

## Layerscape® 1024A Dual-Core Processor

## LS1024A

Last Updated: Sep 5, 2025

LS1024A multicore devices are not recommended for new designs. Please use LS1023A devices.

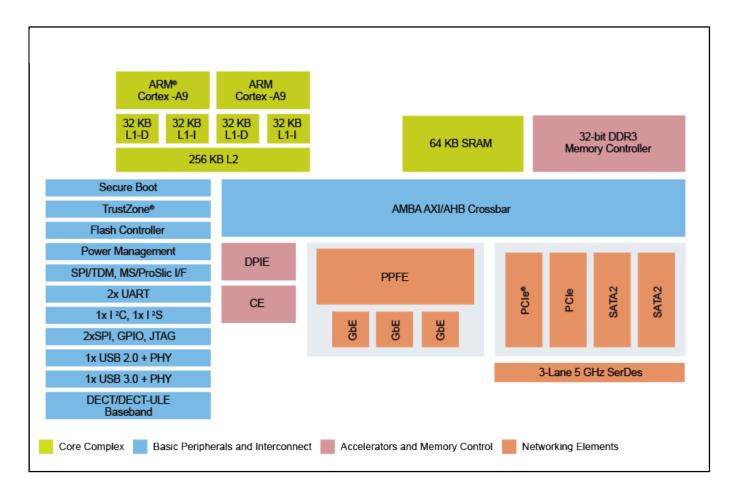
The LS1024A multicore communications processors delivers scalability, superior packet handling capabilities, vastly increased VPN and SSL throughput and optimized quality of service hardware features. For broadband home routers, VoIP gateways, IoT (Internet of Things) gateways, and low-end network attached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

Based on single- or dual-core Arm® Cortex®-A9 CPU cores, the 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 LS1024A OpenWRT Linux-based SDK is optimized for both single- and dual-core operation.

Layerscape processors are part of NXP's EdgeVerse™ edge computing platform.

## Layerscape 1024A Dual-Core Communications Processor Block Diagram



View additional information for Layerscape® 1024A Dual-Core Processor.

Note: The information on this document is subject to change without notice.

## www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2025 NXP B.V.