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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 36467-2018

**Reliability growth -- Stress testing for early failures in unique
complex systems**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the translation method equivalent to using IEC 62429.2007 "Early failure stress test for certain complex systems with increased reliability".

The Chinese documents that have a consistent correspondence with the normatively cited international documents in this standard are as follows.

---GB/T 5080.1-2012 Reliability test Part 1. Test conditions and principles of statistical inspection (IEC 60300-3-5.

2001, IDT)

---GB/T 5080.2-2012 Reliability Test Part 2. Test Cycle Design (IEC 60605-2.1994, IDT)

1 Scope

This standard gives guidance on the reliability growth of the final test and acceptance test for a particular complex system, and gives the final test and acceptance.

Accelerated test conditions and termination guidelines for testing. "Specific" means there is no relevant information for similar systems, and a small amount of production means

The information generated by these tests will have limited effect on future products.

This standard applies to the growth of the reliability of repairable complex systems consisting of hardware embedded software and is used to describe the procedures for acceptance testing.

The commissioning ensures that the reliability of the delivered system will not be reduced due to coding errors, process errors or manufacturing errors. This standard applies only to the Department

The early life cycle of the life cycle does not apply to accidental failures, nor does it apply to loss-of-use failures. This standard can also be used by manufacturers in

Prototypes, single systems, or small batch productions are optimized for the duration of the

internal production test.

This standard applies to large hardware/software systems, but does not include large-scale network systems such as telecommunications and electricity networks because these systems

The new parts cannot usually be isolated during the test.

This standard does not apply to independent software testing, but its method can be used when embedded software is used to simulate workloads on hardware systems.

The test. This standard applies to the reliability of the system before the delivery or delivery of the growth test, the test can be in the manufacturer's or user's site

get on.

If users use the improved hardware and newer versions of software to perform reliability growth, this standard can be used to guide this growth process.

This standard applies to a wide range of fields, but it does not apply to health or safety systems.

This standard does not apply to systems covered by IEC 62279 [38].

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 2900.13-2008 Electrotechnic terms reliability and quality of service (IEC 60050-191..1990, IDT)

IEC 60300-3-5 Reliability Management Part 3-5. Application Guidelines Reliability Test Conditions and Statistical Test Principles (Depend-

abilitymanagement-Part 3-5.

Applicationguide-Reliabilitytestconditionsandstatisticaltestprinci-

Ples)

IEC 60605-2 Equipment reliability test - Part 2. Design of test cycle (Equipment reliability test-Part 2.

Designoftestcycles)

IEC 61163-1.2006 Reliability Stress Screening Part 1. Batch Reworkable Products (Reliabilitystress)

screening-Part 1. Repairable assemblies manufactured in lots)

IEC 61163-2 Reliability Stress Screening Part 2. Electronic Components
(Reliability stress screening-Part 2. Elec-

Tronic components

IEC 61164 Reliability growth statistical test and assessment method (Reliability
growth-Statistical test and

Estimation methods)

IEC 61710 power function model goodness of fit test and estimation method
(Power law model-Goodness-of-fit and esti-

Mation methods)