



iSPAN® 36MC1 OCTEON™ Plus AdvancedMC™ GE RJ45 Packet Processor Card

High Performance Packet Processing for Broadband Networks

FEATURES

AMC.0 R2.0 Mid-size or Full Size AdvancedMC

Cavium Networks high performance OCTEON Plus 56xx family of Packet Processors

GbE (AMC.2) plus PCI-E x4 (AMC.1) to carrier

Front panel I/O options:
▪ 4x GE RJ45

Rich Ecosystem of software tools and applications available through Interphase Partners including:

- TCP/IP off load
- Wire-speed IPSEC acceleration
- SRTP Off-load
- IPv4/IPv6 L2/L3 wire-speed forwarding
- Policy Management and Routing
- On board RTP/RTCP processing
- GTP-u protocol support
- Compression / De-compression off-load

APPLICATIONS

Media Servers

Node-B/RNCs

VoIP

Edge/Access Routers

Deep packet Content Inspection

Line rate crypto and security functions

Stateful Protocol Identification

Policy Enforcement

Wire-Speed Packet Processing

The Interphase iSPAN® 36MC1 AdvancedMC™ Packet Processor Card extends the broad portfolio of communication processing and network processing solutions to address the growing need for GE wire-speed packet processing solutions for the delivery of broadband services in the 3G Wireless, 4G Wireless (LTE & WiMAX), Voice Over IP and IMS network infrastructure.

High Performance – Multicore Processor

The 36MC1 is based on the Cavium OCTEON Plus high-performance multicore processor architecture which provides:

- A pin compatible chip that can support 8 to 12 cnMIPS® Plus MIPS 32/64 architecture compatible cores
- Per core hardware acceleration for packet processing and security including addition of support for Kasumi for wireless security
- Integrated co-processors for packet I/O, compression/decompression, IDS and anti-virus

Flexible Architecture

With its four 1 GE RJ-45 interfaces, powerful onboard OCTEON Plus packet processor, dual management interface and upgradeable memory, the iSPAN 36MC1 is extremely versatile and provides the functionality necessary for migrating to next-generation infrastructures and converged networks.

Cavium Simple Executive and Linux®-based ready-to-use application / protocol suites are available to transform the 36MC1 into a specialized communications interface which can be easily integrated into solution platforms.



36MC1 OCTEON Plus Packet Processor Card Configurations

AdvancedMC Connectivity

- Gigabit Ethernet
 - AMC.2 Type 2E2, ports 0, 1, 8, 9
- PCI-Express
 - AMC.1 Type 4 x4 PCI-Express lanes on ports 4-7
 - PCI Express 100 MHz clock on AdvancedMC CLK3

External Interfaces

- 4 x Gigabit Ethernet
 - RJ45 receptacles on the front panel
- One RS-232 console port

Processor

The *i*SPAN 36MC1 is designed around the Cavium OCTEON Plus 56xx processor family:

- Support for NSP, or CP* device family options
 - NSP – Network Services Processor supports encryption, reg-ex acceleration, TCP acceleration, compression/decompression, networking and QOS
 - CP* – Secure Communications Processor supports encryption, networking, TCP acceleration and QOS

Memory

- Up to 4GB of DDR2 SDRAM Memory (2 GB Standard)
- 16MB downloadable 8-bit Boot Flash Memory
- Up to 2GB of downloadable NAND Flash memory for firmware storage organized in dual banks (1 GB Standard)
- Optional 16MB of Persistent Memory

Operating Systems

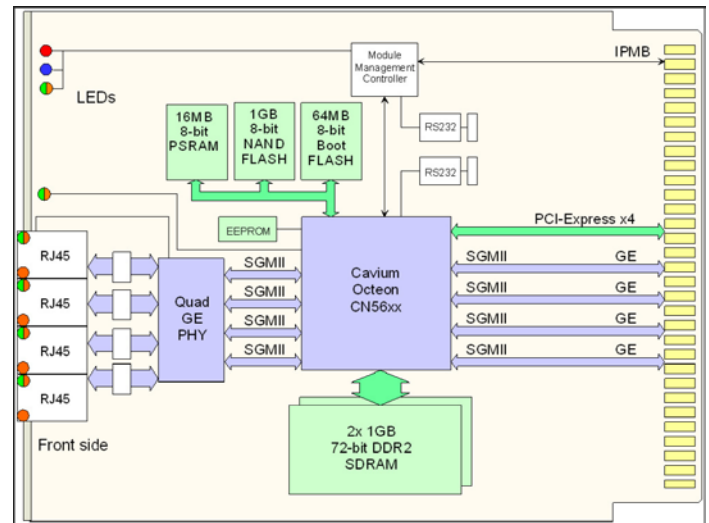
- Cavium Simple Executive
- Wind River PNE Linux® distribution with Cavium OCTEON extensions

Applications

Interphase provides ready-to-use application / protocol suites that transform the 36MC1 into a specialized communications interface which can be integrated into solution platforms.

Packet Processing Modules available from 3rd parties include: TCP/IP off load, IPv4 & IPv6 stacks, Unicast and multi-cast routing acceleration, IPSEC acceleration, Stateful Firewall, SRTP Offload, Transport Protocols, and Mobile-IP, Policy management and routing, and Compression / Decompression off-load.

* CP processor support is available through Professional Services.



Technical Specifications

Architecture

- Processor: OCTEON Plus 56xx processors running at up to 600MHz
 - Mid-size: 8, 10, or 12 Core
 - Full-size: 8, 10, or 12 Core

Memory

- RAM: Up to 4GB of DDR2 SDRAM System memory
- Flash: 16MB NOR Flash, Up to 2GB NAND Flash
- Persistent Memory: Optional 16MB

Mechanical

- Form Factor: AMC.0 R2.0 AdvancedMC Mid-size or Full Size
- Length: 180.6 mm (7.11 in.)
- Width: 73.5 mm (2.89 in.) (single-width)

Operating Environment

- Power Consumption: 35 to 45W typical depending on number of cores (8, 10, or 12), processor speed, and memory
- Temperature: 0 to 55°C (32 to 144.5 °F)
- Storage Range: -40 to 80 °C (-40 to 176 °F)
- Relative Humidity: 5% to 95% non-condensing
- Altitude: 0 to 2000 M (0 to 6500 ft)

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About Interphase Corporation

Interphase Corporation (NASDAQ: INPH) delivers solutions for LTE and WiMAX, interworking gateways, packet processing, network connectivity, and security for key applications for the communications and enterprise markets. Founded in 1974, Interphase provides expert engineering design and electronics manufacturing services, in addition to its commercial-off-the-shelf (COTS) product portfolio. Interphase is headquartered in Plano, Texas, with sales offices in the United States and Europe.