given in the tender)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	De-hook, Move out and Crate 2 old 8â Equipment and re-locate of old 8" Equipment (as per layout drawings given in the tender)		-		

21. CMWO1,CMP Tungsten,6. Slurry Injection System (SIS)

Item specifications for CMWO1,CMP Tungsten,6. Slurry Injection System (SIS)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to supply, install and commission Slurry injection system 2.Vendor to provide all accessories, connectors, tubing, etc. for commissioning of SIS.		-		

22. CMWO1,CMP Tungsten,7. Upgrade Slurry/DIW main valve from 1 line to 3 line

Item specifications for CMWO1,CMP Tungsten,7. Upgrade Slurry/DIW main valve from 1 line to 3 line

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Supply and installation Slurry/DIW valve 2.Vendor to supply, tubing, connectors etc for commissioning of slurry/DIW valve		-		

23. Supply Installation and Commisioning of Dark field defect inspection equipment – KLA PUMA

Item specifications for Supply Installation and Commisioning of Dark field defect inspection equipment – KLA PUMA

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	KLA PUMA		-		

24. Supply Installation and commisioning of Surfscan- KLA SP1 TBI

Item specifications for Supply Installation and commisioning of Surfscan- KLA SP1 TBI

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	KLA SP1 TBI		-		

25. Supply installation and commisioning of Asher- Mattson Aspen II

Item specifications for Supply installation and commisioning of Asher- Mattson Aspen II

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Mattson Aspen II		-		

26. Supply Installation and Commisioning of Polymer strip equipment after VIA and metal etch, LAM DVI (DV24)

Item specifications for Supply Installation and Commisioning of Polymer strip equipment after VIA and metal etch, LAM DVI (DV24)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	LAM, DVI (DV24)		-		

27. Supply Installation and Commisioning of Metal Sputter equipment, AMAT Endura

Item specifications for Supply Installation and Commisioning of Metal Sputter equipment, AMAT Endura

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	AMAT, Endura		-		

28. Supply Installation and commisioning of Bright Field defect inspection equipment, KLA 2367 PRO

Item specifications for Supply Installation and commisioning of Bright Field defect inspection equipment, KLA 2367 PRO

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	KLA, KLA2367 PRO		-		

29. Supply Installation and commisioning of Photoresist strip Pre diffusion clean ZETA VIPER

Item specifications for Supply Installation and commisioning of Photoresist strip Pre diffusion clean ZETA VIPER

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	TEL, ZETA VIPER		-		

30. Supply installation and comisioning of Oxide etcher, LAM EXELAN 2300/TEL UNITY ME

Item specifications for Supply installation and comisioning of Oxide etcher, LAM EXELAN 2300/TEL UNITY ME

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	LAM EXELAN 2300/TEL UNITY ME		-		

31. CMOX1,CMP Oxide,1. In-situ end point system

Item specifications for CMOX1,CMP Oxide,1. In-situ end point system

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to supply, install and commissioning of end point system for AA oxide CMP process. 2.Vendor to provide necessary software(s)/application required to operate the end-point detection system 3.Vendor to provide operation and recipe training to SCL engineers for end point detection system. 4.Vendor to demonstrate and provide training to SCL engineers for operation and implementation of this EPD system in the SCL existing Active area process. 5.Vendor to demonstrate the equipment acceptance as per the acceptance test provided by SCL 6.Its the responsibility of the vendor that the other parts of the equipment should not be affected by this EPD system installation		-		

32. CMOX1,CMP Oxide,2. POU Filter Upgrade

Item specifications for CMOX1,CMP Oxide,2. POU Filter Upgrade

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to provide point of use filter for slurry delivery in Oxide CMP equipment 2.Vendor to provide all fitting, tubing, filter housing, etc for the POU filters.		-		

33. CMOX1,CMP Oxide,3. Upgradation of Slurry recirculation and delivery pump in MABAT (CDU 3000) Slurry Delivery System

Item specifications for CMOX1,CMP Oxide,3. Upgradation of Slurry recirculation and delivery pump in MABAT (CDU 3000) Slurry Delivery System

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	1.Vendor to remove the installed diaphragm pumps (2nos) and install MLC pumps (2nos) in their place. 2.The MLC pumps must be supplied by the vendor, along with all accessories like tubing, connectors etc. 3.Vendor to ensure that the suggested MLC pumps are good replacements for the diaphragm pumps (in terms of pressure head, maximum flow rate) 4.Vendor to update PLC for MLC pumps accordingly. 5.Vendor to ensure apt MLC pumps are selected (in terms of compatibility with the slurry/chemical to be recirculated) 6.Vendor to provide OEM manuals, maintenance training and procedures. 7.Vendor to provide recipe for drum circulation, slurry filling, slurry supply to equipment thru VMBs 8.Vendor to supply bigger day tank in slurry delivery system. The capacity of the new day tank must be selected after thorough assessment of load bearing capacity of the slurry delivery system. The MOC of day tank must be compatible with the slurry. All the fittings, valves and level sensors should be installed as before. Vendor to make the necessary adjustments required (e.g. Stirrer length, level sensors mount etc)		-		

34. CMOX1,CMP Oxide,4. Hard disk upgrade (from mechanical HDD to RAID SSD)

Item specifications for CMOX1,CMP Oxide,4. Hard disk upgrade (from mechanical HDD to RAID SSD)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to supply, install and commission RAID SSD 2.Vendor to provide all accessories, driver, application for commissioning of RAID SSD		-		

35. CMOX1,CMP Oxide,5. Upper Pneumatic Assembly (UPA) module upgrade

Item specifications for CMOX1,CMP Oxide,5. Upper Pneumatic Assembly (UPA) module upgrade

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to supply, install and commission detachable UPA 2.Vendor to provide accessories, connectors, cables etc for the installation and commissioning of upgraded UPA		-		

36. CMOX1,CMP Oxide,6. Upgrade from peristaltic pump to CLC for slurry loop

Item specifications for CMOX1,CMP Oxide,6. Upgrade from peristaltic pump to CLC for slurry loop

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	1.Vendor to supply , Install and commission CLC for slurry loop 2.Vendor to provide all accessories, tubing, plumb line, connectors for commissioning of CLC slurry loop. 3.Vendor to provide application, software required for the upgrade.		-		

37. CMOX1,CMP Oxide,7. Slurry Injection System (SIS)

Item specifications for CMOX1,CMP Oxide,7. Slurry Injection System (SIS)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. Vendor to supply, install and commission Slurry injection system 2. Vendor to provide all accessories, connectors, tubing, etc. for commissioning of SIS.		-		

38. CMOX1,CMP Oxide,8. Upgrade Slurry/DIW main valve from 1 line to 3 line

Item specifications for CMOX1,CMP Oxide,8. Upgrade Slurry/DIW main valve from 1 line to 3 line

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Supply and installation Slurry/DIW valve 2.Vendor to supply, tubing, connectors etc for commissioning of slurry/DIW valve		-		

39. CMWO1,CMP Tungsten,1. POU Filter Upgrade

Item specifications for CMWO1,CMP Tungsten,1. POU Filter Upgrade

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to provide point of use filter for slurry delivery in Oxide CMP equipment 2.Vendor to provide all fitting, tubing, filter housing, etc for the POU filters.		-		

40. CMWO1,CMP Tungsten,2. Upgradation of Slurry recirulation and delivery pump in MABAT Slurry Delivery System

Item specifications for CMWO1,CMP Tungsten,2. Upgradation of Slurry recirulation and delivery pump in MABAT Slurry Delivery System

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	1.Vendor to remove the installed diaphragm pumps (2nos) and install MLC pumps(2nos) in their place. 2.The MLC pumps must be supplied by the vendor, alongwith all accessories like tubing, connectors etc. 3.Vendor to ensure that the suggested MLC pumps are good replacements for the diaphragm pumps (in terms of pressure head, maximum flow rate) 4.Vendor to update PLC for MLC pumps accordingly. 5.Vendor to ensure apt MLC pumps are selected (in terms of compatibility with the slurry/chemical to be recirculated) 6.Vendor to provide OEM manuals, maintenance training and procedures. 7.Vendor to provide recipe for drum circulation, slurry filling, slurry supply to equipment thru VMBs		-		

41. CMWO1,CMP Tungsten,3. Hard disk upgrade (from mechanical HDD to RAID SSD)

Item specifications for CMWO1,CMP Tungsten,3. Hard disk upgrade (from mechanical HDD to RAID SSD)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to supply, install and commission RAID SSD 2.Vendor to provide all accessories, driver, application for commissioning of RAID SSD		-		

42. CMWO1,CMP Tungsten,4. UPA (Upper Pneumatic Assembly) module upgrade

Item specifications for CMWO1,CMP Tungsten,4. UPA (Upper Pneumatic Assembly) module upgrade

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to supply, install and commission detachable UPA 2.Vendor to provide accessories, connectors, cables etc for the installation and commissioning of upgraded UPA		-		

43. CMWO1,CMP Tungsten,5. Upgrade from peristaltic pump to CLC for slurry loop

Item specifications for CMWO1,CMP Tungsten,5. Upgrade from peristaltic pump to CLC for slurry loop

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to supply , Install and commission CLC for slurry loop 2.Vendor to provide all accessories, tubing, plumb line, connectors for commissioning of CLC slurry loop. 3.Vendor to provide application, software required for the upgrade.		-		

44. MTOP2,Film Thickness and Reflectance Measurement,1 Install Mini environment

Item specifications for MTOP2,Film Thickness and Reflectance Measurement,1 Install Mini environment

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	Vendorâs scope of work shall cover supply, installation & commissioning of Filter Fan Unit (FFU) for Opti-probe). The scope of work should include the following: - Design, Detailed engineering, Fabrication and Installation of FFU - Supply of all support tools including Cabinet, Castor Wheels and Shutter Motor etc. - Installation of the FFU and isolation cabinet, including all utility connections. - Commissioning of the FFU and demonstration of its functionality as per the required specifications. - Interfacing with existing (Opti-probe) equipment at SCL. - Training to concerned SCL personnel on Operations, Maintenance & Trouble shooting of the tool. - Clean room compatible material SS304 or clean room compatible aluminum material for the construction of the cabinet.		-		

45. MTOP2,Film Thickness and Reflectance Measurement,2. SMIF upgrade

Item specifications for MTOP2,Film Thickness and Reflectance Measurement,2. SMIF upgrade

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	a) Vendor to supply and install NEW/Refurbished SMIF type loader system with 2 load ports. b) Vendor to ensure and demonstrate smooth operation of related Optiprobe Subsystems, Modules, Hardware & Software with the installed SMIF type loader system. c) Vendor need to supply all necessary hardware and software associated with SMIF upgrade. d) Vendor to bring along all necessary Jigs, Fixtures, Tool & Instruments etc. that are required for the successful installation and acceptance of SMIF type system with Optiprobe. e) Vendor to hook/modify and supply all required electrical, communication cables, compatible connectors, interlocks etc. which are required for successful SMIF upgrade.		-		

46. MTOP2,Film Thickness and Reflectance Measurement,3. Wedge Calibration wafer

Item specifications for MTOP2,Film Thickness and Reflectance Measurement,3. Wedge Calibration wafer

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Supply of Wedge Calibration wafer for Optiprobe equipment calibration		-		

47. REML1,Metal Etcher (1 DPS ch and 1 ASP ch),1. chamber addition 1 DPS chamber and 1ASP chamber

Item specifications for REML1,Metal Etcher (1 DPS ch and 1 ASP ch),1. chamber addition 1 DPS chamber and 1ASP chamber

SI No	Specification	Value	Compliance	Offered Specification	Remark

1	1. Fingerprinting of existing equipment (QC and M1 profile) 2. Supply and install one new DPS metal and one ASP chamber on empty slots of existing AMAT centura platform (slot B and D respectively) 3. Provide and install all MFC's, baratrons, other sensors vis-a- vis other working chambers on the equipment 4. Provide and install all the electrical cables/Signal cable/facility lines required to connect the chambers to the SCL facilities. 5. Vendor to provide and connect all the RF/ Microwave Generators and match units, vacuum pumps, chillers etc. required for the smooth functioning of the chambers and hence the equipment. 6. Vendor to perform equipment acceptance and Unit step acceptance of the chambers as per the Acceptance document provided by the SCL. 7. Post chambers acceptance vendor to demonstrate the original fingerprints of the tool as performed before the installation work. 8. Its the responsibility of the vendor that new installation will not impact other operations of the equipment		-		

48. REML1,Metal Etcher (1 DPS ch and 1 ASP ch),2. Change the existing 4.2Mb hard disk to flash drive

Item specifications for REML1,Metal Etcher (1 DPS ch and 1 ASP ch),2. Change the existing 4.2Mb hard disk to flash drive

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. Perform the backup of all the files (system, configuration, recipes, equipment logs etc) 2. Provide and Install the state of the art compatible flash drive to the equipment 3. Upload all the original backup data file to the new drive 4. vendor to perform the acceptance as per acceptance procedure 5. Itâs the responsibility of the Vendor that this installation should not impact other operations/parts of the equipment		-		

49. REML1,Metal Etcher (1 DPS ch and 1 ASP ch),3. Change the floppy drive to USB drive

Item specifications for REML1,Metal Etcher (1 DPS ch and 1 ASP ch),3. Change the floppy drive to USB drive

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. vendor to provide and install the USB drive on the equipment 2. vendor to demonstrate and train the SCL engineers to load and unload of the files using newly installed USB drive 3. Its the responsibility of the installation Vendor that installed USB drive will not impact other operations of the equipment		-		

50. REML1,Metal Etcher (1 DPS ch and 1 ASP ch),4. Existing Buffer CH Viewport window to be upgraded with sapphire glass

Item specifications for REML1,Metal Etcher (1 DPS ch and 1 ASP ch),4. Existing Buffer CH Viewport window to be upgraded with sapphire glass

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. Provide and install the sapphire glass window in the buffer chamber of the tool. 2. vendor to check the leak rate of the buffer chamber before installation as a fingerprint for this activity		-		

51. REPL1,Poly Si / STI Etcher,1. Upgradation of existing Dome Temp. Control Unit (DTCU) of both the Chambers (Including Source Rf match)

Item specifications for REPL1,Poly Si / STI Etcher,1. Upgradation of existing Dome Temp. Control Unit (DTCU) of both the Chambers (Including Source Rf match)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. Vendor to provide and install the state of the art DTCU units for both the chambers of the equipments. (Please Note that the source RF match and other DTCU parts provided by the vendor should not be obsolete. 2. Vendor to demonstrate the temperature stability over the tool. 3. Vendor to perform the RF calibration in both the chambers. 4. Vendor to demonstrate the equipment acceptance as per the acceptance test provided by SCL.		-		

52. REPL1,Poly Si / STI Etcher,2. Change the floppy drive to USB drive

Item specifications for REPL1,Poly Si / STI Etcher,2. Change the floppy drive to USB drive

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. vendor to provide and install the USB drive on the equipment 2. vendor to demonstrate and train the SCL engineers to load and unload of the files using newly installed USB drive 3. Its the responsibility of the installation Vendor that installed USB drive will not impact other operations of the equipment		-		

53. REPL1,Poly Si / STI Etcher,3. EPD system with EP monitoring at the top of dome for one chamber (AA Etch) only

Item specifications for REPL1,Poly Si / STI Etcher,3. EPD system with EP monitoring at the top of dome for one chamber (AA Etch) only

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	1. Vendor to provide and install the state of the art Endpoint system for one chamber of the equipment (Active area etch). Please Note that the vendor should also provide dome and other parts required for the installation of this EPD system. 2. Vendor should also provide One new spare dome and other additional consumable parts specific to this activity 3. Vendor to demonstrate and provide training to SCL engineers for operation and implementation of this EPD system in the SCL existing Active area process. 4. Vendor to demonstrate the equipment acceptance as per the acceptance test provided by SCL 5. Its the responsibility of the vendor that the other parts of the equipment should not be affected by this EPD system installation		-		

54. IMHE1,High Energy Implanter,1. Additional wafer Buffer Loader

Item specifications for IMHE1,High Energy Implanter,1. Additional wafer Buffer Loader

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	Vendor shall supply and install an additional buffer loader. It has to perform the operation of buffer wafer holder for a simultaneous operation of more than one set of cassettes. It should be compatible with 200mm diameter wafers currently available. For installation of buffer loader if any additional part or spare is required, it needs to be taken care by the vendor. The final outcome requires smooth running of multiple cassettes operation simultaneously without any glitch in handling of wafers. .		-		

55. IMHE1,High Energy Implanter,2. Software Upgrade (SunSystem Upgrade and Night backup recorder installation.)

Item specifications for IMHE1,High Energy Implanter,2. Software Upgrade (SunSystem Upgrade and Night backup recorder installation.)

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	1. Upgrade from current software version of primary, secondary computer be SUN 3.7.2 with cell controller module Part No 11002540 (177 cell) to VM server with V6 Cell controller OR latest version. 2. The night backup recorder either SSD or HDD version needs to be installed or compatible. 3. A provision to use a pen drive is also required with the upgrade. In addition to this if any hardware inclusion is necessary e.g. Any equipment hardware, a new CPU or monitor or an up gradation of RAM or anything		-		

56. TRMU1,Track MUV ,1. Additional - 1 Hot Plate (HHP)

Item specifications for TRMU1,Track MUV ,1. Additional - 1 Hot Plate (HHP)

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	Vendor shall supply and install Additional 1 high temperature Hot plates (HHP) in TRMU1 with all necessary hardware and Software needed. Vendor need to ensure overall functioning of track after HHP installation. Backup of all data and HDD in track should be taken before and after HHP installation. Vendor should bring all support and special tool needed for installation and demonstration of upgrade as per acceptance.		-		

57. TRMU1,Track MUV ,2. Temperature and Humidity Controller Upgrade

Item specifications for TRMU1,Track MUV ,2. Temperature and Humidity Controller Upgrade

SI No	Specification	Value	Compliance	Offered Specification	Remark

1	Vendor shall supply and installation of new Temperature and Humidity Controller compatible with TRMU1. Vendor need to provide all necessary hardware and software required. Vendor need to ensure functioning of track after new T&H controller installation. Backup of all data and HDD in track should be taken before and after T&H controller installation. Vendor should bring all support and special tool needed for installation and demonstration of upgrade as per acceptance. Fingerprint data should be noted for all modules of track using T&H controller before new installation. Unit need to be compatible with existing T&H controller		-		

58. TRDU1,Track DUV,1. Upgrade PLC on Developer LDS

Item specifications for TRDU1,Track DUV,1. Upgrade PLC on Developer LDS

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Vendor shall Upgrade the PLC with all necessary functions compatible with existing chemical delivery system- MABAT CDU2500. Vendor need to provide all necessary hardware and software required.		-		

59. SNDU1,Scanner DUV,1. Installation of Quadrpole Aperture (Resolution improvement)

Item specifications for SNDU1,Scanner DUV,1. Installation of Quadrpole Aperture (Resolution improvement)

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	a) Vendor to record ALL critical Scanner and KrF Laser parameters from logs/records stored during last known good condition of the Scanner and KrF Laser. Critical parameters such as Laser power, Wavelength, Bandwidth, Illumination Uniformity, Illumination Telecentricity and Projection lens parameters such as TFD, Astigmatism, Distortion, Coma etc. should be fingerprinted before the commencing of Quadrupole Aperture installation. b) Vendor to supply and install NEW Quadrupole aperture in the existing Illumination optics hardware. c) Vendor to ensure and demonstrate smooth operation of related Scanner Subsystems, Modules, Hardware & Software with the installed Quadrupole Aperture. d) Quadrupole aperture is to be replaced with unused aperture in the Illumination turret. e) All aperture which are currently used in production IDs (ID4, ID5, ID7 & ID8) and test ID (ID1) shall not be modified. f) Vendor need to supply all necessary hardware and software associated		-		

	with successful installation of Quadrupole aperture. g) Vendor to bring along all necessary Jigs, Fixtures, Tool & Instruments etc. that are required for the successful installation and acceptance of Quadrupole aperture h) Vendor to install Quadrupole aperture with SCL Nikon Scanner successfully using existing OS, Application software MCSV: VER.S3.44B-1 &OCSV:VER.S3.44. i) Vendor to hook/modify and supply all required electrical, communication cables, compatible connectors, interlocks etc. which are required for successful installation				

60. MTCD1,CD SEM,SMIF upgrade

Item specifications for MTCD1,CD SEM,SMIF upgrade

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	a) Vendor to record all Critical parameters related to CD SEM performance such as Operating voltage, Probe current, magnification etc. and Tool parameters/modules such as Operator console, Vacuum integrity, Stage movement & Daily QC parameters (Beam alignment, ALP, STP mode) b) Vendor to supply and install NEW/Refurbished SMIF type loader system with 2 load ports. c) Vendor to ensure and demonstrate smooth operation of related CD SEM Subsystems, Modules, Hardware & Software with the installed SMIF type loader system. d) Vendor need to supply all necessary hardware and software associated with SMIF upgrade. e) Vendor to bring along all necessary Jigs, Fixtures, Tool & Instruments etc. that are required for the successful installation and acceptance of SMIF type system with CD SEM. f) Vendor to install SMIF type loader system using existing OS and Application software of CD SEM. g) Vendor to hook/modify and supply all required		-		

	electrical, communication cables, compatible connectors, interlocks etc. which are required for successful SMIF upgrade.				

61. CDHD1,HDP Oxide CVD (3 ch),1.Replace ETO RF generator for two chambers with ENI RF generators

Item specifications for CDHD1,HDP Oxide CVD (3 ch),1.Replace ETO RF generator for two chambers with ENI RF generators

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. Vendorâs scope of work shall cover De installation of Ch B and Ch C ETO RF generator Racks of AMAT C-5200 HDP Ultima Plus and Supply, Installation & Commissioning of new (Two Noâs) ENI RF generator racks for Ch B and Ch C. Each ENI RF generator rack shall have two NOVA-50A-10 (0190-19510) RF generator, one GHW50A-13DF3H0-10 (0190-19511) RF generator and 1No Seriplex PCB with power supply fittings. 2. Commissioning of these two ENI RF Generator racks and demonstration of its functionality as per the required specifications		-		

62. CDHD1,HDP Oxide CVD (3 ch),2. Change the existing 4.2Mb hard disk to flash drive

Item specifications for CDHD1,HDP Oxide CVD (3 ch),2. Change the existing 4.2Mb hard disk to flash drive

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. Perform the backup of all the files (system, configuration, recipes, equipment logs etc) 2. Provide and Install the state of the art compatible flash drive to the equipment 3. Upload all the original backup data file to the new drive 4. Vendor to show all the recipes and logs to the SCL engineers 5. vendor to perform the acceptance as per acceptance procedure 6. Its the responsibility of the Vendor that this installation should not impact other operations/parts of the equipment		-		

63. CDHD1,HDP Oxide CVD (3 ch),3. Change the floppy drive to USB drive

Item specifications for CDHD1,HDP Oxide CVD (3 ch),3. Change the floppy drive to USB drive

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. vendor to provide and install the USB drive on the equipment 2. vendor to demonstrate and train the SCL engineers to load and unload of the files using newly installed USB drive 3. Its the responsibility of the installation Vendor that installed USB drive will not impact other operations of the equipment		-		

64. CDTS1,PECVD TEOS ,1.Up-grade with RPS

Item specifications for CDTS1,PECVD TEOS ,1.Up-grade with RPS

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. Vendor to supply install and commission RPS system for DxZ Chambers (B and Chamber D) of Applied Centura platform. 2. Vendor to supply RPS and tune RPS process recipe to meet equal and better performance compared to existing In-situ clean. SCL will provide present CP QC performance of In-situ clean for vendor reference. 3. On completion of Installation Vendor to handover the Process chamber with RPS clean with 3 repeatable successful QC as per SCL standard QC procedure.		-		

65. CDTS1,PECVD TEOS ,2. SACVD chamber addition

Item specifications for CDTS1,PECVD TEOS ,2. SACVD chamber addition

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	1. Supply Install and commissioning of SACVD Gigafill Chamber with all its associated accessories like Vacuum pump, ozonator, chiller, MFC's etc. Install at Position A/C in the existing Centura Platform 2. Supply install and commissioning of RPS clean for SACVD chamber 3. Supply installation and commissioning of LDS for TEB & TEPO and draw line from existing TEOS LDS. Configuring/ Re-configuring GPLIS as per requirement for any additional LFM, MFC, filters valves etc. 4. Fingerprinting existing chamber B and D and returning them in same condition post SACVD commissioning		-		

66. CDTS1,PECVD TEOS ,3. Change the existing 4.2Mb hard disk to flash drive

Item specifications for CDTS1,PECVD TEOS ,3. Change the existing 4.2Mb hard disk to flash drive

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	1. Perform the backup of all the files (system, configuration, recipes, equipment logs etc) 2. Provide and Install the state of the art compatible flash drive to the equipment 3. Upload all the original backup data file to the new drive 4. Vendor to show all the recipes and logs to the SCL engineers 5. vendor to perform the acceptance as per acceptance procedure 6. Its the responsibility of the Vendor that this installation should not impact other operations/parts of the equipment		-		

67. CDTS1,PECVD TEOS ,4. Change the floppy drive to USB drive

Item specifications for CDTS1,PECVD TEOS ,4. Change the floppy drive to USB drive

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. vendor to provide and install the USB drive on the equipment 2. vendor to demonstrate and train the SCL engineers to load and unload of the files using newly installed USB drive 3. Its the responsibility of the installation Vendor that installed USB drive will not impact other operations of the equipment		-		

68. SPCO1,Silicide PVD Sputter,1.Upgradation of Conventional Ti Chamber for TiN capability

Item specifications for SPCO1,Silicide PVD Sputter,1.Upgradation of Conventional Ti Chamber

for TiN capability

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1. Drawing Line for N2 capability in Ti Chamber with all its accessories like MFC, valve, filter etc. 2. Supplying and tuning recipes for TiN layer depositing as per SCL acceptance procedure 3. Supplying and tuning recipe for De-poisoning as per SCL acceptance procedure. 4. Defining new Process kit life/clean cycle time.		-		

69. SPCO1,Silicide PVD Sputter,2. Change the existing 4.2Mb hard disk to flash drive

Item specifications for SPCO1,Silicide PVD Sputter,2. Change the existing 4.2Mb hard disk to flash drive

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	1. Perform the backup of all the files (system, configuration, recipes, equipment logs etc) 2. Provide and Install the state of the art compatible flash drive to the equipment 3. Upload all the original backup data file to the new drive 4. Vendor to show all the recipes and logs to the SCL engineers 5. vendor to perform the acceptance as per acceptance procedure 6. Its the responsibility of the Vendor that this installation should not impact other operations/parts of the equipment		-		

70. SPCO1,Silicide PVD Sputter,3. Change the floppy drive to USB drive

Item specifications for SPCO1,Silicide PVD Sputter,3. Change the floppy drive to USB drive

SI No	Specification	Value	Compliance	Offered Specification	Remark

1	1. Perform the backup of all the files (system, configuration, recipes, equipment logs etc) 2.Provide and Install the state of the art compatible flash drive to the equipment 3.Upload all the original backup data file to the new drive 4.Vendor to show all the recipes and logs to the SCL engineers 5.Vendor to perform the acceptance as per acceptance procedure 6.Its the responsibility of the Vendor that this installation should not impact other operations/parts of the equipment		-		

71. SPLR1,Barrier Metal Deposition,1.High speed robot configuration

Item specifications for SPLR1,Barrier Metal Deposition,1.High speed robot configuration

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Supplying , installation and commissioning of 2 No's of VHP+ motor for Buffer and Transfer chamber robots.		-		

72. SPLR1,Barrier Metal Deposition,2. Change the existing 4.2Mb hard disk to flash drive

Item specifications for SPLR1,Barrier Metal Deposition,2. Change the existing 4.2Mb hard disk to flash drive

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	1.Perform the backup of all the files (system, configuration, recipes, equipment logs etc) 2.Provide and Install the state of the art compatible flash drive to the equipment 3.Upload all the original backup data file to the new drive 4.Vendor to show all the recipes and logs to the SCL engineers 5.Vendor to perform the acceptance as per acceptance procedure 6.Its the responsibility of the Vendor that this installation should not impact other operations/parts of the equipment		-		

73. SPLR1,Barrier Metal Deposition,3. Change the floppy drive to USB drive

Item specifications for SPLR1,Barrier Metal Deposition,3. Change the floppy drive to USB drive

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to provide and install the USB drive on the equipment 2.Vendor to demonstrate and train the SCL engineers to load and unload of the files using newly installed USB drive 3.Its the responsibility of the installation Vendor that installed USB drive will not impact other operations of the equipment		-		

74. MTFR1,FTIR Spectroscopy,Upgradation for B,P, and Si-OH bond measurement capability.

Item specifications for MTFR1,FTIR Spectroscopy,Upgradation for B,P, and Si-OH bond

measurement capability.

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Providing software for Si-OH and B,P concentration software 2.Vendor to provide all necessary hardware required, if any. 3.Vendor to provide 3 separate golden wafer. Two for calibration and 3rd golden wafer for verification and quality check. This Methodology to follow for B & P and Si-OH 4.Fingerprinting existing tool before upgradation and demonstrating existing capabilities post upgrade.		-		

75. WTSE1,Single Wafer Spin Processor,Chuck Upgrade in both module- Wafer edges can be better handle with upgraded Chuck.

Item specifications for WTSE1,Single Wafer Spin Processor,Chuck Upgrade in both module- Wafer edges can be better handle with upgraded Chuck.

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Upgraded chuck for both PMA and PMB module. Existing chuck is "Chuck 200mm Standard Version 1"		-		

76. WTSE1,Single Wafer Spin Processor,Upgradation of CDS to handle 200 Ltr drum for catering increase chemical consumption with increase capacity

Item specifications for WTSE1,Single Wafer Spin Processor,Upgradation of CDS to handle 200 Ltr drum for catering increase chemical consumption with increase capacity

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	Upgrade the existing CDS to handle 200 Ltr drum. Current CDs handles only 24Ltr drum		-		

77. WTSE1,Single Wafer Spin Processor,O3 generator upgrade

Item specifications for WTSE1,Single Wafer Spin Processor,O3 generator upgrade

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Vendor to Upgrade the existing Ozone generator integrated with WTSE1. Details of existing ozone generator: AsteX Ozone Generator Model: SEMOZON 090.2 HP Astex PN: 14-6006-01		-		

78. WTSE1,Single Wafer Spin Processor,Addition Heat exchanger for Med 2

Item specifications for WTSE1,Single Wafer Spin Processor,Addition Heat exchanger for Med 2

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Vendor to install the Heat exchanger in Med-2 (for chemical BOE/BHF) of WTSE1 for better temperature control. Required temperature range is 20 deg to 26 deg		-		

79. SBXC1,Pod and Cassette Cleaner,PLC upgrade

Item specifications for SBXC1,Pod and Cassette Cleaner,PLC upgrade

Sl No	Specification	Value	Compliance	Offered Specification	Remark

1	Vendor to upgrade the existing PLC to develop the read - write capability along with Old program need to retain and reload. Equipment Model no HTC 8020 & Make Fluoroware		-		

80. SSRT1,Wafer Sorter - Wafer Start,Upgrade to wafer Back side reading

Item specifications for SSRT1,Wafer Sorter - Wafer Start,Upgrade to wafer Back side reading

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	1.Vendor to upgrade the equipment laser mark reading capability from the wafer front and back side.		-		

81. SSRT2,Wafer Sorter - Common Area,Upgrade to wafer Back side reading

Item specifications for SSRT2,Wafer Sorter - Common Area,Upgrade to wafer Back side reading

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Upgrade to wafer Back side reading		-		

Common Specifications (Applicable for all items)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	As per Scope Of Work (SOW) in RFP.		-		

Supporting Documents required from Vendor

1. Un-priced Bid

2. compliance to Eligibility criteria.

3. Itemized Compliance of RFP.

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	DEFINITIONS: a. The term PURCHASER shall mean Semi-Conductor Laboratory, Sector-72, Mohali, Punjab 160071, India, 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 Purchase Order/Contract for the supply of stores is placed and shall be deemed to include the Contractors 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, technology, service, software and/or subsequent testing, should such a condition is included in the Purchase Order. 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.	Yes / No / Explain	

2	EARNEST MONEY DEPOSIT (EMD): The bid must be accompanied by Earnest Money Deposit (EMD) of INR 5,00,000/- (Rupees Five Lakh only) or equivalent foreign currency by way of a Bank Draft drawn in favour of Semi-Conductor Laboratory, payable at Mohali/ Chandigarh, valid for a period of three months. The earnest money of the selected bidder shall be retained till the execution of the contract. In all other cases, it shall be refunded within 30 days of award of the contract. Such earnest money as retained will be forfeited by SCL in the event of non-compliance of the selected bidder with any of the Terms and Conditions of the contract or the selected bidder failure to execute the contract. No interest will be payable by SCL on the above said EMD. Submission of EMD by way of a Bank Guarantee or Bill of Exchange shall not be accepted. Bids not complying with the EMD clause shall not be considered and shall be rejected. EMD instrument in original should be sent in a sealed cover with a covering letter quoting tender number and same must reach us prior to due date of tender to the following address: Head, Purchase and Stores Semi-Conductor Laboratory, Sector -72, Mohali (Punjab) India -160071. The scanned copy of EMD instrument should be attached online with the tender.	Yes / No / Explain	
3	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 be indicated in the Price Bid template only.	Yes / No / Explain	

4	Pre-bid conference: A Pre-bid conference shall be held with the prospective bidders as per schedule given in the Tender Notification, at Semi-Conductor Laboratory, S.A.S. Nagar (Mohali), Punjab, India to clarify issues regarding the specifications and other associated technical/commercial details of the subject Tender. The prospective bidders must, therefore, ensure that they or their authorized representatives attend the said pre-bid conference physically at SCL, S.A.S. Nagar or Online (preferably on Webex), as per the given schedule. Bidders who want to attend, online pre-bid conference, are advised to send their willingness at the e-mail ID fab_pm@scl.gov.in. Online conference details shall be shared in advance to them over email. In order to enable meaningful discussions in the Pre-bid conference, the prospective Bidders are requested to list the queries/clarifications planned to be sought by them on this Tender in the Pre-bid conference, in a Query Sheet and send us the said Query Sheet over email address fab_pm@scl.gov.in or by post as to react the under mentioned address well in advance (i.e.) five (5) days before the Pre-bid conference: Project Manager - FAB Augmentation, Semi-Conductor Laboratory, Sector-72, S.A.S Nagar, Punjab, India - 160071. In case Foreign bidders, foreign national wants to attend the pre-bid conference, shall intimate their willingness to attend the Pre-bid conference at least 5 days in advance with all details such as Passport Number, Country Name and Business Visa details etc. at the e-mail address given above. All prospective bidders shall attend pre-bid conference on scheduled date and time. Any request pertaining to change of date, time and venue of pre-bid conference will not be entertained.	Yes / No / Explain	

	All queries/clarifications from the bidders, related to this RFP, must be directed in writing exclusively to the contact person notified above. Queries/clarifications must be sent in the Pre Bid Queries format attached as Annexure A: Request for Clarifications in the RFP. The preferred mode of delivering written questions to the aforementioned contact person would be through post or email. Telephone calls will not be accepted. In no event SCL will be responsible for ensuring, that bidders inquiries have been received by SCL. After issuance of the RFP, SCL will begin accepting written queries from the bidders. SCL will make efforts to provide a full, complete, accurate and timely response to all queries. However, SCL makes no representation or warranty as to the completeness or accuracy of any response, nor does SCL undertake to answer all the queries that have been posed by the vendor.		
5	Export License: The Contractor shall inform whether Export License for the tendered equipment is required or not. If required, if Contractor to provide commitment that they will able to obtain Export License.	Yes / No / Explain	
6	Arranging any license, if required for supply of equipment/technology/software etc. shall be in the scope of the Contractor. Also the contractor must ensure transfer of ownership of the supplied equipment, software and NVM IP etc. in the name of the purchaser (i.e. Semi-Conductor Laboratory) by the OEM of the equipment, software and IP etc.	Yes / No / Explain	

7	Technical Compliance to Clauses of RFP: Bidders shall submit their Technical Compliance to Clauses of RFP in the attached format marked as Technical Compliance-(Technical Compliance Matrix.pdf) along with their bid. If any deviation is taken for any of the section mentioned in the RFP, bidder shall indicate the same and shall also upload the same with the bid.	Yes / No / Explain	
8	Requirement of Memorandum of Understanding (MOU): Prime Bidder will provide Copy of Memorandum of Understanding (MOU) undertaken with all consortium partners, indicating their roles and responsibilities under this consortium for execution of scope of work as per RFP.	Yes / No / Explain	
9	Delivery Terms for Imported stores: Prices shall be quoted on DAP, SCL SAS Nagar (F.O.R. SCL, SAS Nagar) basis. All materials such as upgrades, equipment, utilities, software, tools and tackles etc. should be supplied by contractor on DAP, SCL SAS Nagar (F.O.R. SCL, SAS Nagar) basis. Transportation from overseas suppliers to IGI airport, New Delhi, Customs clearance and inland transportation from IGI air Port to SCL, SAS Nagar, Loading at airports, unloading at SCL, SAS Nagar and proper storage at SCL specified site shall be the responsibility of the Contractor. However, Customs duty payment and airport handling charges shall be paid/ reimbursed by SCL. Demurrage charges if any, shall not be considered for payment/reimbursement.	Yes / No / Explain	
10	Delivery Terms for Indigenous stores: Prices shall be quoted on F.O.R. destination basis i.e. SCL, S.A.S. Nagar, Mohali, Punjab exclusive of GST as may be applicable.	Yes / No / Explain	

11	Insurance: Under DAP and F.O.R. terms, it will be the responsibility of the Contractor to arrange necessary Insurance coverage to secure the cargo during transit.	Yes / No / Explain	
12	Goods and Service Tax (GST) for Indigenous material: Please mention percentage of applicable GST along with HSN Code in your response.	Yes / No / Explain	
13	Vendors who are offering the delivery term as DDP/F.O.R. basis, please note that, Purchaser is 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, Contractor shall take into consideration the same. 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. (Purchaser will provide Customs Duty Exemption Certificate in case of Import Orders/ imported supplies/ High Sea Sales).	Yes / No / Explain	

14	Security Deposit (SD): Upon award of Purchase Order (PO), the Contractor shall submit security deposit for three percent (3% percent) value of the Purchase Order or as applicable as per Govt. notification at the time of release of 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 executed on non-judicial stamp paper of appropriate value, and shall be 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 entire project satisfactorily as per contract terms. If not, the amount will be forfeited). Note: In case Security Deposit is submitted in the form of Bank Guarantee (BG), the issuing bank shall communicate the genuineness of BG through e-mail from issuing bank domain e-mail ID to hariprasad@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. Important: The Contractor who are submitting SD/PBG via Bank Guarantee are advised to request their bank to route the BG through SFMS gateway and mention IFSC Code of SCL bank, State Bank of India i.e. SBIN00061229 to facilitate verification of Bank Guarantee authenticity.	Yes / No / Explain	

15	Delivery Schedule: A) Supply and Commissioning Equipment /Upgrades/Cleanroom utilities modification 1.Supply, installation, testing and commissioning of all the equipment, equipment upgrades and material required for clean room/ utility modification within 20 months from the date of P.O. 2.Equipment upgrades shall be done in staggered manner and the upgrade of each equipment shall be completed within 4-5 weeks of release of the equipment for the Upgrade(s). MES 1.Supply, installation, testing and commissioning of MES with all related software and hardware within 12 months from the date of P.O. NVM 1.Supply and porting of qualified macro, memory cuts as per SCL requirement, EDA infrastructure, training and documentation within 12 months from the date of P.O.	Yes / No / Explain	

16	Procedure of Bid evaluation: i.New as well as OEM refurbished equipment are acceptable and shall be evaluated on same platform. No additional weightage shall be given to New equipment. ii.If some Non-critical Item(s) in Equipment Upgrade is Not quoted by any bidder, their bid will be loaded by the highest Bid of any bidder for those item(s), for Bid evaluation. Quote for two major equipment upgrades namely Metal etch and ASP chamber in Metal Etcher and SACVD BPSG Deposition chamber in TEOS Equipment are MUST. iii.Purchaser reserves the right to exclude/drop any item/equipment/equipment grade, based on detailed engineering or specifications of the offered item/equipment/upgrade. iv.The bid/offer, however will be evaluated for cost comparison on Overall L-1 basis.	Yes / No / Explain	

17	Installation/Commissioning : The Contractor shall provide in advance guidelines for preparation of the installation site and list of items to be supplied by Purchaser during installation. On receipt of intimation from the Purchaser, the Contractor shall depute its engineer(s) to Purchaser site as mentioned at Clause No. 13 (Installation/Commissioning schedule milestone) to carry out installation and commissioning and will demonstrate the functionality of the tendered equipment to Purchaser specifications as the acceptance per the Acceptance Procedure given in this tender for each equipment/software etc. The Contractor shall be responsible for any loss/damages sustained due to delay on the part of the Contractor to send its engineer for installation and commissioning. Failure to commission the tendered store(s) successfully shall entitle Purchaser to full refund of the payment made and the interest thereon. Decision regarding successful installation and commissioning shall rest solely with the Purchaser.	Yes / No / Explain	
18	Responsibility of Prime bidder : 1. Sole responsibility of successful completion of the project shall lie with the Prime Bidder. 2. Prime Bidder will ensure that ownership of stores supplied under this contract should be in the name of Purchaser.	Yes / No / Explain	

19	Terms of Payment in case of overseas supplier(s): All payments to Foreign Contractors shall be made via Sight Draft/wire transfer mode. The milestone of payment(s) shall be as Under: Payment schedule for Equipment Upgradation and Supply of Equipment: i.80% cost of the supplied material within 30 days from the receipt of material at Purchaser site via sight draft. ii.10% within 30 days against hook-up, installation and commissioning of respective equipment and equipment upgrade via wire transfer. iii.10% within 30 days after acceptance of the entire project at Purchasers site against a Performance Bank Guarantee (PBG) and the same shall be paid via wire transfer or after expiry of warranty. Payment Schedule for Utilities - Design and modification: i.80% within 30 days upon completion of Cleanroom and Utilities modification, as per detailed Engineering, via sight draft. ii.20% within 30 days upon successful qualification for Cleanroom and utilities modification, via sight draft MES PAYMENT SCHEDULE: i.50% within 30 days upon receiving MES and all related software and hardware at Purchaser site, via sight draft. ii.20% within 30 days upon installation and testing, via wire transfer. iii.10% within 30 days after completing all customizations, via wire transfer. iv.10% within 30 days after implementing automatic data capturing from metrology equipments, via wire transfer. v.10% within 30 days upon final acceptance, against PBG, via wire transfer. NVM PAYMENT SCHEDULE: i.20% within 30 days from the Initial documentation on IP, it operation, project work plan and GDS for test	Yes / No / Explain	

	chip, via wire transfer. ii.20% within 30 days from the Post-Silicon Characterization report with Go Ahead for Qualification, via wire transfer. iii.20% within 30 days from the Post-Silicon Qualification report with performance meeting the RFP specification, via wire transfer. iv.30% within 30 days from the Final design macro, memory cuts as per SCL requirement, EDA infrastructure, training, via wire transfer. v.Remaining 10% after 60 days against PBG for the like amount to ensure support during warranty period.		
20	Terms of Payment in case of indigenous supplier(s): All payments to Indigenous supplier by RTGS/NEFT mode as per the milestone of payment(s) mentioned above.	Yes / No / Explain	
21	Bank Charges: 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.	Yes / No / Explain	
22	Price validity: The contract price shall remain firm till the successful execution of the entire project.	Yes / No / Explain	

23	Liquidated Damages (LD): If the Contractor fails to complete the Supply, Installation and commissioning of the Equipment /Equipment upgrades/ Supply and customization of MES/ Completion of establishment of NVM Technology IP in the period stipulated 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 respective cost pertaining to unsupplied stores against Equipment Cost/ Equipment upgrades cost/MES Software cost/ NVM Technology IP Cost for each calendar week of delay. The total liquidated damages shall not exceed ten percent (10 percent) of the Contract price. Wherever, SITC is involved, 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. Delivery of stores shall be complete on Installation, commissioning, Testing and Acceptance.	Yes / No / Explain	

24	Force Majeure: Neither of the parties hereto shall be liable for damage or have the right to cancel for any delay or default in performing its obligations if such delay or default are caused by conditions beyond its control including but not limited to fire, storm, floods, earthquakes, acts of God, government restrictions, continuing domestic or international problems (such as wars, rebellion, insurrections, strikes, riots, work stoppages, Labour dispute) or delay as to ancillary materials, which affect the dates of fulfilment of any obligations as per the purchase contract. Such dates will be respectively postponed for the period of continuance of such force majeure circumstances and the other party can suspend the performance of its obligations correlated to the postponed obligations of the affected party. The obligations thus postponed shall be resumed after the force majeure circumstances have ceased. At the beginning, during and at the pre-visible end of the force majeure circumstances, the parties shall promptly consult with each other about appropriate counter measures to be taken. If the performance of obligations of any party should be delayed more than six (06) months by reasons of force majeure circumstances mentioned above, the parties shall mutually consult about the subsequent performance of obligations.	Yes / No / Explain	

25	Extension of Time: If the completion of supply/installation 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.	Yes / No / Explain	
26	Warranty: i.For supplied Equipment: Vendor has to provide a comprehensive part and labor warranty for a period of 24 months after acceptance of the system at SCL. Vendor to guarantee 85% uptime for the tool based on 24 hours working, 7 days a week. Vendor has to give two Preventive Maintenance Visits per year in the Warranty Period of the tool. Vendor shall provide all spares (including consumable spares: PM Kits, additional Process kits) which will be required during preventive maintenance during the period of warranty. ii.For Equipment Upgrade: One year warranty for equipment upgrades as per Annexure F: Equipment Upgradation and acceptance procedure. Vendor shall provide all spares (including consumable spares: PM Kits, additional Process kits) which will be required during preventive maintenance during the period of warranty. The format for consumable and spare required for preventive maintenance is as per Annexure J: Recommended Consumable Spare for PM. iii.For Embedded Single-Poly MTP-NVM IP Acquisition: Vendor shall provide support for 12 months after successful qualification and acceptance by SCL. During warranty, vendor shall support troubleshooting through help ticket, email or onsite visit.	Yes / No / Explain	

27	Warranty Replacements: If in the opinion of the purchaser it becomes necessary to replace or repair defective equipment during the warranty period, such replacement or repair 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, warranty period plus 2 months from the date of acceptance thereof. All replacement parts during the warranty period shall be supplied by the Contractor, free of cost on DDP (Delivery Duty Paid) basis with freight and insurance upto Purchaser site at S.A.S. Nagar, Punjab and customs duty applicable in India to the Contractor account including compliance with the customs procedure in India as applicable from time to time. The indigenous replacement parts, if any, shall be supplied by the Contractor free of cost on F.O.R. Purchaser site at SAS Nagar, Punjab basis. All defective parts including the imported parts shall be returned by Purchaser to the Contractor, if requested, on Freight to pay basis after receipt of replacement parts.	Yes / No / Explain	
28	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.	Yes / No / Explain	

29	Performance Bank Guarantee (PBG): The Contractor shall furnish a Bank Guarantee (as per format given by purchaser) from any nationalized/scheduled bank for an amount equivalent to 10% of the value of the Purchase Order (PO) before start of warranty period and should be valid for a period of 60 days beyond the expiry date of warranty period. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest. Important: The Contractor who are submitting SD/PBG via Bank Guarantee are advised to request their bank to route the BG through SFMS gateway and mention IFSC Code of SCL bank, State Bank of India i.e. SBIN00061229 to facilitate verification of Bank Guarantee authenticity.	Yes / No / Explain	
30	POST WARRANTY SERVICE/SUPPORT: Spares and maintenance support required for 7 years after the expiry of warranty period. Contractor shall ensure the inventory in their stock to fulfil the Post warranty service/support. During this period Contractor/OEM shall not obsolete any of the equipment.	Yes / No / Explain	
31	Recommended Spares and Consumables: Vendor to provide itemized List of Recommended Spares (for reference) for recommended essential spares and consumables which may be required for meeting the tool uptime. The format for recommended consumable and spare is as per Annexure-I: Recommended Spares and special tools.	Yes / No / Explain	
32	Validity: 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.	Yes / No / Explain	

33	Patent Infringement: (i) Subject to terms of this article, the Contractor hereby warrants and be deemed to have warranted that to the best of its knowledge, the stores supplied under this Contract by Contractor do not infringe any patent, copyright or trade mark registered in India and Country of Origin, as of the Effective date and shall at all times indemnify the Purchaser in accordance with the terms of this Article, against all claims which may be made in respect of the technology for infringement of any patent, copyright or trade mark registered in India and Country of Origin as of the Effective Date. (ii) Purchaser shall not be responsible in any way for the consequences direct or indirect, of any infringement by the Contractor or its Sub-Contractors and their employees, of any patent, copyright, or trademark law or statutes of the Country in which this Contract is performed. (iii)Contractor shall, at its expenses, defend any suits or proceedings based on claims of infringement brought against Purchaser in accordance with Section (i) above, shall satisfy all judgments and pay all expenses which may be incurred by or rendered against Purchaser therewith provided however, that: (a) Purchaser shall have made all payments then due and fulfilled all other material obligations under this Contract. (b) Contractor shall be given exclusive control of the defense and settlement of any such suit. (c) Purchaser promptly informs Contractor in writing of any claim of threat of a claim of infringement with respect to which Contractor has assured responsibility hereunder: and (d) Purchaser assists Contractor by providing any information possessed by Purchaser relevant to the defense or settlement or any such suit.	Yes / No / Explain	

	(iv) In case the stores supplied under this Contract or any part thereof furnished hereunder, as a result of any suit or proceeding so defended under this Article, is held to constitute infringement, and its use is enjoined, Contractor shall, at its options and its expenses, either: (a) Procure for Purchaser the right to continue using said technology or part thereof, or (b) Replace it with substantially equivalent non-infringing stores, or (c) Modify so that it becomes non-infringing.		
34	Mode of Despatch: All materials such as upgrades, equipment, utilities, software, tools & tackles etc. should be supplied by contractor on DAP, SCL SAS Nagar (FOR) basis. Transportation from overseas suppliers to IGI airport, New Delhi, Customs clearance and inland transportation from IGI air Port to SCL, SAS Nagar will be the responsibility of the Contractor. However, any documentation required from the Purchaser, for Transportation/Customs clearance etc., shall be provided by purchaser.	Yes / No / Explain	
35	Packing and Forwarding: It will be the responsibility of the Contractor to pack and crate all stores appropriately 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. Contractor shall also affix the label on each box, indicating that boxes contains highly sensitive material and should not be opened in normal environment other than the Class 100 cleanroom.	Yes / No / Explain	

36	New Machine Certificate: In case of New Equipment, The Contractor shall submit New Machine Certificate alongwith each equipment as well as with the documents for claiming payment indicating the date of manufacture and certifying that the equipment supplied is brand new equipment and not used/refurbished/remanufactured/ reconditioned equipment.	Yes / No / Explain	
37	Chartered Engineer Certificate for Refurbished Equipment: The Contractor will provide a certificate issued by an independent Chartered Engineer or any equivalent in the country of supply alongwith shipping documents for valuation of Refurbished/ Second hand capital goods. The certificate should indicate: i)Price of new equipment as in the year of its manufacture : ii)Current CIF value of new equipment if purchased now : iii)Year of the manufacture of equipment : iv)Sale price of the supplier : v)Present condition of equipment : vi)Nature of reconditioning or repairs carried out, if any, and the cost (including the dismantling cost, if any) thereof :	Yes / No / Explain	
38	SHIPPING MARKS: The mark on the shipping documents such as invoice, bill of lading and on the packages should be as follow: PURCHASE ORDER NO. DATED GOVERNMENT OF INDIA MINISTRY OF ELECTRONICS & INFORMATION TECHNOLOGY (MEITY) SEMI-CONDUCTOR LABORATORY DESTINATION: SECTOR 72, S.A.S. NAGAR (MOHALI), PUNJAB, INDIA.	Yes / No / Explain	

39	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 or c.acquire the defective stores at a reduced price considered equitable under the circumstances. The provision of this article shall not prejudice the Purchasers rights under LD clause.	Yes / No / Explain	

40	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.	Yes / No / Explain	
41	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.	Yes / No / Explain	

42	42.Termination of Contract for Cause: a) The Purchaser may upon written notice of default to the Contractor terminate the contract in whole or in part in circumstances detailed hereunder: i) If there is delay of 100% or more in the completion of the project beyond the original schedule specified in the Contract plus the period for which extension, if any, has been granted by the Purchaser to the Contractor. ii) If the Contractor fails to comply with any of the other provisions of the contract and this cannot be rectified by the Contractor. A written Notice of Termination will be sent by the Purchaser in case delay as mentioned in clause (a) above. On receipt of the Notice of termination, the Contractor will have to response within thirty (30) days failing which this Contract shall be deemed to be terminated. Upon receiving to decide whether or not to terminate this Contract and Purchaser decision shall be final subject to the provisions of the contract. b) In the event of termination of the Contract, the purchaser in addition to any other rights provided in this article, may require the contractor to transfer title and deliver the purchaser under any of the following cases in manner and as directed by the Purchaser. (i) Any Completed stores. (ii) Such partially completed stores, drawing information and contract right (herein after called manufacturing material) as the Contractor has specifically produced or acquired for the Contract as terminated. The purchaser shall pay to the Contractor the contract price for completed stores delivered and accepted by the purchaser and for manufacturing materials delivered and accepted. c) In the event of termination of the Contract, the Purchaser shall be	Yes / No / Explain	

	entitled to a refund of all such advanced and payments previously made to the Contractor under this Contract against which supplied have not yet been made. This would include advance/payments made towards transfer of stores and process documentation. Interest at the rate of LIBOR shall accrue from the date payment was made until the repayment in made by Contractor to the Purchaser. d) In the event of Contractor failure to execute the contract as per various provisions mentioned herein, the Purchaser reserves the right to claim compensation from the Contractor for the loss suffered by the Purchaser on account of Contractor failure to execute the Contract and such compensation shall be worked out on mutually agreeable basis. e) Notwithstanding the above, the Contractor entire liability for breach under this clause shall not exceed the contract price. However, the contractor will not be liable for indirect or consequential damages.		
43	Waiver: There shall be no waiver of any term, provision or condition of this Agreement unless such waiver is evidenced in writing and signed by the waiving party. No omission or delay on the part of any party in exercising any right, power or privilege hereunder shall operate as waiver thereof, nor shall any single or partial exercise of any such right, power or privilege preclude any other or further exercise thereof or of any other right, power or privilege.	Yes / No / Explain	
44	Indicate the Name and address of the Contractor for placing purchase order along with their e-mail ID, contact person name and designation, Telephone no. and fax no.	Yes / No / Explain	

45	a. Name and address of Indian agent, if any. b. Percentage of Indian agent Remuneration/Service Charge, if any: Indian agent remuneration/service charge shall 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. Indian agent remuneration/service charge should be included in the Contract value.	Yes / No / Explain	
46	Adherence of Security Rules of SCL: Contractor shall abide by security procedure in SCL and ensure that all its personnel at SCL strictly follows the same. For this purpose, an identified person from SCL shall communicate the security procedure of SCL to an identified person of Contractor .	Yes / No / Explain	
47	Labour Laws: Contractor shall abide by all labour laws, rules and regulations, which are prevailing and as enforced from time to time and SCL shall not be responsible for any accident or mishap during the course of the subsistence of the contract, to any of engineer / labour employed by Contractor. Contractor shall also ensure that the statutory obligations with regards to the employment of labour under the law are compiled properly and timely by them.	Yes / No / Explain	
48	Insurance of Contractor personnel deployed for installation and commissioning at Purchaser site: Insurance of Contractor personnel deployed for installation and commissioning at Purchaser site shall be arranged by the Contractor and shall be Contractor sole responsibility. The Contractor shall indemnify the Purchaser against any claims arising out of injury/accidents/mishaps to any of the Contractor personnel during installation and commissioning at Purchaser site.	Yes / No / Explain	

49	INSPECTION AND ACCEPTANCE TEST: The Purchasers representatives shall also be entitled at all reasonable times during manufacture to inspect, examine and test on the Contractors 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 purchasers representative permission to inspect, examine and test as if the equipment were being manufactured on the Contractors premises. Such inspection, examination and testing shall not release the Contractor from the obligations under this Contract. For tests on the premises of the Contractor or of any of his sub-Contractors or Consortium partner, 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 purchasers representative to carry out the tests efficiently. When the stores have passed the specified test, the purchaser 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.	Yes / No / Explain	

50	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.	Yes / No / Explain	
51	REQUIREMENT OF ADDITIONAL NUMBERS OF THE STORES/SPARE PARTS/ ACCESSORIES 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.	Yes / No / Explain	

52	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.	Yes / No / Explain	
53	TECHNICAL DOCUMENTATION: The Contractor shall provide installation, operation maintenance and programming manual. All documentation shall be in English language.	Yes / No / Explain	
54	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.	Yes / No / Explain	

55	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 fulfilment of the Contract. The Contractor shall also ensure that perpetual key(s) for the software is supplied and at any time the equipment/software shall not struck due to renewal of software key.	Yes / No / Explain	
56	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.	Yes / No / Explain	
57	CONFIDENTIALITY: Contractor shall not divulge the information relating to the documentation/drawing etc., that are not in public domain and exclusively provided by SCL for its own requirements, to any third party and shall not use for own commercial purposes, without prior written consent from Purchaser. Further Contractor shall maintain absolute secrecy and security of the documentation/drawings and other technical documentation supplied by Purchaser for any purpose and shall return the same to Purchaser after completion of the work.	Yes / No / Explain	

58	CONTRACTORS 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	Yes / No / Explain	
59	Any Other Term:	Yes / No / Explain	

C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	WTPD1,Batch processing ,1.O3 generator	1.00 Nos.		-		
2	WTPD1,Batch processing ,2. Mega sonic generator	1.00 Nos.		-		
3	WTPD1,Batch processing ,3. CD upgrade	1.00 Nos.		-		
4	WTRS1,Batch processing ,1. CD upgrade	1.00 Nos.		-		
5	WTRS1,Batch processing ,2. Mega sonic generator	1.00 Nos.		-		

6	YEDR1,CP measurement upgraded for Computer hardware, Windows Operating Syasuremeupgraded for Compstem and Hard Disk Storage	1.00 Nos.		-		
7	YEOI1,Optical Inspection Station,1. Upgrade YEOI1 for Bevel Inspection	1.00 Nos.		-		
8	YEOI1,Optical Inspection Station,2. Optics needs to be upgraded for existing system	1.00 Nos.		-		
9	YESR1,SEM Review Station,1. IP computer	1.00 Nos.		-		
10	YESR1,SEM Review Station,2. HDD higher capacity for all computers	1.00 Nos.		-		
11	YESR1,SEM Review Station,3. EDX software and computer	1.00 Nos.		-		
12	YESR1,SEM Review Station,4. Optical Microscope replacement	1.00 Nos.		-		
13	YESR1,SEM Review Station,5. OS system upgrade (O2)	1.00 Nos.		-		
14	YEOR1,Optical Review Station,1. Optical module needs to be upgraded.	1.00 Nos.		-		

15	YEOR1,Optical Review Station,2. ADR software needs to be upgraded	1.00 Nos.		-		
16	YEOR1,Optical Review Station,3. Upgrade YEOI1 for Bevel Inspection	1.00 Nos.		-		
17	Supply and installation of MES, as per SOW given in the tender	1.00 Nos.		-		
18	Supply of IPs for NVM (Single Poly non-volatile memory, as per SOW and specifications given in the tender	1.00 Nos.		-		
19	Supply, Installation, testing and commissioning of Cleanroom modifications and Utilities for Equipment Movement	1.00 Nos.		-		
20	De-hook, Move out and Crate 2 old 8” Equipment and re-locate of old 8" Equipment (as per layout drawings given in the tender)	1.00 Nos.		-		
21	CMWO1,CMP Tungsten,6. Slurry Injection System (SIS)	1.00 Nos.		-		

22	CMWO1,CMP Tungsten,7. Upgrade Slurry/DIW main valve from 1 line to 3 line	1.00 Nos.		-		
23	Supply Installation and Commisioning of Dark field defect inspection equipment – KLA PUMA	1.00 Nos.		-		
24	Supply Installation and commisioning of Surfscan-KLA SP1 TBI	1.00 Nos.		-		
25	Supply installation and commisioning of Asher-Mattson Aspen II	1.00 Nos.		-		
26	Supply Installation and Commisioning of Polymer strip equipment after VIA and metal etch, LAM DVI (DV24)	1.00 Nos.		-		
27	Supply Installation and Commisioning of Metal Sputter equipment, AMAT Endura	1.00 Nos.		-		
28	Supply Installation and commisioning of Bright Field defect inspection equipment, KLA 2367 PRO	1.00 Nos.		-		

29	Supply Installation and commisioning of Photoresist strip Pre diffusion clean ZETA VIPER	1.00 Nos.		-		
30	Supply installation and comisioning of Oxide etcher, LAM EXELAN 2300/TEL UNITY ME	1.00 Nos.		-		
31	CMOX1,CMP Oxide,1. In-situ end point system	1.00 Nos.		-		
32	CMOX1,CMP Oxide,2. POU Filter Upgrade	1.00 Nos.		-		
33	CMOX1,CMP Oxide,3. Upgradation of Slurry recirculation and delivery pump in MABAT (CDU 3000) Slurry Delivery System	1.00 Nos.		-		
34	CMOX1,CMP Oxide,4. Hard disk upgrade (from mechanical HDD to RAID SSD)	1.00 Nos.		-		
35	CMOX1,CMP Oxide,5. Upper Pneumatic Assembly (UPA) module upgrade	1.00 Nos.		-		
36	CMOX1,CMP Oxide,6. Upgrade from peristaltic pump to CLC for slurry loop	1.00 Nos.		-		

37	CMOX1,CMP Oxide,7. Slurry Injection System (SIS)	1.00 Nos.		-		
38	CMOX1,CMP Oxide,8. Upgrade Slurry/DIW main valve from 1 line to 3 line	1.00 Nos.		-		
39	CMWO1,CMP Tungsten,1. POU Filter Upgrade	1.00 Nos.		-		
40	CMWO1,CMP Tungsten,2. Upgradation of Slurry recirulation and delivery pump in MABAT Slurry Delivery System	1.00 Nos.		-		
41	CMWO1,CMP Tungsten,3. Hard disk upgrade (from mechanical HDD to RAID SSD)	1.00 Nos.		-		
42	CMWO1,CMP Tungsten,4. UPA (Upper Pneumatic Assembly) module upgrade	1.00 Nos.		-		
43	CMWO1,CMP Tungsten,5. Upgrade from peristaltic pump to CLC for slurry loop	1.00 Nos.		-		
44	MTOP2,Film Thickness and Reflectance Measurement,1 Install Mini environment	1.00 Nos.		-		

45	MTOP2,Film Thickness and Reflectance Measurement ,2. SMIF upgrade	1.00 Nos.		-		
46	MTOP2,Film Thickness and Reflectance Measurement ,3. Wedge Calibration wafer	1.00 Nos.		-		
47	REML1,Metal Etcher (1 DPS ch and 1 ASP ch),1. chamber addition 1 DPS chamber and 1ASP chamber	1.00 Nos.		-		
48	REML1,Metal Etcher (1 DPS ch and 1 ASP ch),2. Change the existing 4.2Mb hard disk to flash drive	1.00 Nos.		-		
49	REML1,Metal Etcher (1 DPS ch and 1 ASP ch),3. Change the floppy drive to USB drive	1.00 Nos.		-		
50	REML1,Metal Etcher (1 DPS ch and 1 ASP ch),4. Existing Buffer CH Viewport window to be upgraded with sapphire glass	1.00 Nos.		-		

51	REPL1,Poly Si / STI Etcher,1. Upgradation of existing Dome Temp. Control Unit (DTCU) of both the Chambers (Including Source Rf match)	1.00 Nos.		-		
52	REPL1,Poly Si / STI Etcher,2. Change the floppy drive to USB drive	1.00 Nos.		-		
53	REPL1,Poly Si / STI Etcher,3. EPD system with EP monitoring at the top of dome for one chamber (AA Etch) only	1.00 Nos.		-		
54	IMHE1,High Energy Implanter,1. Additional wafer Buffer Loader	1.00 Nos.		-		
55	IMHE1,High Energy Implanter,2. Software Upgrade (SunSystem Upgrade and Night backup recorder installation.)	1.00 Nos.		-		
56	TRMU1,Track MUV ,1. Additional - 1 Hot Plate (HHP)	1.00 Nos.		-		
57	TRMU1,Track MUV ,2. Temperature and Humidity Controller Upgrade	1.00 Nos.		-		

58	TRDU1,Track DUV,1. Upgrade PLC on Developer LDS	1.00 Nos.		-		
59	SNDU1,Scanner DUV,1. Installation of Quadrpole Aperture (Resolution improvement)	1.00 Nos.		-		
60	MTCD1,CD SEM,SMIF upgrade	1.00 Nos.		-		
61	CDHD1,HDP Oxide CVD (3 ch),1.Replace ETO RF generator for two chambers with ENI RF generators	1.00 Nos.		-		
62	CDHD1,HDP Oxide CVD (3 ch),2. Change the existing 4.2Mb hard disk to flash drive	1.00 Nos.		-		
63	CDHD1,HDP Oxide CVD (3 ch),3. Change the floppy drive to USB drive	1.00 Nos.		-		
64	CDTS1,PECVD TEOS ,1.Up-grade with RPS	1.00 Nos.		-		
65	CDTS1,PECVD TEOS ,2. SACVD chamber addition	1.00 Nos.		-		
66	CDTS1,PECVD TEOS ,3. Change the existing 4.2Mb hard disk to flash drive	1.00 Nos.		-		
67	CDTS1,PECVD TEOS ,4. Change the floppy drive to USB drive	1.00 Nos.		-		

68	SPCO1,Silicide PVD Sputter,1.Upgradation of Conventional Ti Chamber for TiN capability	1.00 Nos.		-		
69	SPCO1,Silicide PVD Sputter,2. Change the existing 4.2Mb hard disk to flash drive	1.00 Nos.		-		
70	SPCO1,Silicide PVD Sputter,3. Change the floppy drive to USB drive	1.00 Nos.		-		
71	SPLR1,Barrier Metal Deposition,1. High speed robot configuration	1.00 Nos.		-		
72	SPLR1,Barrier Metal Deposition,2. Change the existing 4.2Mb hard disk to flash drive	1.00 Nos.		-		
73	SPLR1,Barrier Metal Deposition,3. Change the floppy drive to USB drive	1.00 Nos.		-		
74	MTFR1,FTIR Spectroscopy,Upgradation for B,P, and Si-OH bond measurement capability.	1.00 Nos.		-		
75	WTSE1,Single Wafer Spin Processor,Chuck Upgrade in both module-Wafer edges can be better handle with upgraded Chuck.	1.00 Nos.		-		

76	WTSE1,Single Wafer Spin Processor,Upgradation of CDS to handle 200 Ltr drum for catering increase chemical consumption with increase capacity	1.00 Nos.		-		
77	WTSE1,Single Wafer Spin Processor,O3 generator upgrade	1.00 Nos.		-		
78	WTSE1,Single Wafer Spin Processor,Addition Heat exchanger for Med 2	1.00 Nos.		-		
79	SBXC1,Pod and Cassette Cleaner,PLC upgrade	1.00 Nos.		-		
80	SSRT1,Wafer Sorter - Wafer Start,Upgrade to wafer Back side reading	1.00 Nos.		-		
81	SSRT2,Wafer Sorter - Common Area,Upgrade to wafer Back side reading	1.00 Nos.		-		