



iSPAN® 36CA Oction™ Plus AdvancedMC™ Packet Accelerator Card

High Performance Packet Processing for Broadband Networks

FEATURES

AMC.0 R2.0 Mid-size AdvancedMC

Cavium Networks high performance Oction Plus 58xx family of Packet Processors

4x GbE (AMC.2) plus PCI-E x4 (AMC.1) to carrier

4x GbE interfaces on front panel

RTM connectivity for rear-access operation

Application Support includes:

- TCP/IP off load
- Wire-speed IPSEC acceleration
- SRTP Off-load
- IPv4/IPv6 L2/L3 wire-speed forwarding

Other planned application support includes:

- 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® 36CA AdvancedMC™ Packet Processor Card extends the broad portfolio of communication processing and network processing solutions to address the growing need for 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 36CA is based on the Cavium Oction Plus high-performance multi-core processor architecture which provides:

- A pin compatible chip that can support 4 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 interchangeable SFP modules, powerful onboard Oction Plus packet processor, dual management interface and upgradeable memory, the iSPAN 36CA is extremely versatile and provides the functionality necessary for migrating to next-generation infrastructures and converged networks.

The iSPAN 36CA comes with Linux®-based ready-to-use application / protocol suites that transform the 36CA into a specialized communications interface which can be easily integrated into solution platforms.



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36CA Oceon Plus Packet Accelerator Card

Processor

The iSPAN 36CA is designed around the Cavium Oceon Plus 58xx processor family:

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

Memory

- Up to 1GB of DDR2 SDRAM Memory (512MB Standard)
- Optional 32 MB of RLD RAM with NSP or EXP Processor (None Standard)
- 8 MB downloadable 8-bit Boot Flash Memory
- 128 MB of downloadable NAND Flash memory for firmware storage organized in dual banks
- Optional 16MB of Persistent Memory

AdvancedMC Connectivity

- Gigabit Ethernet link options:
 - AMC.2 Type 2E2, ports 0, 1, 8, 9
 - AMC.2 Type 4, ports 8-11
- PCI-Express
 - AMC.1 Type 4 x4 PCI-Express lanes on ports 4-7
 - PCI Express 100 MHz clock on AdvancedMC CLK3

External Interfaces

- Four Gigabit Ethernet Links. Options:
 - SFP receptacles on the front panel for maximum configurability. SFP Modules must be purchased separately
 - RTM ports 17-20
- One RS-232 console port

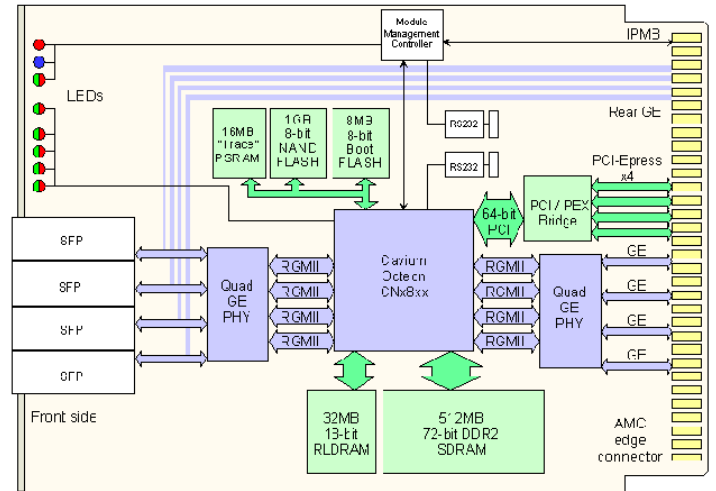
Operating Systems

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

Applications

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

Planned Packet Processing Modules 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 58xx processors running at up to 600MHz
	- Mid-size: 4 or 8 core
	- Full-size: 4, 8, or 12 Core

Memory

RAM	Up to 1GB of DDR2 SDRAM System memory
Flash	8 MB NOR Flash, 128 MB NAND Flash
RLDRAM	Optional 32 MB
Persistent Memory	Optional 16 MB

Connectivity

	AMC.1 Type 4 (x1 PCI Express)
	AMC.2 Type2 and Type E2

Mechanical

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

Operating Environment

Power Consumption	35W to 45 typical depending on number of cores (4,8 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) 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.