



Main Features

- NXP® Layerscape® LX2160A SoC, BGA type
- 4 x DDR4-3100 ECC-DIMM
- 1 x 2.5 SSD, 1 x M.2 2280
- PCIe Gen3 x8 with SR-IOV
- Dual boot device
- Enhancing UEFI
- Support secure boot and optional TPM
- 2 x SerDes LAN modules support 25G/10G/1G
- 4 x GbE RJ45
- Optional IEEE1588 PTP
- Optional BMC support with manager port
- Redundant power supply
- Optional PoE at/af support
- Operating system: NXP® LSDK (Ubuntu userland)

Product Overview

Our 1U rackmount uCPE NSA 6310, based on the NXP® Layerscape® LX2160A SoC, helps telecom companies build virtualization environments. The device combines sixteen ARM Cortex®-A72 processor cores with high-performance data path accelerators, IEEE 1588, and BMC for networking and telecom/datacom uses. The 1U rackmount uCPE's flexible I/O networking design supports 25G/10G/1G speeds, while its architecture supports FPGA or GPU cards for edge computing.

Specifications

Main Board

- NXP® Layerscape® LX2160A SoC, BGA type
 - LX2160A, 16 cores
 - LX2120A, 12 cores
 - LX2080A, 8 cores

Main Memory

- 4 x DDR4 3100 ECC-DIMM sockets, up to 64GB

Storage

- 1 x 2.5" internal SSD/HDD bays
- 1 x M.2 2280 B key, supports SATA signal

Front I/O

- 4 x LED: Power/System/HDD/Error
- Button: Reset
- 1 x Console port: RJ45 x1
- 2 x Management port: RJ45 x2 (LX2160 and BMC)
- 2 x USB 3.0 type-A port
- 4 x GbE RJ45 ports
- 1 x Micro SIM card slot
- 2 x SerDes LAN module slots

Front I/O

- 1 x PCI-Express card slot
- 2 x Fixed smart fans
- 2 x Power inlets

Interface Internal

- 1 x mini-PCIe for Wi-Fi
- 1 x M.2 2280 B key with SIM slot for LTE
- 1 x SO-DIMM slot for NEXCOM BMC module
- SPI I/O pin-header for GPS module
- SPI I/O pin-header for TPM
- Micro SD slot for RMA

Power

- 550W 1+1 CRPS redundant power supply (default)
- 12V/550W + 54V/850W CRPS power supply (for PoE application)

Dimensions and Weight

- Chassis dimension (mm): 430 x 480 x 44
- Package dimension(mm): TBD
- Without packing: TBD
- With packing: TBD

Environment

- Operating temperature: 0°C~40°C
- Storage temperature: -20°C~80°C
- Relative humidity: 10%~90%, non-condensing

Certifications

- CE/FCC Class A (planning)
- Arm Server Ready (planning)

Ordering Information

Barebone

♦ NSA 6310 (P/N: 10S00631000X1)

1U NXP® Layerscape® LX2160A SoC Processors, 4 x GbE RJ45 and 2 x SerDes module slot

Model	P/N Controller	Controller	Type	Port Number	Bypass/Segment	Expansion Slot	Location Slot
NSK7400	20SK0740000X1	TI DS250DF410	SerDes x4	SFP28 x4	None	None	Slot A
NSK7401	TBD	TI DS250DF410	SerDes x4	SFP28 x2	None	None	All slot
NSK7100	20SK0710000X1	Inphi CS4223	SerDes x4	SFP+ x4	None	None	All slot
NSK7602	20SK0760200X1	Marvell 88X3340P	SerDes x4	10GbE x4 Copper	None	None	All slot
NSK7601	20SK0760100X1	Marvell 88E1543	SerDes x4	1GbE x4 Copper	None	None	All slot