

Military Overview

Introduction

Cypress Semiconductor is committed to support the military market. This dedication is demonstrated by the participation in the QML program to become a fully qualified QML manufacturer. Cypress wholly supports the SMD (Standard Military Drawing) program with an ongoing endeavor to ensure all compliant products are documented by an SMD. The commitment is indicated by our dedication to meet and exceed the stringent quality and reliability levels as required by our internal goals and our customers' requirements through MIL-STD-883 and MIL-PRF-38535.

Product Design

Every Cypress military product is designed to meet or exceed the full temperature and functional requirements as defined by MIL-STD-883 and the applicable detail specification. This means that Cypress builds military product as a matter of course, rather than as an accidental benefit of favorable test yield. Designs are being carried out in our industry-leading 0.65-micron CMOS and BiCMOS processes. Cypress is able to offer a family of products that are industry leaders in density, low operating and standby current, and high speed. In addition, our technology results in products with very small manufacturable die sizes that will fit into the LCCs and flatpacks used in military programs.

Certifications

On May 8, 1986, the Cypress facility at 3901 North First Street in San Jose, California was certified by DESC for the production of JAN Class B CMOS Microcircuits. On February 16, 1994, Cypress received QML (Qualified Manufacturers List) transitional certification from DESC to the requirements of MIL-PRF-38535. After performing successful audits, DESC issued letters of conformance for ISO-9000 compliance, to each fabrication, manufacturing, and test location.

Datasheet Documentation

Every Cypress final data sheet is a documented specification. The document number and revision appears on each final data sheet. Cypress maintains a listing of all data sheet documentation and a

copy is available to customers upon request. This gives a customer the ability to verify the current status of any data sheet and it also gives that customer the ability to obtain updated specifications as required.

Every final data sheet also contains detailed Group A subgroup testing information.

Assembly Traceability Code™

Cypress Semiconductor places an assembly traceability code on every military package that is large enough to contain the code. The ATC automatically provides traceability for that product to the individual wafer lot. This unique code provides Cypress with the ability to determine which operators and equipment were used in the manufacture of that product from start to finish.

Quality and Reliability

Mil-Std-883 and MIL-PRF-38535 specify the most stringent quality and reliability standards for military products. Cypress products meet all of these requirements and more. Our in house quality and reliability programs are regularly reviewed and updated as part of our continuous improvement program.

Military Product Offerings

All Cypress military products are available with processing in compliance with MIL-STD-883 screened to the electrical requirements as specified on the applicable data sheet.

Products are available to the SMD (Standardized Military Drawing) program administered by DESC. These products are fully MIL-STD-883D compliant, screened to the electrical requirements of the applicable military drawing.

Product Packaging

A description of packages is contained in the appendix in the back of this data book. A wide variety of packages are offered. Included are CerDIPs, windowed CerDIPs, leadless chip carriers (LCCs), windowed leadless chip carriers, cerpaks, windowed cerpaks, quad cerpaks, windowed quad cerpaks, bottom-brazed flatpacks, and pin grid arrays.

Assembly Traceability Code is a trademark of Cypress Semiconductor Corporation.