

FPGA ProASIC®3 Family 250K Gates 231MHz 130nm Technology 1.5V 256-Pin FBGA Tray



Images are for reference only

Manufacturer: [Microchip Technology, Inc](#)

Package/Case: BGA

Product Type: Programmable Logic ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

[Inquiry](#)

General Description

Flash Advantages Reduced Cost of Ownership

Advantages to the designer extend beyond low unit cost, performance, and ease of use. Unlike SRAMbased FPGAs, flash-based ProASIC3E devices allow all functionality to be Instant On; no external bootPROM is required. On-board security mechanisms prevent access to all the programming informationand enable secure remote updates of the FPGA logic. Designers can perform secure remote in-systemreprogramming to support future design iterations and field upgrades with confidence that valuableintellectual property (IP) cannot be compromised or copied. Secure ISP can be performed using theindustry-standard AES algorithm. The ProASIC3E family device architecture mitigates the need for ASICmigration at higher user volumes. This makes the ProASIC3E family a cost-effective ASIC replacementsolution, especially for applications in the consumer, networking/ communications, computing, andavionics markets.

Security

The nonvolatile, flash-based ProASIC3E devices do not require a boot PROM, so there is no vulnerableexternal bitstream that can be easily copied. ProASIC3E devices incorporate FlashLock, which providesa unique combination of reprogrammability and design security without external overhead, advantagesthat only an FPGA with nonvolatile flash programming can offer.

Key Features

High Capacity

Reprogrammable Flash Technology

On-Chip User Nonvolatile Memory

High Performance

In-System Programming (ISP) and Security

Low Power

High-Performance Routing Hierarchy

Recommended For You

A3P250-PQ208

Microchip Technology, Inc
QFP

A3P250-FGG256I

Microchip Technology, Inc
BGA256

A3P1000-1PQG208M

Microchip Technology, Inc
QFP

A3P1000-PQG208

Microchip Technology, Inc
QFP

A3P1000-FGG256I

Microchip Technology, Inc
FBGA256

A3P1000-FG256I

Microchip Technology, Inc
256-LBGA

A3P1000-FGG484I

Microchip Technology, Inc
FBGA484

A3P250-VQG100

Microchip Technology, Inc
QFP

A3P250-VQG100I

Microchip Technology, Inc
VQFP

A3P250-FGG144I

Microchip Technology, Inc
BGA

APA300-BG456M

Microchip Technology, Inc
BGA

A3P1000-FG144

Microchip Technology, Inc
BGA

A3P1000-1FG484I

Microchip Technology, Inc
484-BGA

A3P1000-1FGG144I

Microchip Technology, Inc
BGA

A3PN060-VQG100

Microchip Technology, Inc
QFP100