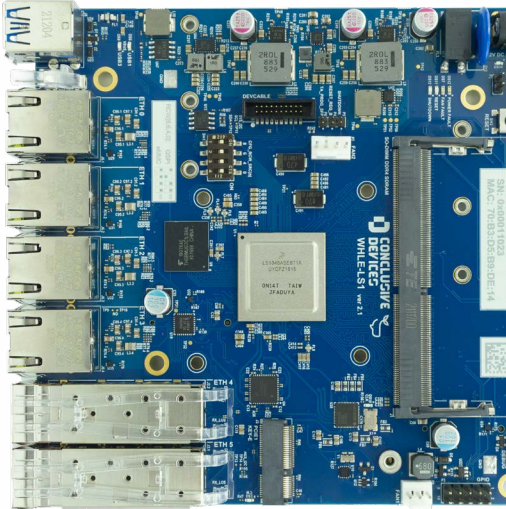



WHLE-LS1 SBC

NXP Layerscape® LS1 series SoC based on Arm® Cortex®-A53 or Cortex®-A72

SmartNIC features and over 45,000 CoreMark® performance



Product Highlights

 NXP Layerscape® processor	up to 1.8 GHz	up to 8 cores	Packet processing engine
4x 1 Gigabit Ethernet	3x PCIe M.2	2x 10 Gbit/s SFP+	up to 64 GB eMMC

WHLE-LS1 High Performance Single Board Computer

- Small form factor, perfect for custom routers and firewalls
- Featuring NXP Layerscape® processors based on Arm® Cortex®-A53 and Cortex®-A72.
- Hardware network traffic processing engine
- Easy to expand thanks to PCIe M.2 connectors

About Conclusive Engineering

We provide reliable development and consulting services for various embedded platforms, assisting enterprises and manufacturing companies in optimizing their processes through tailored embedded system services, products, and hardware solutions.

For more information contact:
sales@conclusive.pl

WHLE-LS1 Specifications

SoC	NXP Layerscape® SoC variants: LS1026, 2 core Arm® Cortex®-A72 1.8 GHz CPU with DPAA LS1046, 4 core Arm® Cortex®-A72 1.8 GHz CPU with DPAA LS1048, 4 core Arm® Cortex®-A53 1.4 GHz CPU with DPAA2 LS1088, 8 core Arm® Cortex®-A53 1.6 GHz CPU with DPAA2
Memory	1x SO-DIMM socket supporting DDR4 SDRAM with ECC (up to 2100 MT/s)
Ethernet	4x 1 Gbit/s RJ45 2x 10 Gbit/s SFP+
Mass storage	4-64GB eMMC 16 MB QSPI NOR Flash 8 KB EEPROM
PCIe	M.2 Key-M 2280 D4 PCIe 3.0 x2 NVMe M.2 Key-M 2280 D5 PCIe 3.0 x1 NVMe M.2 Key-E 2230 D5 PCIe 3.0 x1 WiFi/BT with USB 2.0, I2C, UART
USB	1x or 2x USB A 3.0 (host mode)
Debug	Conclusive Developer Cable connector providing access to: - System UART - JTAG port - System I2C bus 1x USB Micro-B 2.0 console port (System UART)
Software support	Linux 4.14 to 5.16 and newer Ubuntu 20.04 LTS Secure Boot UEFI EDK2 U-Boot 2023.07 Linux 4.14-5.16 (Buildroot and Yocto) FreeBSD 13 (on request)
Additional features	RTC with CR2032 back-up battery Reset button Power switch Boot source selector DIP switch 2x two-color status LED Two channel fan controller with 3 pin and 4 pin fan connectors 6x GPIO (3.3V) External I2C (3.3 V)
Power supply	12 V DC, 7 A, 2.5 x 5.5 mm barrel connector
Dimensions	130 x 130 mm