



MEMORANDUM OF UNDERSTANDING

Between

National Institute of Electronics & Information Technology (NIELIT)

And Semi-Conductor Laboratory (SCL)

This Memorandum of Understanding (hereinafter referred to as "MoU") is made and executed on 25th April, 2025 ("Effective Date") at New Delhi.

BY AND BETWEEN

The National Institute of Electronics & Information Technology an Autonomous Scientific Society under the administrative control of Ministry of Electronics & Information Technology (MeitY), Government of India, represented by Dr. Madan Mohan Tripathi, Director General, NIELIT, having its office at NIELIT Bhawan, Plot No.3, PSP Pocket, Sector-8, Dwarka, New Delhi-110077, hereinafter Called "NIELIT", which expression shall, unless it be repugnant to the context or meaning thereof, be deemed to mean and include its executors, administrators and assigns of the first party.

AND

Semi-Conductor Laboratory an autonomous body under Ministry of Electronics & Information Technology (MeitY), Government of India, represented by Dr. Kamaljeet Singh, Director General, SCL, having its office at Govt. of India, Sector-72, Industrial Area, Sahibzada Ajit Singh Nagar, Punjab 160071, hereinafter Called "SCL", which expression shall, unless it be repugnant to the context or meaning thereof, be deemed to mean and include its executors, administrators and assigns of the second party.

WHEREAS, NIELIT is set up to carry out Human Resource Development and related activities in the field of Information, Electronics & Communications Technology (IECT). NIELIT is engaged both in Formal & Non-Formal Education in the area of IECT besides development of industry-oriented quality education and training programs in the state-of-the-art technologies.

WHEREAS, SCL aims to provides end-to-end solutions for the development of Application-Specific Integrated Circuits (ASICs), Opto-electronics Devices, and Micro-Electro-Mechanical System (MEMS) Devices. This encompasses Design.

राष्ट्रीय इनिक्रिनिक्स एवं मृचना प्रौद्योगिकी संस्थान (रा.इ.सू.प्रौ.स)

National Instruct ्र Earth was and Information Technology (NIELIT) नाइसिट भवन, लाट अवर 3, पीएसपी पाकेट, सेक्टर-8, द्वारका, नई दिल्ली-110077 NIELIT Bhawan, Piot No.3, PSP Pocket, Sector-8, Dwarka, New Delhi-110077

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उत्कृष्ट वैज्ञानिक एवं महा निवेशक Outstanding Schoolst a Director General मेमो-कडकेळ्ळालिबोरटर्ग इन्ला-Conductor Laboratory लिस्ट्रॉनिको और मुक्ता अंटर्गिकितो संग्रहेक्या Ministry of Electronics & Information Technology





Fabrication, Assembly, Packaging, Testing, and Reliability Assurance.

AND, WHEREAS, both the parties have held discussions and have agreed for collaboration with the purpose of synergizing their mutual strengths in public interest and to deliver a larger good for the society.

NOW, THEREFORE, IN CONSIDERATION OF THE PROMISES MADE AND THE MUTUAL COVENANTS SET FORTH HEREIN, THE PARTIES HEREBY AGREE AS FOLLOWS:

1. UNDERSTANDING AND COLLABORATION POINTS:

1.1 Skilling Collaboration

- i. Master Trainer Program: SCL will provide theory classes training to NIELIT's designated master trainers on ATMP (Assembly, Testing, Marking, and Packaging) operations.
- ii. Emphasis on Advanced Packaging: The training program will include current packaging techniques being used by SCL along with miniaturization trends on advanced substrates. Theory lectures will cover recent market trends for heterogeneous packaging techniques relevant to the semiconductor industry.
- iii. Curriculum Development Support: SCL will collaborate with NIELIT in designing and updating curriculum and training materials for ATMP courses, integrating advanced packaging modules.
- iv. Practical Training: The program will feature ATMP production facility visit, Show & tell, watch & learn approach to provide trainings & real time exposure to production facility at SCL. This will enable NIELIT master trainers to gain direct experience with industry-standard equipment.
- v. Certification Courses: To design and deliver courses in semiconductor and other related technologies for students, academicians and industry professionals. Certification will be done by NIELIT.
- vi. Workshops & Seminars: Both the organizations will participate in workshops, seminars, conferences, on-line lectures on semiconductor and other related technologies to engage a broader audience.
- vii. Utilization of the infrastructural facilities: Facilities such as software, computational facility and industrial skill augmentation available at SCL and NIELIT through modular courses or customized training for the mutual benefits at mutually agreed rates/ terms and conditions.

1.2 Research & Development Collaboration

i. Joint Research Projects: NIELIT and SCL will collaborate on R&D initiatives in

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National Institute (NIELIT)
नाइसिट भवन, १५७६ - २८७३ (राज्या) पासेट, सेक्टर-8, द्वारका, नई दिस्ती-11007व
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उत्कृष्ट वैज्ञानिक एवं महा निर्देशक

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सेभी-कंडक्टर लेखे देश) Serbi-Conductor Lagora ry
इतेक्ट्रीनिकी और सूचना प्रीरियोगिक मंद्रालय .

Ministry of Electronics & Information Technology
भागत भरकार / Goyt of India





- semiconductor and other related technologies.
- ii. Shared Facilities & Expertise: Both institutions will facilitate access to their research infrastructure, including equipment, software, technical expertise, technical papers and library to support collaborative R&D efforts.
- iii. Researcher & Expert Exchange: NIELIT and SCL will explore short-term and long-term exchange programs for researchers and technical experts to enhance knowledge sharing and accelerate advancements in semiconductor and other related technologies.
- iv. SCL will share PDKs with NIELIT for the development of open source-based EDA flows, and design of Chips/IPs based on open source tools.
- v. SCL will facilitate NIELIT to manufacture the chips/IPs designed by NIELIT to ensure that it is silicon proven.
- vi. SCL and NIELIT will establish a synergy for overall development of students & youth in the area of Chip and System Design and other emerging technologies.
- vii. To mutually collaborate for R&D in Semiconductors and in the domains of mutual interest as per demand on mutually agreed terms.
- viii. Undertake, aid, promote, guide, and coordinate research to promote the development of the semiconductor ecosystem in India.
 - ix. SCL and NIELIT will support each other in leveraging their respective area of expertise.

1.3 Academic Collaboration

- i. Higher Education Opportunities: SCL scientists and engineers will have the opportunity to pursue Master's and Ph.D. programs under NIELIT D2U (Deemed to be university).
- ii. Adjunct Faculty Engagement: SCL scientists and engineers may contribute as adjunct faculty members at NIELIT D2U, strengthening academic-industry linkages.
- 2. IMPLEMENTATION PROCESS: The NIELIT and the SCL will identify their respective nodal officers to define framework, including feedback process and coordinate this initiative. Both the parties may also form a sub-committee to deliberate upon the implementation methodology and to guide and monitor the progress of implementation of the MoU. Both parties acknowledge and understand that all financial arrangements, if any, will be subjected to prior written agreement, availability of funds for each activity/project undertaken and upon mutually agreed implementation methodology.

3. ADDENDUM FOR OTHER PROJECTS: If parties envisage any

Outstanding Scientist & Director General सेभी-कडक्टर लेबीरूजे / Semi-Conductor Laboratory इकेस्ट्रॉनिकी और सूचना प्रौदयोगिकी मंत्रालय Ministry of Electronics & Information Technology

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requiring payment of fees, then both the parties will sign a separate addendum on project-to-project basis.

- 4. TERM OF THE MoU: The MoU shall be effective from the date of execution and shall remain in-force for a period of THREE (3) years unless terminated earlier in accordance with the MoU or completion of the obligations mentioned under this MoU.
- 5. EXTENSION OF THE MoU: After having a mutual discussion about the work completed during the running period, the additional opportunities can be included and the extension will be finalized after signing a separate document.
- 6. DELIVERABLES & REPORTING: All deliverables and reports pertaining to the project shall be elaborated in the proposal to be shared, whenever required.
- 7. OBLIGATION OF THE PARTIES: The parties agree to display NIELIT and SCL logos, in relation to a project on project site, its resource materials, annual report(s), newsletters and its website. To this extent, both Parties shall ensure that the intellectual property rights of each other are not breached. Parties shall exercise reasonable skill, care and diligence in the performance of the MoU. NIELIT and SCL shall ensure that all the project obligations are met as per project wise addendum, which is to be executed separately.
- 8. TERMINATION: Each Party has the right to terminate this MoU by giving 90 days advance notice to the other Party or on a mutually agreeable basis. Without prejudice to the foregoing, steps shall be taken to ensure that the termination of this MoU will not compromise or discriminate against any of the activities undertaken.

9. OTHER TERMS & CONDITIONS:

Amendment: The MoU shall be amended only by written mutual consent of both the Parties to the MoU.

No Relationship: Nothing in this MoU shall constitute or be deemed to constitute a partnership between neither the Parties, nor render one the agent of the other for any purpose whatsoever. Neither Party shall have the right or authority, to assume, create or have the power to bind the other Party to contract or create any liability or obligation, expressed or implied, against, in the name of, or on behalf of another डॉ. कमलजीत सिंह / Dr. KAMAL

party.

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भारत सरकार / Govt of India





Force Majeure: A Party shall be excused from performing its obligations under this MoU to the extent its performance is delayed or prevented by a Force Majeure Event provided that the affected Party promptly notifies the other of the occurrence of Force Majeure Event. For the purposes of this clause, "Force Majeure Event" means circumstances beyond reasonable control of a Party, including but not limited to, change in government policy, fire, flood, epidemic, act of God, war and riot. In case the Force Majeure Event continues for a period exceeding thirty (30) days, either Party shall have the right to terminate this MoU with immediate effect.

Notices: All notices, reports and receipts shall be in writing and shall be deemed duly given on (i) the date of personal or courier delivery; (ii) the date of transmission by telecopy or other electronic transmission service, provided a confirmation copy is also sent no later than the next business day as in (i), or confirmation of receipt is received, or (ii) the date of receipt by any other means of delivery.

The address for service of notice to the respective Parties is as given below: NIELIT

NIELIT Bhawan, Plot No.3, PSP Pocket, Sector-8, Dwarka, NewDelhi-110077.

SCL

Govt. of India, Ministry of Electronics & Information Technology (MeitY),

Sector-72, Industrial Area,

Sahibzada Ajit Singh Nagar,

Punjab 160071.

Either party may change its mailing address by written notice to the other Parties in accordance with this paragraph. The Parties may also later decide upon sharing each other's email ID for such notices etc.

by each other in connection with this MOU, confidential, use it only for the purpose of this Project, protect it from unauthorized use, reproduction, access and damage or destruction and employ the same degree of care as it would employ to protect its own confidential information. Under such an eventuality where in the information is required to be shared with statutory bodies, each party must intimate the other party of such disclosure at least Five (5) days before submitting the information to

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the statutory bodies.

The Parties shall not during or after the termination of the MoU disclose to any third party any confidential information arising from the MoU (other than in the proper performance of their duties hereunder or as may be required by a court or arbitration panel of competent jurisdiction) except with the prior written permission from the other Party.

For the purposes of this Clause, "Confidential Information" shall mean Information relating to proprietary, technological, economic, financial, legal, administrative, business or technical matters of both Parties.

11. INTELLECTUAL PROPERTY RIGHTS (IPR)

- 11.1 Information on research results and study materials (reports, articles, books) will be exchanged freely keeping in mind the mutually agreed provision of Intellectual Property Rights. All Intellectual Property solely conceived and/or developed by SCL during the course of this Agreement shall be owned by SCL. All Intellectual property solely conceived and or developed by NIELIT during the course of this agreement shall be owned by NIELIT Intellectual property jointly conceived and or jointly developed by NIELIT and SCL will be jointly owned by NIELIT and SCL. Patents will be as per SCL guidelines. Each party may use such property for research and study purpose. NIELIT and SCL will be committed to the protection of appropriate and application of such intellectual property for commercial or other purpose on mutually acceptable terms to be negotiated in good faith between NIELIT and SCL.
- 11.2 NIELIT and SCL shall acknowledge one another in any form of writing, publication or presentation based on research derived from the co-operative efforts of both parties under this MoU unless otherwise mutually agreed upon in writing by the parties.

12. GOVERNING LAW AND DISPUTE RESOLUTION:

In case of dispute arises between the parties, the parties shall attempt to amicably resolve all the disputes arising out of this MoU and the obligations hereunder ("Dispute"). Either Party may give written notice of a dispute to the other Party within ten (10) days of the occurrence of the event which gives rise to such Dispute or the date such event comes to the notice of the applicable Party. Any dispute between NIELIT and SCL-India in connection with this MoU shall be referred to the designated officials of NIELIT and SCL-India for mutual discussions and negotiations.

mutual discussions and negotiations. निर्मात स्टर-८, वारका, नई दिल्ली-110077 IELIT Bhawan, Piot 140.5, PSP Pocket, Sector-8, Dwarka, New Delhi-110077

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b) If the parties fail to resolve the issue amicably, the parties would refer the dispute to AMRDC (Administrative Mechanism for resolution of Dispute). Both the parties shall resort mechanism to resolve disputes as per the OM issued by the Ministry of Law & Justice dated 31/03/2020.

13. JURISDICTION:

This Clause shall be binding. This MoU shall be governed by and interpreted in accordance with the laws prevailing in India. Both Parties irrevocably submit to the exclusive jurisdiction of the Courts in Delhi, India for any action or proceeding arising out of or in connection with this MoU.

IN WITNESS WHEREOF, the parties hereto, each acting under due and proper authority, have executed this mutually binding Memorandum of Understanding as on the date first written above.

For NIELIT Name:

Designation:

Stamp: एवं मुनन वैलेकिन चल्का के वै.मं)
National Institute of Electrons
नाइतिट भवन, स्रोट नंबर 3, पीएसपी भाग्य, कार्याक, बहु हिस्सी-110077
NIELIT Bhawan, Plot No.3, PSP Pocket, Sector-8, Dwarka, New Delhi-110077

Witness:

1.

For SCL, Punjab

Name:

Designation:

Stamp विज्ञानिक एवं महा निदेशक

Outstanding Scientist & Director General के अन्वत लेगोरनी / Semi-Conductor Laboratory प्रतिको और सूचन पीवरोणको स्वालय div of Electronics & Information Technology

Spoter 72, S.A.S. Nagar

Witness:

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