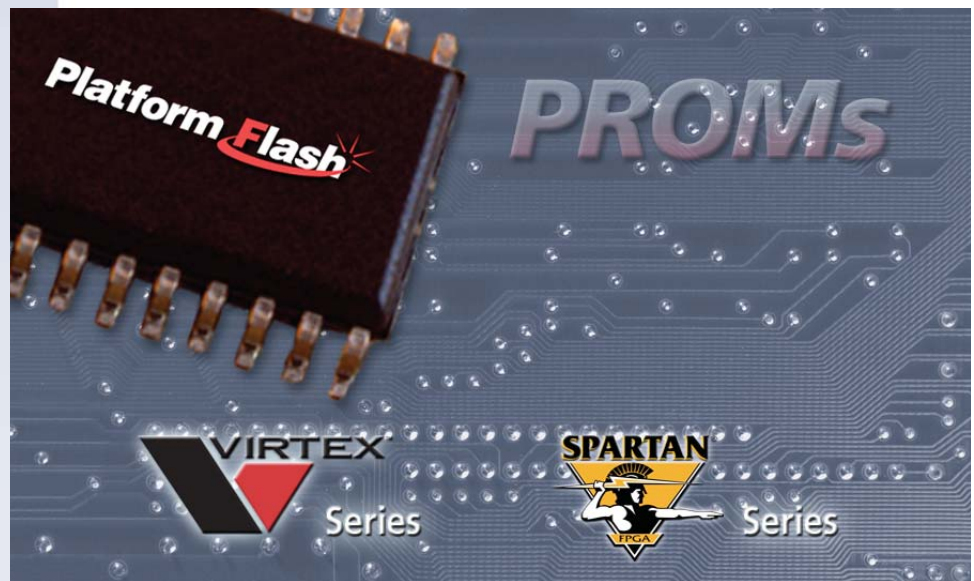# Platform Flash PROM
Industry's Lowest-Cost Configuration Solution

Selecting the right PROM for design configuration presents a variety of challenges. Often, this means choosing between a higher-cost, in-system programmable device, a one-time programmable device that costs less but can't be reprogrammed, or a PROM that may not be optimized for the specific FPGA but is readily available.

Xilinx Platform Flash PROMs deliver everything you need in a single high-performance, low-cost family. You get innovative configuration memory with value-added features that enable greater flexibility and performance for Virtex™ and Spartan™ FPGAs. Plus, they're backed by proven technology that combines Xilinx expertise in configuration control logic with a proven partner in Flash memory technology.

Best of all, Xilinx Platform Flash PROMs feature the small package size, high densities, and competitive price you need to reduce your overall board cost.

Low-Cost In-System Programmability

Configuring FPGAs in a system is now easier than ever before. With Platform Flash PROMs, designers get a system-level drop-in solution that allows them to maximize the flexibility of Virtex and Spartan FPGA-based systems to significantly reduce their design effort and accelerate their time to market. These devices offer greater flexibility for managing the configuration of systems with multiple FPGAs.

- **Competitively Priced Configuration PROMs**
- **Small Area per Megabit**
  - Reduces amount of board space required for configuration
  - VO20 (Thin Shrink Small-Outline, 20 leads) and the FS48 (Thin Flat Ball Grid Array, 48 balls) packages

- **Complete 1-Mbit to 32-Mbit PROM Family**
  - Use just one Platform Flash PROM to configure Xilinx FPGAs
  - Simplifies manufacturing flow
  - Reduces inventory cost

- **In-System Programmability**
  - Makes design changes easy during all phases of the product lifecycle, including development and verification
  - Simplifies manufacturing flow and board test by supporting on-board programming
  - Enables easy field upgrades

- **Xilinx Advanced Compression Technology**
  - Increases effective memory capacity by up to 50% with advanced compression technology, allowing the use of a smaller-density, lower-cost Xilinx Platform Flash PROM
  - Available in all high-density devices, from 8 Mbits to 32 Mbits

- **Xilinx ISE Tools and Programming Support**
  - Compatible with existing ISE software tools, enabling lower configuration costs now with the Platform Flash PROMs

Broad Density Range and Flexibility

The Platform Flash PROM family has six members—three low-density devices and three high-density devices. Together, they offer a range of devices to support configuration of all Xilinx FPGAs:

- **Low-Density Devices** (XCFxxS)
  - Serial configuration PROMs in densities of 1, 2, and 4 Mbits in the VO20 package (Thin Shrink Small-Outline Package, 20 leads)
- **High-Density Devices** (XCFxxP)
  - 8-, 16-, and 32-Mbit densities in FS48 package (Thin Flat Ball Grid Array, 48 balls)
  - Both serial and parallel configuration

Platform Flash PROMs deliver powerful advantages over competing products:

- Up to 32 Mbits of configuration space in a small (72-mm^2) footprint allows you to store several programs in a single, very-small footprint PROM. Use one 32-Mbit device to configure one high-density FPGA or to store multiple FPGA bitstreams for daisy-chain configuration.

- Design Revisioning allows you to program one high-density PROM application. This lets you to use one Platform Flash PROM and one system board to deliver multiple applications.
- The Xilinx Advanced Compression Technology provides for storage of up to 50% more bits, reducing costs even further.
- SelectMAP decreases FPGA configuration time by bursting out bitstreams eight bits at a time.
- Platform Flash PROMs comply with the industry-standard IEEE 1532 interface so you can use existing equipment to test and program devices—without the need for additional programming expense.

Take the Next Step

Visit our website for more information or call your local sales office or distributor for a presentation and software tool demonstration.

www.xilinx.com/products/platformflash

	XCF01S	XCF02S	XCF04S	XCF08P	XCF16P	XCF32P
Density	1Mb	2Mb	4Mb	8Mb	16Mb	32Mb
JTAG Prog	✔	✔	✔	✔	✔	✔
Serial Configuration	✔	✔	✔	✔	✔	✔
SelectMAP Configuration				✔	✔	✔
Compression				✔	✔	✔
VCC (V)	3.3	3.3	3.3	1.8	1.8	1.8
VCCO (V)	1.8 – 3.3	1.8 – 3.3	1.8 – 3.3	1.5 – 3.3	1.5 – 3.3	1.5 – 3.3
VCCJ (V)	2.5 – 3.3	2.5 – 3.3	2.5 – 3.3	2.5 – 3.3	2.5 – 3.3	2.5 – 3.3
Configuration Clock (MHz)	33	33	33	40	40	40
Package	VO20	VO20	VO20	FS48, V048	FS48, V048	FS48, V048
Lead-free Package	Yes	Yes	Yes	Yes	Yes	Yes

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