

BUREAU OF INDIAN STANDARDS

AGENDA

18th MEETING OF SEMICONDUCTOR AND OTHER ELECTRONIC COMPONENTS AND DEVICES SECTIONAL COMMITTEE, LITD 05

(Hybrid Meeting)

| Date & Time | 21 st October 2024 Time : 14:00 hrs | | |
|--------------|-----------------------------------------------------------------|--|--|
| | Bureau of Indian Standards, Bengaluru, Opp. Jalahalli Metro, | | |
| Venue | Peenya Indistrial Area 1st Stage, Tumkur Rd, Vivekananda Nagar, | | |
| | Peenya, Bengaluru, Karnataka 560058 | | |
| Meeting link | https://bismanak.webex.com/bismanak/j.php?MTID=m3acbd4c79 | | |
| | e8c6bfcd647e423573314fe | | |
| Meeting ID | 25172317029 | | |
| Password | 123456 | | |
| | | | |

Chairperson: Shri Jery Varghese.K, Scientist 'G', DRDO, LRDE

Member Secretary: Shri Kalluri.N.V.S.Chaitanya, Scientist 'C', BIS

ITEM 0 WELCOME

- **0.1** Welcome by the Member Secretary
- **0.2** Opening remarks by the Chairperson

ITEM 1 FORMAL CONFIRMATION OF THE MINUTES OF THE LAST MEETING

1.1 The minutes of the 17th meeting of "Semiconductor and Other Electronic Components And Devices" sectional committee, LITD 05, which was held on 26 October 2023, were circulated. No comments have been received.

The Committee May Formally Confirm The Minutes.

ITEM 2 SCOPE AND COMPOSITION COMMITTEE

- 2.1 The Scope and composition of LITD 05 is given in Annex 1.
- **2.2** Liaison with IEC Committees
 - IEC/TC 40 Capacitors and resistors for electronic equipment Participating (P)
 - ➤ IEC/TC 91 Electronics assembly technology Participating (P)
 - IEC/TC 47 Semiconductor devices Observer (O)

- SC 47A Integrated circuits Observer (O)
- SC 47D Semiconductor devices packaging Observer (O)
- SC 47E Discrete semiconductor devices Observer (O)
- SC 47F Micro Electromechanical Systems Observer (O)
- **2.3** Co-option requests have been received from the following Organizations/Institutes:
 - ➤ Omkar Consultants— Mr. Trupti Deokule, Detailed CV is given in Annex-2
 - ➤ Siemens EDA- Mr. Vikas Kohli, Detailed CV is given in Annex-2
- 2.4 Co-option requests have been received from the following persons as individual capacity:
 - ➤ Amitesh Kumar, Detailed CV is given in **Annex-2**
 - ➤ Devendra Tandel, Detailed CV is given in **Annex-2**
 - ➤ Vinod Belwanshi, Detailed CV is given in **Annex-2**
 - ➤ Rahul Ingle, Detailed CV is given in **Annex-2**

The Committee May Review The Scope & Composition

ITEM 3 Creation of panels for Semiconductor devices, Integrated Circuits, Capacitors and Resistors and Electronics assembly technology

As Semiconductor devices and Integrated Circuits is a field in boom and lot of new standards are being developed at international level and lot of new requirements are arising for Government and Industries for the standardization of new work items. Panels may be created on the following subjects for successfully carrying out the work at national and international level and as India is already a P Member in TC 40 Capacitors and resistors for electronic equipment and TC 91 Electronics assembly technology. In view of the above the following panels may be created:

- 1. Panel 1 for **Semiconductor Devices**.
- 2. Panel 2 for **Integrated Circuits.**
- 3. Panel 3 for Capacitors and Resistors for Electronic Equipment.
- 4. Panel 4 for **Electronics assembly technology.**

The Committee May Discuss And Decide

ITEM 4 NATIONAL STANDARDIZATION ACTIVITIES

4.1 NEW WORK ITEM PROPOSAL

- **4.1.1** New work item proposals (NWIP) have been proposed by MeitY is annexed in **Annex-3**. MeitY has requested to provide Standards on the items attached in Annex-3. It is proposed that a working group may be created for the purpose of carrying out work on the items in **Annex-3**.
- **4.1.2** Two new work items Proposals have been received from M/s Vishay Components India Pvt.Ltd for TC 40 Capacitors and resistors for electronic equipment. The proposals are as follows.
 - i. Amendment proposal for IEC 60286-1. The document for this amendment is attached in **Annex-4**.
 - ii. NP for METHOD OF MEASUREMENT OF THERMAL RESISTANCE OF SMD CHIP RESISTORS. The document for this NP is attached in **Annex-5.**

ITEM 5 REVIEW OF STANDARDS UNDER DEVELOPMENT

5.1 Draft Indian Standards under WC Draft

The following draft Indian standards are under WC-draft stage and comments have been received only for the document LITD/05/16612. The last date for comments of WC Draft was completed for all the below documents. Comments received for the document LITD/05/16612 is attached in Annex-6. The committee may deliberate regarding finalization of the following documents:

| S. | | | |
|----|-------------------------|----------------------------------------|---------------------------------|
| N | | | Remarks of the secretariat |
| 0 | Document Number | Title | |
| 1 | | | Editorial comments received for |
| | | | this document are attached in |
| | | | Annex-6. Fresh Document may |
| | | | be circulated as P-Draft to the |
| | | Printed Circuit Board Assembly Part 1 | committee members for 1 |
| | LITD/05/16612 | Safety Requirements | month. |
| | | | No comments have been |
| 2 | | Semiconductor Devices � Discrete | received for this document. We |
| | LITD/05/23273IS14901: | Devices Part 7 Bipolar Transistors (| may consider this document for |
| | Part 7: 2020 | First Revision) Amendment - 1 | finalization. |
| | | | No comments have been |
| 3 | | Varistors for use in Electronic | received for this document. We |
| | LITD/05/25416(Identical | Equipment Part 1: Generic | may consider this document for |
| | To: IEC 61051-1:2018) | Specification | finalization. |
| | | Fixed Capacitors for use in Electronic | No comments have been |
| | | Equipment Part 11: Sectional | received for this document. We |
| 4 | | Specification Fixed Polyethylene- | may consider this document for |
| | LITD/05/25417(Identical | Terephthalate Film Dielectric Metal | finalization. |
| | To: IEC 60384-11:2019) | Foil DC Capacitors | |
| | | Fixed Capacitors for use in Electronic | No comments have been |
| 5 | | Equipment Part 8: Sectional | received for this document. We |
| | LITD/05/25418(Identical | Specification Fixed Capacitors of | may consider this document for |
| | To: IEC 60384-8 : 2024) | Ceramic Dielectric Class 1 | finalization. |
| | | Fixed Capacitors for use in Electronic | No comments have been |
| | | Equipment Part 3: Sectional | received for this document. We |
| 6 | | Specification Surface Mount Fixed | may consider this document for |
| | LITD/05/25420(Identical | Tantalum Electrolytic Capacitors with | finalization. |
| | To: IEC 60384-3:2016) | Solid MnO2 Electrolyte | |

5.2 Draft Indian Standards for Finalization

The following draft Indian standards are under Finalization

| S.No | Document Number | Title | Remarks of the secretariat |
|------|-----------------|-----------------------------|--------------------------------------------|
| 1 | LITD/05/16543 | Printed Circuit Boards Part | Fresh Document may be recirculated as P- |
| | | 1 Safety Requirements | Draft for 1 month to the committee members |

The Committee May Discuss & Decide

ITEM 6 PROGRAM OF WORK

6.1 The present program of work of LITD 05 is given in **Annex-7.**

The Committee May Consider

ITEM 7 INTERNATIONAL STANDARDIZATION ACTIVITIES

- 7.1 Presently, LITD 05 acts as National Mirror Committee of following committees:
 - ➤ IEC/TC 40 Capacitors and resistors for electronic equipment Participating (P)
 - IEC/TC 91 Electronics assembly technology Participating (P)
 - IEC/TC 47 Semiconductor devices Observer (O)
 - SC 47A Integrated circuits Observer (O)
 - SC 47D Semiconductor devices packaging Observer (O)
 - SC 47E Discrete semiconductor devices Observer (O)
 - SC 47F Micro Electromechanical Systems Observer (O)

India is a P-member in IEC/ TC 40, IEC TC 91 and O-member in IEC/ TC 47. Participating members have an obligation to vote and participate in international meetings and have access to all the IEC documents. 'O' members are observer members. They do not have any voting rights, also they cannot participate in international meetings. However, they have access to all the IEC documents.

- 7.2 List of standards published by IEC/ TC 40, 91,47 and the list of Indian Standards that are mapped to International Standards and the list of Indian Standards that are not mapped with Indian Standards is given at **Annex-8**.
- 7.3 Voting and comments for the upcoming ballots. List of all upcoming ballots is attached in Annex-9.
- **7.4** Status of the work of our experts in the working groups at international level. The list of working groups in each TC and SC and the experts associated with the working groups is attached in **Annex-10.**

7.5 Participation in working groups in TC 47, SC 47A, SC 47D, SC 47E and SC 47F for updating the membership of India in TC 47, SC 47A, SC 47D, SC 47E and SC 47F.

As Semiconductor devices and Integrated Circuits is a field in boom and lot of new standards are being developed at International level and lot of new requirements are arising for Government and Industries for the standardization of new work items, we should participate in the work of TC 47, SC 47A, SC 47D, SC 47E and SC 47F for active participation and involvement in the international standardization work and also for putting up the new proposals and standardization requirements pertaining to the semiconductors and integrated circuits. In view of all the above we should start our participation in TC 47, SC 47A, SC 47D, SC 47E and SC 47F and their working groups.

7.6 Forthcoming ISO/IEC Plenary Meetings:

| Meeting | Date | Mode |
|---------------------------------------------------|---------------------|--------|
| TC 40 Plenary Meetings Japan (Tokyo) | 18-21 November 2024 | Hybrid |
| TC 47 Plenary Meetings United Kingdom (London) | 25-29 November 2024 | Hybrid |

The agenda for the upcoming TC 40 meeting is placed at Annex-11. Agenda for TC 47 meeting is placed at Annex-12. Members may consider participation.

The Committee May Discuss And Decide

ITEM 8 Guidelines on Research Projects

8.1 Introduction

BIS has issued Guidelines for Research & Development Projects for Formulation and Review of Standards. The Objectives of this Scheme are to:

- A. Support and commission R&D projects to generate knowledge, empirical data and insights that would help in formulating new standards and updating & upgrading the existing Indian standards.
- B. Expand the network of domain area experts to carryout R&D projects in the areas related to standardization and conformity assessment; and
- C. Enrich the research ecosystem in the educational institutions imparting technical and professional education.

BIS will publish a list of research & development projects along with Terms of Reference (ToR) on Standardization portal or any other suitable digital platform.

8.2 The current guidelines for R&D projects for establishments/revision of Indian Standards is given in **Annex-13.**

The Committee May Please Note

ITEM 9 DATE AND PLACE FOR THE NEXT MEETING
ITEM 10 ANY OTHER BUSINESS

Annex-1

Scope: To prepare Indian standards relating to:

- a. Semiconductor devices & integrated circuits.
- b. Capacitors, resistors, allied component
- c. Discrete semiconductor devices & micro-electromechanical systems
- d. Electronic assembly technologies and printed board assemblies.
- e. Capacitors resistors and inductors for use in electronics equipment.

Committee Composition

| Sl. | Organization | Member Name | Role |
|-----|----------------------------------------------|----------------------|--------------------|
| No | o i guinzuoi | 112011Well 1 (Wille | 21010 |
| • | | | |
| 1 | Electronics Component | JERY VARGHESE K | Chairperson |
| | Standardization | | |
| | organisation | | |
| 2 | Bharat Electronics Limited, | Shri Sharanappa.B | Principal Member |
| | Bengaluru | | |
| 3 | Bharat Electronics Limited, | Ms Manjula Raju | Alternate Member |
| | Bengaluru | | |
| 4 | CSIR - Central Electronics | Shri Ashok Chauhan | Principal Member |
| | Engineering Research | | |
| 5 | Institute, Pilani CSIR - Central Electronics | Shri Sai Krishna | Alternate Member |
|) | Engineering Research | Silii Sai Kiisiila | Alternate Member |
| | Institute, Pilani | | |
| 6 | Deki Electronics Private | Sankar Raj Poyyaly | Principal Member |
| | Limited, New Delhi | | |
| 7 | Deki Electronics Private | Mohammad Rasheen | Alternate Member |
| | Limited, New Delhi | | |
| 8 | Directorate General of | DC-AC | Alternate Member |
| | Quality Assurance, New | | |
| | Delhi | | |
| 9 | Electronic Industries | Rajoo Goel | Principal Member |
| | Association of India, New | | |
| 40 | Delhi | Ch.: ACHOK KUNAAD | Alta and Alamba |
| 10 | Electronic Industries | Shri ASHOK KUMAR | Alternate Member |
| | Association of India, New Delhi | DUGGAL | |
| 11 | Electronic Industries | MP Dubey | Alternate Member |
| 11 | Association of India, New | Will Dubey | Alternate Welliber |
| | Delhi | | |
| 12 | Electronic Test and | Dr N.C. Joshi | Principal Member |
| | Development Centre, | | • |
| | Bangalore | | |
| 13 | Electronics Corporation of | P.ANJALI | Principal Member |
| | India Limited, Hyderabad | | |
| 14 | Electronics Corporation of | P GANESH | Alternate Member |
| | India Limited, Hyderabad | Cl : NA l : | A.I |
| 15 | Electronics Regional and | Shri Mahaveer Prasad | Alternate Member |
| | Test Laboratory (North), New Delhi | Sharma | |
| | New Deini | | |

| 16 | Electronics and Radar Development Establishment, Bengaluru | Shri Sreenivasulu | Principal Member |
|----|---------------------------------------------------------------------------|-----------------------|------------------|
| 17 | Electronics and Radar Development Establishment, Bengaluru | Amit Singh Bisht | Alternate Member |
| 18 | IPC India Ltd | Saurabh Kumar Saxena | Principal Member |
| 19 | Indian Cellular and Electronics Association, New Delhi | Ramashish Ray | Alternate Member |
| 20 | Indian Cellular and Electronics Association, New Delhi | Neeraj Agrawal | Principal Member |
| 21 | Indian Printed Circuit Association, Bengaluru | Shri V. Ramani | Alternate Member |
| 22 | Indian Printed Circuit Association, Bengaluru | Shri M Thiyagarajan | Principal Member |
| 23 | Micropack Limited, Bengaluru | Shri Pradeep | Alternate Member |
| 24 | Micropack Limited, Bengaluru | Shri U. Nagaraj | Principal Member |
| 25 | Ministry of Electronics and Information Technology, New Delhi | Shri P. Satheesan | Principal Member |
| 26 | Ministry of Electronics and Information Technology, New Delhi | Dr. B.K. Yadav | Principal Member |
| 27 | The Institution of Electronics and Telecommunication Engineers, New Delhi | Niranjan Prasad | Principal Member |
| 28 | The Institution of Electronics and Telecommunication Engineers, New Delhi | Dr. Ajay Agarwal | Alternate Member |
| 29 | Uni Automation (I) Private Limited, Pune | Vidyadhar K Mahajan | Principal Member |
| 30 | Vishay Components India Private Limited, Pune | Shri Mandar Sinnarkar | Principal Member |