INTERPHASE

*i*SPAN® 36CA OCTEON™ Plus AdvancedMC™ Packet Processor

High Performance Packet Processing for Broadband Networks

FEATURES

AMC.0 R2.0 Mid-size / Full AdvancedMC

Cavium Networks high performance OCTEON 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

RLDRAM for REGEX operations

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	*Deep packet Content Inspection*
Node-B/RNCs	*Line rate crypto and security functions*
VoIP	*Stateful Protocol Identification*
Edge/Access Routers	*Policy Enforcement*

Wire-Speed Packet Processing

The Interphase *i*SPAN® 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 OCTEON 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 Octeon Plus packet processor, dual management interface and upgradeable memory, the *i*SPAN 36CA 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.

36CA OCTEON Plus Packet Accelerator Card

Processor

The *i*SPAN 36CA is designed around the Cavium OCTEON 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

- 1GB of DDR2 SDRAM Memory
- Optional up to 32 MB of RLDRAM with NSP or EXP Processor
- 16 MB downloadable 8-bit Boot Flash Memory
- 1 GB of downloadable NAND Flash memory for firmware storage organized in dual banks
- Optional 16 MB 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

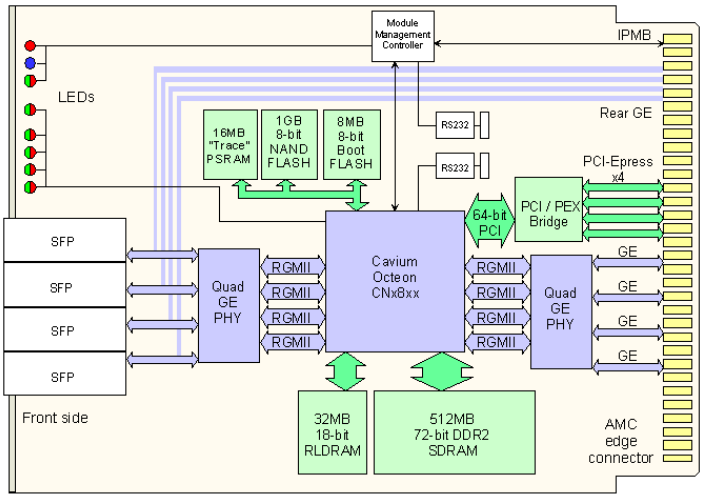
Operating Systems

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

Applications

Interphase supports WindRiver PNE Linux® distribution with Cavium OCTEON extensions and the Cavium Networks “Simple Executive”.

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	OCTOEN Plus 58xx processors running at up to 600MHz - Mid-size: 4 or 8 core - Full-size: 4, 8, or 12 Core
Memory	
RAM	1GB of DDR2 SDRAM System memory
Flash	16 MB NOR Flash, 1 GB NAND Flash
RLDRAM	Optional up to 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) delivers solutions for network connectivity, interworking, and packet processing for key applications for the communications, Mil/Aero, and enterprise markets. Founded in 1974, Interphase provides expert customization services and contract manufacturing, in addition to its COTS portfolio, and plays a leadership role in next generation AdvancedTCA® (ATCA), AdvancedMC™ (AMC), PCI-X, and PCIe standards and solutions. Interphase is headquartered in Plano, Texas, with sales offices across the globe.