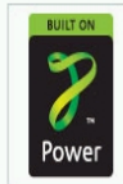


P1023: QorIQ P1023/17 Low-End Single- and Dual-Core Communications Processors with Data Path ☆

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The P1023 and P1017 processors offer the unique value of integrated high-performance data path offload for networking protocols and dual e500 Power Architecture® cores for application software. The P1023 and P1017 are ideally suited for high-performance enterprise WLAN, fixed routers and security gateway applications. The P1023 device supports a 400–800 MHz performance range, along with advanced security and a rich set of interfaces—all delivered on 45 nm technology for low-power implementation.

The P1023 processor includes a performance optimized implementation of the QorIQ data path acceleration architecture (DPAA). This architecture provides the infrastructure to support simplified sharing of networking interfaces and accelerators by multiple CPU cores. The DPAA significantly reduces software overhead associated with high touch packet forwarding operations. Examples of the types of packet processing services this architecture is optimized to support include traditional routing and bridging, firewall, VPN termination for IPsec and MACsec (a standardized form of Ethernet encapsulation that can be used to provide confidentiality).

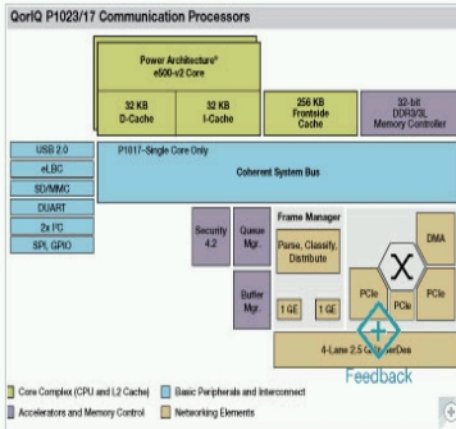
Features

- ▶ CORE COMPLEX
- ▶ NETWORKING ELEMENTS
- ▶ ACCELERATORS AND MEMORY CONTROL
- ▶ BASIC PERIPHERALS AND INTERCONNECT
- ▶ ADDITIONAL FEATURES
- ▶ PACKAGE

This product is included in Freescale's [product longevity program](#), with assured supply for a minimum of 10 years after launch

Related Products

- LS1020A: QorIQ LS1020A and LS1022A Dual-Core Processors
- P1010: QorIQ P1010/14 Low-Power Communications Processors with Trust Architecture
- P1020: QorIQ P1020/11 Single- and Dual-Core Communications Processors

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Featured Documentation

[QORIQP1023FS: P1023 Fact Sheet](#)

Target Applications

- ▣ Networking

Multicore Resources

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Software, tools and tips to ease your migration to QorIQ multicore processors

Featured Video



[Wireless LAN Application and CPU Offloading - Demo](#)
(01:21 min)

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Products

- P1022: QorIQ P1022/13 Communic...
- P1010: QorIQ P1010/14 Low-Powe...
- P1025: QorIQ P1025/16 Single- ...

Documentation

- P1023 Fact Sheet
- QorIQ Information - Data Sheet
- P1010 QorIQ Integrated Process...

Software and Tools

- SDKLINUX: Linux® SDK for ...
- P1022/P1013 QorIQ Development ...
- P1020/P1011 QorIQ Reference De...

Applications

- Wireless LAN (WLAN) Acces...
- Gateway (Router)
- Ethernet Switch

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