IECQ ASSURES QUALITY IN THE ELECTRONICS INDUSTRY

IEC QUALITY ASSESSMENT SYSTEM FOR ELECTRONIC COMPONENTS (IECQ)
IECQ ASSURES QUALITY IN THE ELECTRONICS INDUSTRY

What is the IECQ?

IECQ is a worldwide approval and certification system, covering the supply of electronic components, associated materials, assemblies, and processes. It uses quality assessment specifications that are based on International Standards prepared by the IEC (International Electrotechnical Commission).

IECQ is about assurance and cost-cutting. Electrical and electronic products comprise many, sometimes hundreds of individual components and sub-assemblies. The well-known brand manufacturers and their purchasing managers want to be assured that the electronic components used in their products are of the required quality and reliability. To minimize incoming inspection costs and eliminate the quality auditing of suppliers, they can choose component suppliers who hold IECQ product certification for their components.

What does the IECQ do?

- IECQ helps purchasing managers and those involved in procurement to ensure that they are getting the highest quality electronic components that they order from their suppliers;
- IECQ helps component suppliers provide the guarantee that their products are of the high quality that is expected today;
- IECQ provides a valuable supply chain management and control system; and
- IECQ eliminates the need for second party auditing of component suppliers.

What components are we talking about?

At present there are eight families of electronic components covered by the IECQ along with their respective raw materials and assemblies for which they are utilized.

- active components, including integrated circuits;
- electromagnetic components;
- electromechanical components;
- electro-optic components;
- hybrid integrated circuits;
- passive components;
- printed wiring boards; and
- wire and cables.

To support industry, IECQ also operates the IECQ HSPM (Hazardous Substance Process Management) Certification scheme, which provides IECQ HSPM Certification holders with a single global system of demonstrating their compliance with the Green Process Management System. For this, the International IECQ Specification QC 080000 was developed. This takes
the basic quality management system requirements of ISO 9001 and provides a specific focus for the legislative and customer requirements for the management of hazardous substances. These are now a very common requirement worldwide, e.g. European Restriction of Hazardous Substances Directive.

IECQ is continuously expanding into new fields, being one of the more recent IECQ ECMP Electronic Component Management Plan initially for the avionics industry. It now audits original equipment manufacturers that manage and control the use of electronic components for their avionic equipment.

How does the IECQ work?

There are two aspects to the IECQ: facility certification and product certification.

- **Facility:** An IECQ Certification Body (IECQ CB) will evaluate the supplier’s quality management system and grant facility approval for the family (or families) of component(s) concerned.

- **Product certification:** Suppliers have to show, through testing, that the component conforms to the relevant quality assessment specifications declared by the manufacturers. Some suppliers have their own in-house testing facilities for all of the tests required by the specification or standard. The IECQ CB will ensure that these testing facilities are adequate. Those who do not have the testing facilities may use outside testing laboratories that are accepted to the IECQ CB.

How can I find out more?

Visit the IECQ website at [www.iecq.org](http://www.iecq.org).

You may also wish to contact the IECQ Secretariat:

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About the IEC

The IEC (International Electrotechnical Commission) is the world’s leading organization that prepares and publishes International Standards for all electrical, electronic and related technologies and administers Conformity Assessment Systems that certify that components, equipment and systems conform to them.

The IEC brings together 165 countries, and over 13 000 experts cooperate on the global IEC platform to ensure that products work everywhere safely with each other. IEC work enables global value chains; allows industry and companies of all sizes to access global markets faster and at less cost, and permits nations to better protect their citizens.

IEC work covers a vast range of technologies: power generation (including all renewable energy sources), transmission, distribution, Smart Grid, batteries, home appliances, office and medical equipment, all public and private transportation, semiconductors, fibre optics, nanotechnology, multimedia, information technology, and more. It also addresses safety, EMC, performance and the environment.

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