

January 21, 2000 (v2.0)

The High-Reliability Programmable Logic Leader

Xilinx is the leading supplier of High-Reliability programmable logic devices to the aerospace and defense markets. These devices are used in a wide range of applications such as electronic warfare, missile guidance and targeting, RADAR, SONAR, communications, signal processing, avionics and satellites. The Xilinx QPRO family of ceramic and plastic QML products (Qualified Manufacturers Listing), certified to MIL-PRF-38585, provide system designers with advanced programmable logic solutions for next generation designs. The QPRO family also includes select products that are radiation hardened for use in satellite and other space applications.

The Xilinx QPRO family addresses the issues that are critical to the aerospace and defense market:

QML/Best commercial practices. Commercial manufacturing strengths result in more efficient process flows

Performance-based solutions, including cost-effective plastic packages.

Reliability of supply. Controlled mask sets and processes insure the same quality devices, every time, without variation, which remain in production for an extended time.

Off-the-shelf ASIC solutions. Standard devices readily available, no need for custom logic and gate arrays.

Unmatched Product Offering

The QPRO family provides a wide variety of devices, delivering the industry's fastest and biggest devices. The Virtex members of the QPRO family offers FPGAs with densities greater than 1,000,000 system gates, and even larger devices planned for the future. This broad range of devices is available in a wide variety of speed and package options. Both military temperature and full QML/SMD versions are available as standard off-the-shelf products. Select software cores, such as complete PowerPC peripherals, is also available.

Products for Space Applications

Xilinx offers the industry's only radiation hardened reconfigurable FPGAs for satellite and space. These devices are manufactured using an epitaxial wafer process, and have guaranteed total dose, latch up immunity, and low soft upset rates. These products allow for the ultimate in design and mission flexibility in a cost-effective manner.

QML Certification Part of Overall Quality Platform

Being certified to MIL-PRF-38535 QML complemented by ISO-9000 certification results in an overall product quality platform that makes Xilinx a world-class supplier of programmable logic devices. Designers can confidently design with Xilinx for High-Reliability systems with the knowledge they are getting unsurpassed quality and reliability, and long-term commitment to the aerospace and defense market.

Commitment to the Aerospace and Defense Market

Xilinx understands that our customers need to be able to count on their suppliers to be around for the long-term. Xilinx is committed to the long-term support of the aerospace and defense market, and we are continually expanding our product portfolio. Because our focus is in the form of a vertical market concept, we are able to provide emphasis on all of our customer's product requirements.

Table 1: High Density High Performance and Radiation Hardened Products

Family	Devices	Features
XC/XQ4000/E/EX	XC4005/E XC4010/E XC4013/E XC4025E XQ4028EX	<ul style="list-style-type: none"> • 5,000-28,000+ gates • Up to 256 user-definable I/Os • Extensive system features include on-chip user RAM, built-in 1149.1 test support and fast carry logic
XQ4000XL	XQ4013XL XQ4036XL XQ4062XL	<ul style="list-style-type: none"> • Up to 130,000 system gates • 3.3 V, 5V-compatible I/O
XQR4000XL Radiation Hardened	XQR4013XL XQR4036XL XQR4062XL	<ul style="list-style-type: none"> • Up to 130,000 System Gates • 60K Rads total dose, latchup immune
Virtex	XQV100 XQV300 XQV600 XQV1000	<ul style="list-style-type: none"> • Up to 1,000,000 System Gates, 2.5V
Virtex Radiation Hardened	XQVR300 XQVR600 XQVR1000	<ul style="list-style-type: none"> • 100K Rads Total Dose, Latchup Immune

Revision Control

Date	Version	Description
1/98	1.1	Version 1.1 -- High-Reliability and QML Military Products, correct erroneous information page 2 "XC3000 Products", delete last page, table - "Mil-PRF-3853 QML, Xilinx M Grade and Plastic Commercial Flows"
11/98	1.2	Version 1.2 - Added new products, corrected XC3000, XC4000 products.
02/02/00	2.0	Updated Introduction and product listing.