

Features

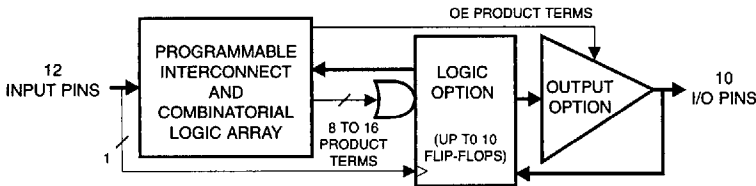
- Quarter Power Equivalent of ATF22V10B - 55 mA Maximum
- Low Power ATF22V10BQL - 10 mA Maximum Standby
- Industry Standard Architecture
Low-Cost, Easy-To-Use Software Tools
- High Speed Electrically Erasable Programmable Logic Device
15 ns Max Propagation Delay
- CMOS and TTL Compatible Inputs and Outputs
Input and I/O Pull-Up Resistors
- Advanced Flash Technology
Reprogrammable
100% Tested
- High Reliability CMOS Technology
20 Year Data Retention
100 Erase/Write Cycles
2,000 V ESD Protection
200 mA Latchup Immunity
- Full Military, Commercial and Industrial Temperature Ranges
- Dual-In-Line and Surface Mount Packages in Standard Pinouts

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High Performance Flash PLD

Advanced Information

Logic Diagram



Description

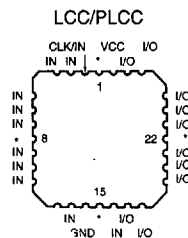
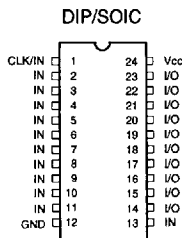
The ATF22V10BQs are high performance CMOS (electrically erasable) Programmable Logic Devices (PLDs) that utilize Atmel's proven electrically erasable Flash memory technology. Speeds down to 15 ns and power dissipation as low as 10 mA are offered. All speed ranges are specified over the full 5 V ± 10% range for military and industrial temperature ranges, and 5 V ± 5% for commercial ranges.

The ATF22V10BQL provides the fastest low power CMOS PLD solution, with low DC power (5.0 mA typical). The ATF22V10BQL significantly reduces total system power and enhances system reliability.

(continued)

Pin Configurations

Pin Name	Function
CLK	Clock
IN	Logic Inputs
I/O	Bidirectional Buffers
*	No Internal Connection
VCC	+5 V Supply



Description (Continued)

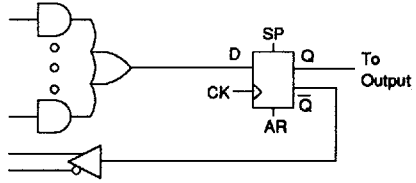
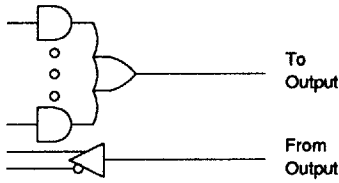
The ATF22V10BQs incorporate a variable product term architecture. Each output is allocated from eight to 16 product terms, which allows highly complex logic functions to be realized.

Two additional product terms are included to provide synchronous preset and asynchronous reset. These terms are common to

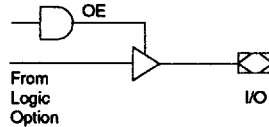
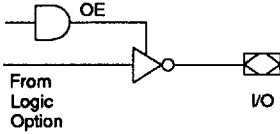
all 10 registers. All registers are automatically cleared upon power up.

Register Preload simplifies testing. A Security Fuse prevents unauthorized copying of programmed fuse patterns.

Logic Options



Output Options



D.C. and A.C. Operating Conditions

	Commercial	Industrial	Military
Operating Temperature (Case)	0°C - 70°C	-40°C - 85°C	-55°C - 125°C
Vcc Power Supply	5 V ± 5%	5 V ± 10%	5 V ± 10%