

iSPAN[®] 36MC2 Oocteon[™] Plus AdvancedMC[™] 10 GE 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 Oocteon Plus 56xx family of Packet Processors

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

Front panel I/O options:

- 2x 10 GE SFP+
- 1x 10 GE SFP+
- Synchronous Ethernet

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[®] 36MC2 AdvancedMC[™] Packet Processor Card extends the broad portfolio of communication processing and network processing solutions to address the growing need for 10 GE wire-speed packet processing solutions for the delivery of broadband services in the 3G Wireless, Voice Over IP and IMS network infrastructure.

High Performance – Multi-Core Processor

The 36MC2 is based on the Cavium Oocteon Plus high-performance multi-core 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 one or two 10 GE interchangeable SFP+ modules, powerful onboard Oocteon Plus packet processor, dual management interface and upgradeable memory, the iSPAN 36MC2 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 36MC2 into a specialized communications interface which can be easily integrated into solution platforms.



36MC2 Oceon Plus 10 GE Packet Processor Card

External Interfaces

- Single or Dual 10 Gigabit Ethernet
 - SFP+ receptacles on the front panel for maximum configurability (SFP+ Modules must be purchased separately)
- Synchronous Ethernet
- One RS-232 console port

AdvancedMC Connectivity

- Gigabit Ethernet
 - AMC.2 Type E2, ports 0,1 (2x 10 GE)
 - AMC.2 Type 5E2, ports 0, 1 / XAUI ports 8, 9, 10, 11 (1x 10 GE)
- PCI-Express
 - AMC.1 Type 4 x4 PCI-Express lanes on ports 4-7
 - PCI Express 100 MHz clock on AdvancedMC CLK3

Processor

The iSPAN 36MC2 is designed around the Cavium Oceon 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 4 GB of DDR2 SDRAM Memory (1 GB Standard)
- 8 MB downloadable 8-bit Boot Flash Memory
- Up to 2 GB of downloadable NAND Flash memory for firmware storage organized in dual banks (1 GB Standard)
- Optional 16MB of Persistent Memory

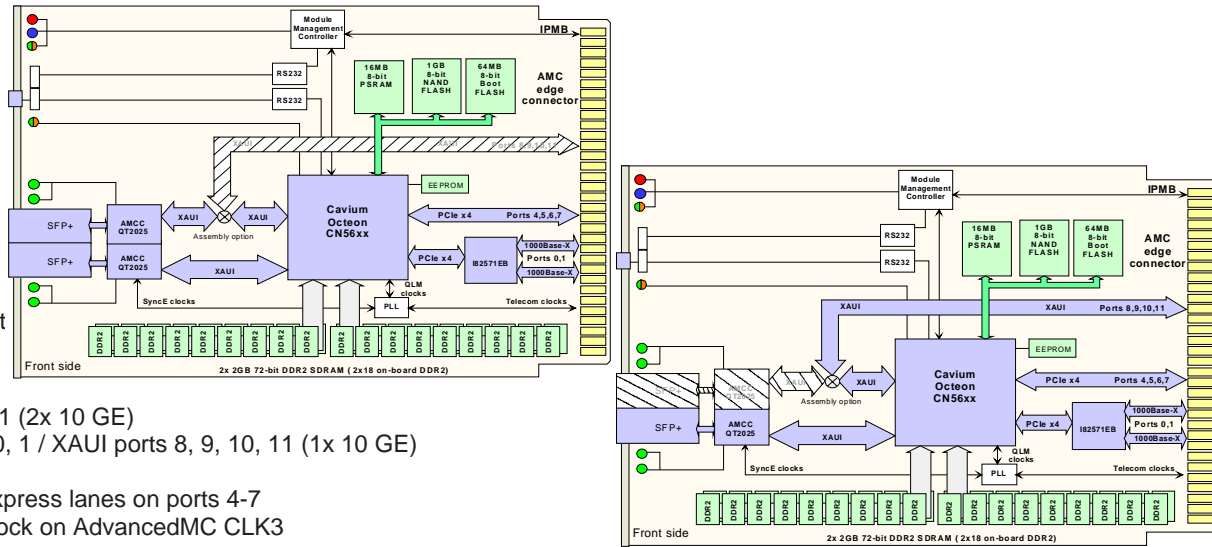
Operating Systems

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

Applications

Interphase provides ready-to-use application / protocol suites that transform the 36MC2 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.



Technical Specifications

Architecture

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

Memory

RAM	Up to 4GB of DDR2 SDRAM System memory
Flash	8 MB NOR Flash, Up to 2 GB NAND Flash
Persistent Memory	Optional 16 MB

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	35W 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)

Corporate Headquarters

2901 N. Dallas Parkway
 Plano, Texas 75093
 1-800-FASTNET
 Phone: + 1.214.654.5000
 Fax: + 1.214.654.5500

European Headquarters

Centre d'affaires 10ème Avenue
 855, avenue Roger Salengro
 92370 Chaville - France
 Tél.: + 33 (0) 1 41 15 44 00
 Fax: + 33 (0) 1 41 15 12 13

Asia/Pacific Headquarters

27 Brallas Avenue
 St. Ives NSW 2075
 Australia
 Tel.: + 612 9440 2140
 Fax: + 612 9440 2141

About Interphase Corporation

Interphase Corporation (NASDAQ: INPH) is a leading provider of robust building blocks, highly integrated subsystems and innovative gateway appliances for the converged communications network. Building on a 30-year history of providing advanced I/O solutions for telecom and enterprise applications, and addressing the need for high speed connectivity, Interphase has established a key leadership role in delivering next generation AdvancedTCA® and AdvancedMC™ solutions to the marketplace.