FPGA Configuration PROMs

Manufacturer:	AMD Xilinx, Inc
Package/Case:	PLCC
Product Type:	Programmable Logic ICs
Lifecycle:	Obsolete
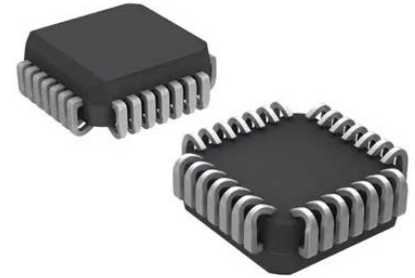
Images are for reference only

Inquiry

General Description

The XC1700 family of configuration PROMs provides an easy-to-use, cost-effective method for storing large Xilinx FPGA configuration bitstreams. When the FPGA is in Master Serial mode, it generates a configuration clock that drives the PROM. A short access time after the rising clock edge, data appears on the PROM DATA output pin that is connected to the FPGA DIN pin. The FPGA generates the appropriate number of clock pulses to complete the configuration. After configured, it disables the PROM. When the FPGA is in Slave Serial mode, the PROM and the FPGA must both be clocked by an incoming signal. Multiple devices can be concatenated by using the CEO output to drive the CE input of the following device. The clock inputs and the DATA outputs of all PROMs in this chain are interconnected. All devices are compatible and can be cascaded with other members of the family.

For device programming, either the Xilinx Alliance or Foundation software compiles the FPGA design file into a standard Hex format, which is then transferred to most commercial PROM programmers.

Key Features

One-time programmable (OTP) read-only memory designed to store configuration bitstreams of Xilinx® FPGAs

Simple interface to the FPGA; requires only one user I/O pin

Cascadable for storing longer or multiple bitstreams

Programmable reset polarity (active High or active Low) for compatibility with different FPGA solutions

XC17128E/EL, XC17256E/EL, XC1701, and XC1700L series support fast configuration

Low-power CMOS floating-gate process

XC1700E series are available in 5V and 3.3V versions

XC1700L series are available in 3.3V only

Available in compact plastic packages: 8-pin SOIC, 8- pin VOIC, 8-pin PDIP, 20-pin SOIC, 20-pin PLCC, 44- pin PLCC or 44-pin VQFP

Programming support by leading programmer manufacturers

Design support using the Xilinx Alliance and Foundation™ software packages

Guaranteed 20 year life data retention

Lead-free (Pb-free) packaging available

Recommended For You

XCF128XFT64C	XC18V04VQ44I	XC17128EPD8I
AMD Xilinx, Inc	AMD Xilinx, Inc	AMD Xilinx, Inc
BGA	QFP	DIP8

XC1765ELSO8C	XC18V04VQ44C	XC18V01SO20C
AMD Xilinx, Inc	AMD Xilinx, Inc	AMD Xilinx, Inc
SOP8	QFP44	SOP20

XC18V04VQG44C	XCF32PVOG48C	XC18V01PCG20C
AMD Xilinx, Inc	AMD Xilinx, Inc	AMD Xilinx, Inc
QFP	TSOP48	PLCC20

XCF04SVO20C	XC2C256-7CPG132I	XCF04SVOG20C
AMD Xilinx, Inc	AMD Xilinx, Inc	AMD Xilinx, Inc
TSSOP20	BGA132	TSSOP20

XCF08PFS48C	XC18V01VQ44C	XC1765EPD8C
AMD Xilinx, Inc	AMD Xilinx, Inc	AMD Xilinx, Inc
BGA	TQFP44	DIP8