



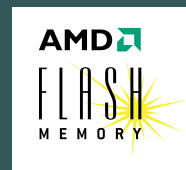
An unparalleled **combination**
high-density and **high-performance**

Succeed with Flash technology leadership from AMD

Am29PDL128 High-Density, High-Performance Flash

AMD continues its leadership in Flash technology with the introduction of the Am29PDL128 – a 128 Megabit, 3.0 Volt-only NOR Flash device delivering an unparalleled combination of high-density and high-performance.

Utilizing a high-performance Page mode interface and AMD's award-winning Simultaneous Read/Write functionality, the Am29PDL128 offers exceptionally high throughput and fast data access in order to significantly improve system performance and functionality. Coupled with 128 Megabits of storage capacity for code and data – as well as AMD's unmatched commitment to reliability and data integrity – the Am29PDL128 is the ideal solution for today's most demanding designs.



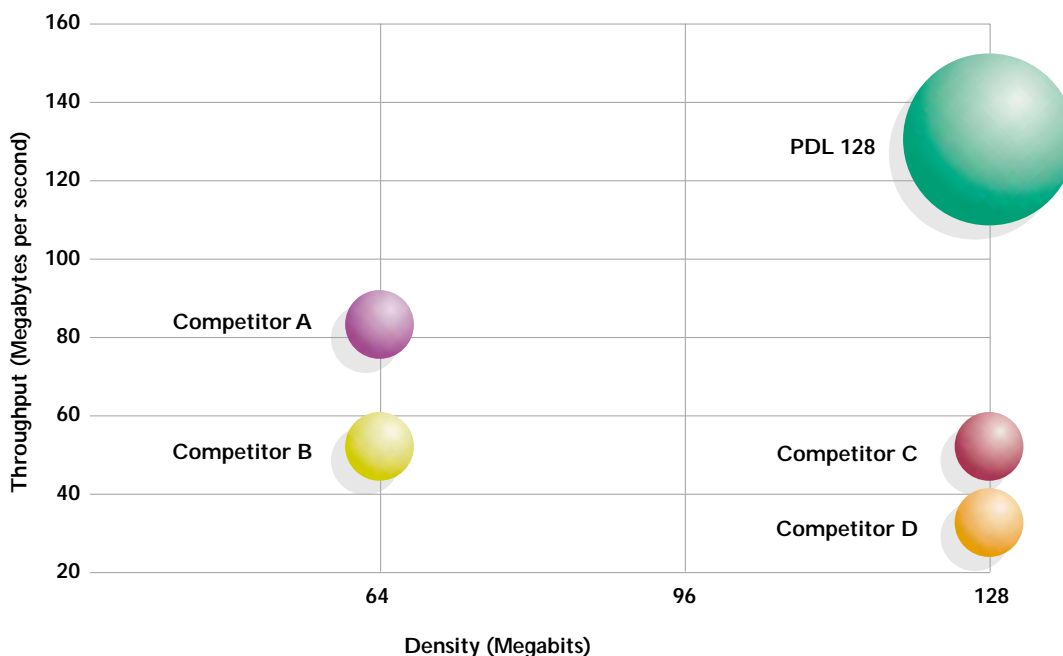
Incredible Density, Incredible Performance

Built on AMD's advanced 0.17 μm technology, the Am29PDL128 delivers a tremendous 128 Megabits of storage capacity. This high-density device enables designers to increase functionality and build complex features for their systems through additional code and data storage capabilities. At the same time, the high-density Am29PDL128 can reduce memory count to decrease board space, simplify design, and lower system cost.

For unmatched code execution and data storage on the same device, Am29PDL128 also delivers the industry's first 128 Mb Flash device featuring true hardware Simultaneous Read/Write functionality. Most remarkably, the Am29PDL128 combines high-density storage with a large page-buffer size and a user-configurable 16- or 32-bit databus to deliver data throughput rates two to three times greater than those of competing products.

Performance-Density Competitive Comparison

With 128 Megabits of storage capacity and data throughput rates as high as 131 Megabytes per second, the Am29PDL128 delivers an unmatched combination of density and data throughput.



Fortified BGA – The Industry's Widest Ball Pitch and Largest Ball Size

The Am29PDL128 is available in AMD's innovative Fortified Ball-Grid Array package. Engineered to withstand extreme temperature cycling and to extend outdoor equipment life, this breakthrough package offers unmatched package reliability while maintaining a small form factor. A 0.6 mm diameter ball – the largest in the industry – ensures extremely high board-attachment reliability, regardless of manufacturing technique. An extra-wide 1.0 mm ball-pitch allows for easy routing and conservative design rules. As a result, AMD's Fortified BGA package enables customers to utilize low-cost PCB solutions while providing the industry's leading package reliability.

Uncompromising Reliability and Data Integrity

Because the Am29PDL128 has been rigorously tested to satisfy AMD's industry-leading standards for endurance and reliability, customers can rest assured about the integrity of code and data stored on the device. In fact, AMD continues to offer the industry's only guarantee of 1,000,000 (minimum) erase cycles and 20 years data retention at 125°C for its Flash memory devices. For automotive dashboard applications – or any other system with extremely stringent quality requirements – the Am29PDL128 delivers the industry's first and only QS-9000 certified, 128 Mb Flash memory.



Key Features

Key features of the Am29PDL128 include the following:

- 70 ns initial or random access, 25 ns Page access
- User-definable 16-bit or 32-bit databus
- AMD Flexible Bank architecture provides ultimate design flexibility for code and data storage
- Ultra-low power consumption (typical 1.5 μ A, maximum 5 μ A standby current)
- QS-9000 certification and Fortified BGA packaging for guaranteed data integrity and superior board-level reliability

Applications

AMD's Am29PDL128 offers the high-density and high-performance required for the most demanding customer applications:

- Advanced Automotive Dashboard Applications – Car PCs, dashboard navigation, voice recognition, and other advanced Telematics
- Next-Generation Handheld PCs, PDAs, and Cellular Handsets – GPRS, MP3, GPS, and short messaging
- High-End Storage Solutions and PC Peripherals
- Set-Top Boxes and Cutting-Edge Consumer Electronics

Features	Benefits	Features	Benefits
<ul style="list-style-type: none"> High data throughput, large page-buffer size 	<ul style="list-style-type: none"> High data throughput empowers designers to create next-generation, feature-rich systems and applications 	<ul style="list-style-type: none"> User-configurable x16/x32 databus 	<ul style="list-style-type: none"> Compatible with a variety of microprocessors and microcontrollers to suit any application
<ul style="list-style-type: none"> 128 Megabits of storage capacity 	<ul style="list-style-type: none"> Enables storage of large amounts of code or data on a single device; reduces memory component count to save space, simplify design, and reduce system cost 	<ul style="list-style-type: none"> Ultra-low power consumption 	<ul style="list-style-type: none"> Extends system usage time for battery-operated applications
<ul style="list-style-type: none"> High-performance page mode access, fast read and write times 	<ul style="list-style-type: none"> Eliminates system bottlenecks and wait-states to significantly improve system performance 	<ul style="list-style-type: none"> Single power-supply operation 	<ul style="list-style-type: none"> Single power-supply simplifies design and reduces board space
<ul style="list-style-type: none"> Simultaneous Read/Write with AMD Flexible Bank architecture 	<ul style="list-style-type: none"> Execute code while storing data with no latency; AMD Flexible Bank architecture offers maximum design flexibility through a versatile multi-bank architecture 	<ul style="list-style-type: none"> Advanced security features 	<ul style="list-style-type: none"> Multiple levels of defense against cloning, signal-theft, hacking, viruses, erroneous code, and inadvertent writes
<ul style="list-style-type: none"> Fortified Ball-Grid Array package 	<ul style="list-style-type: none"> High board-level reliability for extended operation in the harshest of environments; extra-wide ball-pitch and large ball-diameter for easy layout and use with low-cost PCB 	<ul style="list-style-type: none"> Meets AMD's uncompromising standards for reliability 	<ul style="list-style-type: none"> Industry-leading reliability offers peace-of-mind for all applications; QS-9000 certification for demanding automotive applications
		<ul style="list-style-type: none"> AMD's award-winning service and support 	<ul style="list-style-type: none"> Proven commitment, technology leadership, and service to ensure customer success

ORDERING INFORMATION

PRODUCT	DENSITY	DATA WIDTH	SPEED RATINGS (NS)	PACKAGE OPTIONS
Am29PDL128G	128 Mb	x16/x32	70, 80, 90	80-ball Fortified BGA (1.0 mm pitch, 10 x 15 mm package)

About AMD

AMD is a global supplier of integrated circuits for the personal and networked computer and communications markets with manufacturing facilities in the United States, Europe, Japan, and Asia.

AMD, a Fortune 500 and Standard & Poor's 500 company, produces microprocessors, Flash memory devices, and support circuitry for communications and networking applications.

Founded in 1969 and based in Sunnyvale, California, AMD had revenues of \$3.9 billion in 2001. (NYSE:AMD)



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