

NCP-5120

Dual Cavium OCTEON™ MIPS64® Multi-core Processor-based Network Appliance

NEW



Features

- Dual 1GHz OCTEON MIPS64 Processors with 16 cores each
- Supports security and de/compression engine
- Up to 20 Gigabit Ethernet ports
- Supports one 64-bit/66 MHz PMC Slot
- Supports one 2.5" SATA HDD
- One 10/100 Mbps Ethernet port for management function



Introduction

The NCP-5120 is a 1U rackmount network applications platform designed for mission-critical performance-demanding applications. With the increasing demand and complexity in networking environments, system integrators and solution providers are seeking platforms that can manage high-speed packet processing.

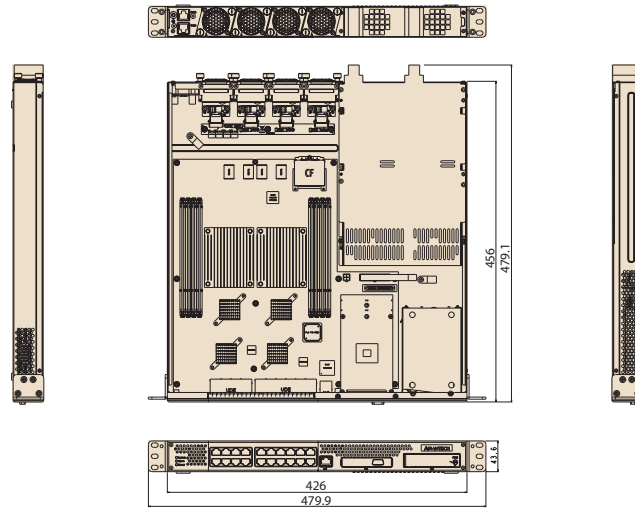
Based on a new generation high-performance OCTEON network processors, the NCP-5120 offers up to sixteen 1 GHz cores. The chipset supports a variety of I/O interfaces from Gigabit Ethernet interfaces and SPI 4.2 to PCI-X. The built-in security and compression/decompression engine provides reliable security functions at top speed.

The NCP-5120 comes with specially designed platform features, including redundant power supplies and a front-accessible HDD bay. In addition, a uniquely-designed thermal mechanism and hot-swappable fan modules enhance platform reliability.

Specification

Processor System	Processor	Dual Cavium OCTEON CN38XX/CN58XX series
	Max Speed	1 GHz
	Processor Cores	4 – 16
	Encryption Engine	Yes
	Reg-ex Acceleration	Yes
	TCP Acceleration	Yes
System Memory	Inter Processor Communication	Direct, multi-channel SPI 4.2 between OCTEON processors (Primary configured as host and secondary configured as target mode)
	Memory Socket	Eight 240-pin DIMM slots
Boot Flash	Memory type and capacity	ECC registered DDR2 DIMM, up to 8 GB
	Flash Type	4 x TSOP flash holders for development 4 x S29GL01GP for mass production
Networking Interface	Max Flash Size	4 GB
	Data Port Controller	Intel® IXF1010 10-port 100/1000 Gigabit Ethernet MAC x 2 Broadcom® BCM5488 8-port Gigabit Ethernet Transceiver x 2 Broadcom® BCM5482 dual-port Gigabit Ethernet Transceiver x 2
	Ethernet Data Port	100/1000Base-T Gigabit ports x 20 with LED indicators Supports 802.1Q, 802.1P and 802.3AD in software and CPLD
	Management Port Controller	Intel 82545GM PCI-X 64/66 GbE LAN
Expansion	Management Port	10/100/1000Base-T port x 1 with LED indicator Supports 802.1Q and 802.1P
	PMC Slot	One 64-bit/66 MHz PMC Slot
Storage System	Controller	Silicon Image Sil 3124-2 SATA PCI 64-bit/66 MHz
	Storage Interface	One 2.5" Removable HDD tray
I/O Interface	Serial Port	RJ-45 RS-232 x 2, one for each processor
	Debug Port	JTAG pin header x 2, one for each processor
Miscellaneous	Hardware Monitor	Winbond W83791G x 1
	EEPROM	Atmel® AT24C256 x 3
	CPLD	Xilinx® XC2C284-7FT256C x 1

Dimensions



Unit: mm (inch)

Specifications Cont.

Power	Type/Watt	1 + 1 redundant hot-swappable SPS / 250 W + 250 W	
	Input	AC 90 ~ 264 VAC full range	
Cooling	CPU Heatsink	Passive copper fin heatsink	
	Fan	4 x hot-swappable fans	
SW support	Bootloader	Cavium SDK 1.4 U Boot 1.1	
	Operating system	Linux Kernel 2.6.14 Debian MIPS	
Environment	Operating Enviroment	Temperature: 0 to 40° C	Humidity: 20% to 90% RH
	Storage Temperature	Temperature: -20 to 70° C	Humidity: 5% to 95% RH
Physical Dimensions	Dimension (W x H x D)	426 x 44 x 456 mm (16.8" x 1.7" x 18")	
	Weight	10 kg (22 lb)	

