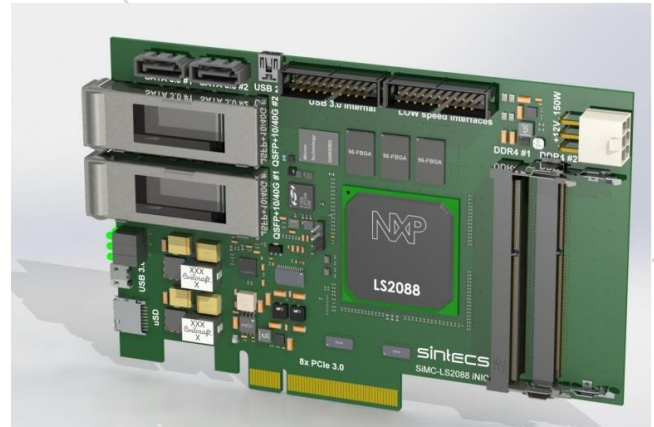




## SiMC-LS2088 a 64-bit ARM® based 40GbE dual port Network Interface Controller

The SiMC-LS2088 is based on NXP's QorIQ™ LS2088 eight ARM® Cortex®-A72 core processor to address high speed networking applications, two 40Gb fiber interfaces, up to 2x 8GByte of DDR4, PCI-e x8 in a full-height, half-length PCI-Express form factor.

This PCI-e adapter addresses a broad range of systems and applications including SDN/OpenFlow™ switching, NFV solutions, Enterprise routing, Wireless access, Datacenter processing, Military and aerospace.



### Features:

- ✓ QorIQ LS2088 multicore communications processor, built on ARM® technology
  - ✓ 2GHz core operation
- ✓ PCI-e x8 full height, half length
  - ✓ 4-lane PCIe with 2x SATA
  - ✓ 8-lane PCIe without SATA
- ✓ Two Serial ATA (SATA 3.0) connectors
- ✓ Two 40G QSFP+ cages
- ✓ micro SD/MMC card slot
- ✓ USB3.0 Type C port
- ✓ QDMA engine

### Memory

- ✓ Dual 8GB 64bit DDR4-2166 SODIMM (upgradeable to 32Gb total) both on separate memory bus
- ✓ One on-board 1GB 32bit DDR4-2166 (for DPAA)
- ✓ 1Gb NAND flash memory

### Datapath acceleration architecture, 2<sup>nd</sup> generation (DPAA2), incorporating:

- ✓ Packet parsing, classification, and distribution (WRIOP)
- ✓ Queue management for scheduling, packet sequencing, and congestion management; Hardware buffer management for buffer allocation and deallocation (QBMan)
- ✓ Cryptography acceleration (SEC 5.2) at up to 10 Gbps
- ✓ RegEx pattern matching acceleration (PME 2.0) at up to 10 Gbps
- ✓ Decompression/compression acceleration (DCE 1.0) at up to 20 Gbps
- ✓ Accelerated I/O processing (AIOP) at up to 20 Gbps

