

NAT-AMC-LX2

The **NAT-AMC-LX2** is a versatile Processing AMC (PrAMC), covering a wide field of network-related applications.

It supports any voice or data application with requirements such as deep packet inspection, encryption, protocol conversion, or Layer 2-7 routing. Moreover, it can serve as, e.g. multi-service switch, edge router, radio network controller (RNC), VoIP/VoP gateway and router, or mobile network equipment.

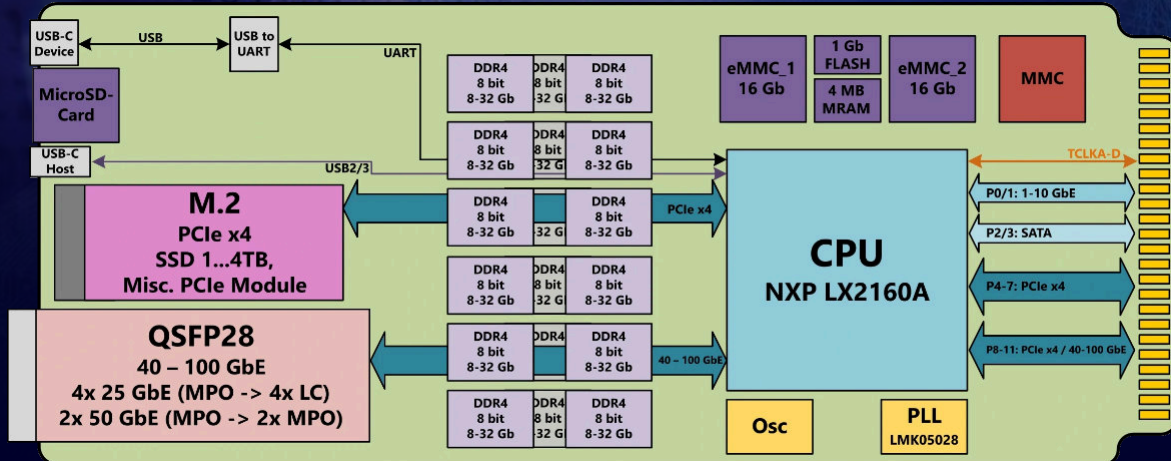
As successor of the **NAMC-QorIQ-P2/P3/P4** series, the **NAT-AMC-LX2** strikes with the latest generation of NXP ARM CPUs. With up to 16 Cortex-A72 cores, PCIe-, and SerDes-Interfaces as well as an Ethernet switch on-chip, the Layerscape LX2160A CPU is ideally suited for networking-related usage.

Apart from its 16 cores, multiple PCIe- and 40/100GbE interfaces, special hardware for Ethernet frame processing, and a security hardware engine, the LX2160A processor stands out by its superior power efficiency.

By its onboard M.2 socket, a PCIe-x4- or SATA-coupled SSD can be realized. The M.2 socket can also be used to provide a USB3 or PCIe-x4 extension for any custom application.

The QSFP28-Transceiver slot offers various front panel interface options:

- 1x 40G / 100G Ethernet (SR4)
- 4x 10G / 25G Ethernet (SR)
- 2x 50G Ethernet (SR2)



Key Features

CPU

- 16x ARM A72 cores @ up to 2.2 GHz
- 24 SerDes
- 2x 72bit DDR4 RAM
- TDP ~30W (@2.2 Ghz)
- Embedded Ethernet Switch
- Frame Processing Hardware Engine

Memory

- 2x 64bit wide DRAM with ECC (72bit)
=> up to 64GB total
- 128MB QSPI
- SPI MRAM
- 16 - 128GB eMMC
- MicroSD-Card

Miscellaneous

- Single, mid- or full-size AMC form factor
- Atmel Atxmega128 MMC
- Linux Software / Firmware
- Compliance to AMC.0, CE, RoHS, REACH

Front Panel Connectivity

- QSFP28 Transceiver:
 - 1x 40G/100G Ethernet (SR4)
 - 4x 10G/25G Ethernet (SR)
 - 2x 50G Ethernet (SR2)
- USB3 Type C to CPU Interface
- Console via USB2 Type C
- Standard AMC LEDs for Status, Fault, Hot-Swap

Backplane Connectivity

- TCLKA-D
- AMC Ports 0/1: 1G-KX - 10G-KR
- AMC Ports 2/3: SATA
- AMC Ports 4-7: PCIe x4
- AMC Ports 8-11: PCIe x4 / 40-100GbE (depending on Backplane)