

JEDEC STANDARD

Component Quality Problem Analysis and Corrective Action Requirements (Including Administrative Quality Problems)

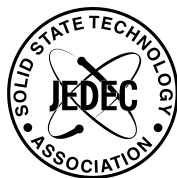
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COMPONENT QUALITY PROBLEM ANALYSIS AND CORRECTIVE ACTION REQUIREMENTS (INCLUDING ADMINISTRATIVE QUALITY PROBLEMS)

(From JEDEC Board Ballot JCB-98-16, formulated under the cognizance of the JC-14.4 Committee on Quality System Standardization.)

1 Introduction

Timely and accurate root cause failure analysis and the establishment and maintenance of an effective corrective action system are of critical importance to an electronic component supplier's ability to effectively develop new products, introduce them to volume manufacture, and support their successful use in customer applications. For customer-initiated problem analysis or corrective action requests, the initial response, failure analysis, and corrective action turnaround time requirements vary widely. The driving factors that determine problem analysis and corrective action priorities and resultant turnaround times are the impact on the customer, the impact on the supplier, and the complexity of the component problem.

2 Purpose

This standard establishes a common set of customer and supplier expectations and requirements that will help to facilitate the successful problem analysis and corrective action of component problems, including administrative quality problems, that may affect the customer.

3 Scope

The scope of this standard includes any customer-initiated component problem analysis/corrective action request and supplier-identified component nonconformances to specification when it may impact the customer.

4 Application documents

ANSI/ASQC Q9001	Quality Systems - Model for Quality Assurance in Design/Development, Production, Installation and Servicing (US version of ISO9001)
ANSI/ASQC Q9002	Quality Systems - Model for Quality Assurance in Production and Installation (US version of ISO9002)
ANSI/ASQC Q9003	Quality Systems - Model for Quality Assurance in Final Inspection and Test
EIA-599	National Electronic Process Certification Standard
EIA-625	Requirements for Handling Electrostatic-Discharge Sensitive (ESDS) Devices

5 Terms and definitions

component problem: Any problem related to the supplier's component, that causes interruption to the customer's production flow.

- a) Administrative Problem (e.g., wrong product, wrong quantity, packing/materials, orientation, date code, paperwork, shipping damage, shipping error, labeling, etc.)
- b) Electrical Problem (e.g., functional, parametric, timing, continuity, programming, etc.)
- c) Visual/Mechanical Problem (e.g., marking, leads, package body, solderability, contamination, etc.)

containment: Interim action(s) taken to minimize the effects of component problems on customers until corrective actions are implemented.

corrective action: Actions taken to eliminate the root cause(s) of an existing nonconformity, or other undesirable situation in order to prevent recurrence.

disposition: The act of determining the future use of nonconforming material, e.g., scrap, use-as-is, retest, rework, other.

failure analysis: Investigation to determine the failure mechanism of an electrical or visual/mechanical nonconforming component.

failure mechanism: The physical, chemical, electrical, or other process that has led to a nonconformance.

failure mode: The way in which a failure mechanism manifests itself in a failing component (electrical signature or workmanship standard).

preventive action: Actions taken to modify the management systems, operating systems, practices, or procedures to prevent recurrence of the current problem, and similar problems, where applicable.

problem analysis: Investigation to determine the root cause of an administrative component problem.

root cause: The source of the failure mechanism or cause of an administrative problem.