

LS1024A: QorIQ LS1024A Communications Processor ☆

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The QorIQ LS1024A and LS1024A multicore communications processors delivers scalability, superior packet handling capabilities, vastly increased VPN and SSL throughput and industry leading quality of service hardware features. For broadband home routers, VoIP gateways, IoT (Internet of Things) gateways, and low-end network attached storage.

Based on single- or dual-core ARM® Cortex®-A9 CPU cores, the QorIQ LS1024A of system-on-chip (SoC) processor achieves the lowest power consumption in its class (<3 W typical at 900 MHz) to provide performance scalability and maximum flexibility. In addition to high throughput IPsec and SSL CPU offload with an onboard security engine that includes a powerful deep packet inspection engine with GZIP decompression capability. The LS1024A processor includes SATA-2 interfaces, along with a powerful processing engine and integrated RAID controller to provide an ideal solution for network attached storage applications.

The QorIQ LS1024A OpenWRT Linux-based SDK is optimized for both single- and dual-core operation. The software deliverables for the LS1024A dual-core devices are backward compatible with the LS1024MA devices.

Features

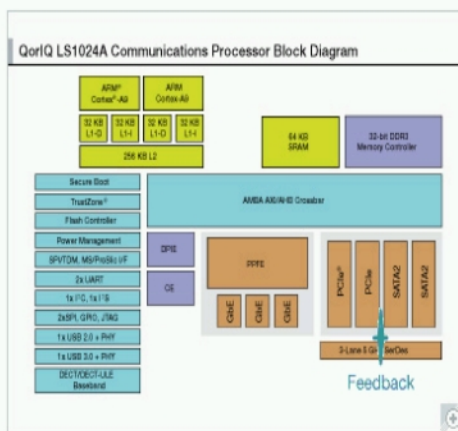
- Core Complex
- Networking Elements
- Accelerators and Memory Control
- Basic Peripherals and Interconnect

Related Products

[LS1024MA: QorIQ LS1024MA Communications Processor](#)

Comparison Table

Device	Cores	Top Core Frequency	L2 Size	DDR 2/3 Support	GE Ports	Serdes	PCI Express Controllers	SATA-2 Ports	USB Ports	Accelerators
LS1024MA	2x ARM1136	650 MHz	N/A	16/32-bit	2	2	2	-	1x USB2.0	SE, 2nd ARM11 used as packet processor
LS1024A	2x ARM Cortex-A9	1.2 GHz	256 KB	16/32-bit	3	3	2	2	1x USB2.0 1x USB3.0	SE, PPFE, DPFE, DECT



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