Axiado Network Control Module (NCM)
NCM3001 Secure Acceleration Card

Features
• Dimensions: 141mm (L) x 56mm (H)
• 10G Ethernet SFP+ port with in-line encryption
• 1G Ethernet RJ-45 port with in-line encryption
• Supports 802.1q VLAN tagging with RDC 2819 RMON statistics
• Complete Ethernet packet processing with flow handling and Firewall rules: Exact and Ternary/Wildcard, and Denial of Service (DoS)
• Supports checksum offload (IP, TCP, UDP)
• Conforms with the following IEEE standards:
  • IEEE 802.3ab (1GBASE-T)
  • IEEE 802.3u (100BASE-T)
  • IEEE 802.3az EEE (Energy Efficient Ethernet)
• Incorporates stateful Firewall
• PCIe Gen4 x2 with Integrity and Data Encryption (IDE) and hardware encryption
• Contains four ARM A53 Application cores with 32 KB L1 cache and 1 MB L2 cache
• Built-in Artificial Intelligence (AI) and Machine Learning (ML) hardware with 4 independent ML islands at up to 4 TFLOPS per second
• USB2.0 A-type interface on front panel
• Optional micro-HDMI interface on front panel with 2D-GPU acceleration
• On-board LED's provide power and system health status feedback via GPIO pins

PRODUCT DESCRIPTION
The NCM3001 is a PCIe-based acceleration card that leverages the Axiado TCU technology. It contains both 10GE and 1GE ports for high speed communication with the network. Built-in Artificial Intelligence (AI) and Machine Learning (ML) hardware provide robust ransomware detection. In addition, trust services can be off-loaded from the server using acceleration engines provided by the Axiado TCU solution.