

Jahresbericht 2022

TK 47, Halbleiterbauelemente

Vorsitz: vakant
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Im Berichtsjahr fand keine Sitzung des TK 47 statt. Es besteht neu aus 8 Experten. Insgesamt wurden 169 Dokumente aus IEC an das TK verteilt. Die 65 Stellungnahmen zu den verteilten Dokumenten erfolgten auf dem Korrespondenzweg.

Das TK 47 ist aktuell in den folgenden IEC-Gremien mit Experten vertreten:

- TC 47/WG 6 Incubating Working Group
- TC 47/WG 7 Semiconductor devices for energy conversion and transfer
- SC 47E/WG 1 Semiconductor sensors
- SC 47E/WG 8 Magnetic and capacitive couplers for basic and reinforced isolation

Es wurden 19 IEC-Normen publiziert, davon folgende 15 neu:

- IEC 62951-9:2022 Semiconductor devices - Flexible and stretchable semiconductor devices - Part 9: Performance testing methods of one transistor and one resistor (1T1R) resistive memory cells
- IEC 63068-4:2022 Semiconductor devices - Non-destructive recognition criteria of defects in silicon carbide homoepitaxial wafer for power devices - Part 4: Procedure for identifying and evaluating defects using a combined method of optical inspection and photoluminescence
- IEC 63275-1:2022 Semiconductor devices - Reliability test method for silicon carbide discrete metal-oxide semiconductor field effect transistors - Part 1: Test method for bias temperature instability
- IEC 63275-2:2022 Semiconductor devices - Reliability test method for silicon carbide discrete metal-oxide semiconductor field effect transistors - Part 2: Test method for bipolar degradation due to body diode operation
- IEC 63284:2022 Semiconductor devices - Reliability test method by inductive load switching for gallium nitride transistors
- IEC TR 63357:2022 Semiconductor devices - Standardization roadmap of fault test method for automotive vehicles
- IEC 63364-1:2022 Semiconductor devices - Semiconductor devices for IoT system - Part 1: Test method of sound variation detection
- IEC 63373:2022 Dynamic on-resistance test method guidelines for GaN HEMT based power conversion devices
- IEC 62228-6:2022 Integrated circuit - EMC evaluation of transceivers - Part 6: PS15 transceivers
- IEC 62228-7:2022 Integrated circuits - EMC evaluation of transceivers - Part 7: CXPI transceivers
- IEC 60747-5-14:2022 Semiconductor devices - Part 5-14: Optoelectronic devices - Light emitting diodes - Test method of the surface temperature based on the thermorefectance method
- IEC 60747-5-15:2022 Semiconductor devices - Part 5-15: Optoelectronic devices - Light emitting diodes - Test method of the flat-band voltage based on the electroreflectance spectroscopy

- IEC 60747-16-7:2022 Semiconductor devices - Part 16-7: Microwave integrated circuits - Attenuators
- IEC 60747-16-8:2022 Semiconductor devices - Part 16-8: Microwave integrated circuits - Limiters
- IEC 62047-42:2022 Semiconductor devices - Micro-electromechanical devices - Part 42: Measurement methods of electro-mechanical conversion characteristics of piezoelectric MEMS cantilever

In San Francisco fand im November zusammen mit dem 86th IEC GENERAL MEETING das IEC/TC 47 Plenary Meeting statt, das auch vom TK 105 mit einem Experten vertreten war.

(HP. L.)