# NCS-MTX401

NIC Module with Tilera<sup>®</sup> TILE-Gx8036 processor

CPU cooling fans

TILERA

2 x DDR3 slots



4 x 10GbE LC Fiber ports

#### **Features**

#### Tilera<sup>®</sup> TILE-Gx8036<sup>™</sup> Processor

The TILE-Gx8036™ Processor is optimized for networking and multimedia applications and delivers enormous compute and I/O with complete "system ona-chip" features. The device includes 36 identical processor cores (tiles) interconnected with Tilera's iMesh<sup>™</sup> on-chip network. Fach tile consists of a fullfetured processor core as well as L1 and L2 cache and a non-blocking switch that connects the tiles into deliver low-latency and highthe mesh. Each tile can independ- bandwidth offload up to 40Gbps ently run a full operating system, or a group of tiles can run a multiprocessing OS, like SMP Linux. The TILE-Gx8036 is ideal for anner

sophisticated networking applications requiring 20 to 40 Gbps of performance.

#### Low Power, High Performance Architecture

Under 30 Watts of processor power consumption, Up to 40 Gbps Wire-speed performance.

#### Tilera<sup>®</sup> MiCA<sup>™</sup>-Multicore iMesh **Coprocessing Accelerator**

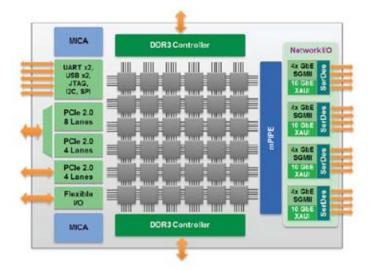
The Tilera MiCA crypto and compression acceleration engines encryption throughput.

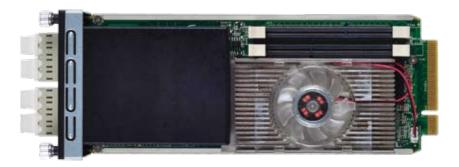
#### **Offload all Packet Processing**

NCS-MTX401 can be used with all Lanner appliances equipped with NIC module slots. While the you can add up to 4 modules for appliance x86 processor takes care of the application, there is enough processing power on this module for you to offload all the packet processing for tasks such as DPI, IDS/IPS and cryptography. Use appliances with

multiple NIC module slots to add more packet processing cores. With a system such as FW-8895 a total of 144 cores.







## **Preliminary Specifications**

Processor / Cache	
Processor	Tilera TILE-Gx8036 1.2 GHz CPU <ul> <li>36 cores</li> <li>9 MB coherent cache</li> </ul>
Network Engine	2 x MICA engines
Memory	
System Memory	<ul> <li>Support 2 DIMM DDR3 ECC 1333/1600 MHz (vertical socket)</li> <li>Support ECC DIMMs</li> <li>8 GB Maximum capacity</li> </ul>
On Board Devices	
Flash	<ul> <li>1 x Serial flash for boot loader</li> <li>1 x SPI ROM</li> </ul>
Network Controllers	1 x BCM8747 Quad ports 10G PHY
I/O Connectors	
USB	1 x Internal USB pin header
Serial Port/Header	1 x Internal 1x3 pin header console pin header
LAN port	4 x 10GbE LC Fiber port
LAN Bypass	Fiber Bypass
PCB & Dimensions	
Physical Dimemsions	PCB: 193 mm x 95 mm
PCB Layer	14 Layers

## **Ordering Information**

NCS-MTX401A	Tilera NPU 1.2 GHz TILE-Gx8036, 4 x 10G SFP+ ports, Tranceiver SX x 4 included, USB, Console pinheader included, with Bypass
NCS-MTX401B	Tilera NPU 1.2 GHz TILE-Gx8036, 4 x 10G SFP+ ports, Tranceiver SX x 4 included, USB, Console pinheader included, without Bypass

# Lanner