The **NAMC-8596-CPU** is a multi-service CPU board in Advanced Mezzanine Card™ (AMC) form factor:

- Latest Freescale™ PowerQUICC® III MPC8569 processor
  - **dual** Multichannel Communication Controller (MCC)
  - higher core frequency than predecessor PowerQUICC III processors
- DDR2 SDRAM 1GB, NAND-Flash 2GB
- Lattice FPGA
  - up to 70,000 logic cells
- Interfaces at front panel
  - 2x Gigabit Ethernet (GbE)
  - USB port and RS232
  - optional user defined IO via sub module
  - optional TDM connectivity
- Backplane connections
  - 2x Gigabit Ethernet (GbE)
  - Serial Rapid IO (SRIO)
  - PCI Express® (PCIe)
- TDM and I-TDM
  - 125 µs and 1 ms I-TDM modes as well as TDM cross-connect supported
- customizeable I/O mezzanines

Flexibility, high-bandwidth and low latency processing dedicate the NAMC-8569-CPU for applications in (tele-)communication, medical, industrial automation, defense&aerospace and telecommunication market.

One or both GbE interfaces can be switched or multiplexed towards the CPU and the backplane.

Depending on the required throughput one Fat Pipe (PCIe or SRIO) or the combination of both Fat Pipes (PCIe and SRIO) is available to the backplane. Thus, the NAMC-8569-CPU is targeting at applications where IO boards need PCIe and where low latency of SRIO for multi-processing is requested.
NAMC-8569-CPU

Overview and Purpose
The NAMC-8569-CPU is a multi-service processor board featuring multiple Ethernet, SRIO, PCIe interfaces along with an USB port and optional TDM connectivity. It is available as a single compact-, mid- and full-size AMC. The full-size AMC can be equipped with an extension board adding customized I/O functionality. The NAMC-8569-CPU provides flexibility, high-bandwidth and low latency processing in next generation systems based on the MicroTCA® or ATCA standards.

CPU and Memory
The NAMC-8569-CPU is equipped with the powerful Freescale PowerQUICC III MPC8569. It offers an e500 PowerPC core combined with dedicated interface hardware and four RISC cores. This network processor operates at core frequencies of 800, 1000 or 1333 MHz. The main onboard memory is delivered by 128-1024 MB DDR2 SDRAM. In addition, the NAMC-8569-CPU is equipped with 16-128 MB FLASH and 2GB NAND Flash memory. A Micro-SD-Card slot are provided by an optional 512kB MRAM...