

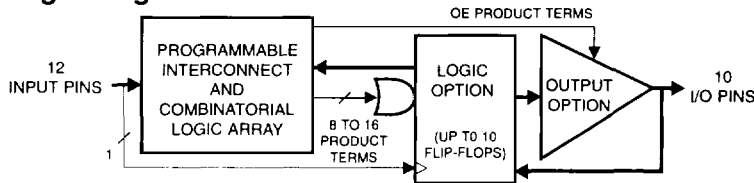
Features

- User-Controlled Power Down Pin
- Low Voltage Equivalent of ATF22V10B
- Wide Supply Range 2.7 V to 5.5 V
- Pin-Controlled Zero Standby Power (10 μ A Typical)
- Ideal for Battery Powered Systems
 - Low-Cost, Easy-To-Use Software Tools
- High Speed Electrically Erasable Programmable Logic Device
 - 5 ns Max Propagation Delay
- CMOS and TTL Compatible Inputs and Outputs
 - Latch Feature Hold Outputs to Previous Logic States
- 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
- Virtually Zero Standby Power

High Performance Flash PLD

Advance Information

Logic Diagram



Description

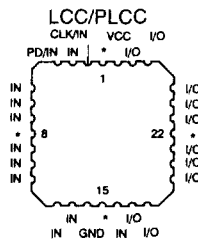
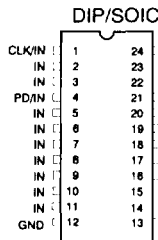
The ATF22LV10C is a low voltage compatible CMOS high performance Programmable Logic Device (PLD) which utilizes Atmel's proven electrically erasable Flash memory technology. Speeds down to 10 ns with "zero" standby power dissipation are offered. All speed ranges are specified over the 2.7 V to 5.5 V range. All pins offer low $\pm 10 \mu$ A leakage.

The ATF22LV10C provides the low voltage and user-controlled zero power CMOS PLD solution. A user-controlled power down feature, offers "zero" (10 μ A typical) standby power. This feature allows the user to manage total system power to meet specific application requirements, enhance reliability, without sacrificing speed. (The ATF22LV10CZ provides

(continued)

Pin Configurations

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



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Description (Continued)

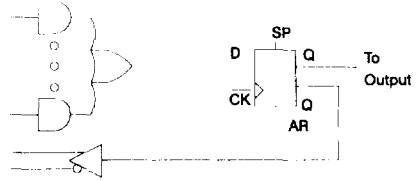
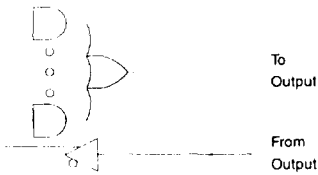
edge-sensing "zero" standby power (10 μ A typical), see the ATF22LV10CZ Data Sheet in this Data Book.)

The ATF22LV10C is capable of operating at supply voltages down to 2.7 V. When the power down pin is active the device is placed into a zero standby power power-down mode. When the power down pin is not used or active, the device operates in a full power low voltage mode. Pin "keeper" circuits on the input and output pins hold pin to their previous logic level when idle. This can reduce static power consumed by pull-up resistors.

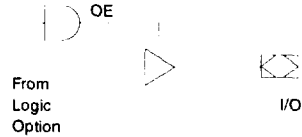
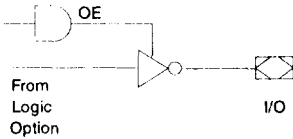
The ATF22LV10C macrocell incorporates a variable product term architecture. each output is allocated from eight to 16 product terms, which allows highly complex logic functions to be realized.

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.

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	3 V \pm 10%	3 V \pm 10%	3 V \pm 10%