Datasheet

Media Cross Connect™ Chassis for High-Speed Applications

Highlights

- 36, 144, or 288 10G ports in a single chassis
- Supports all prominent 10G protocols
- Supported by existing MCC user interface and management options
- Backward compatible with existing MCC blades

OVERVIEW

Higher speed equipment and protocols are continually being developed. This inevitable evolution makes it difficult for test labs to keep pace with the appropriate tools for quality assurance and to verify designs. Once physically wired to all lab devices, the Media Cross Connect (MCC) allows test technicians to connect and remotely configure lab equipment and devices to be tested through software, providing greater setup flexibility and improved operating efficiency. Often-used topologies can be stored and recalled by any authorized user. Test time and configuration errors are reduced, repeatability of simulation testing is improved, and expensive test equipment can be shared. Deploying the MCC in a test lab eliminates manual cabling of test topologies, and it is the cornerstone of lab automation that enables:

- Simplified topology configuration and automated testing
- More corner cases addressed in product design
- Simulated cable breaks or intermittent links in a controlled environment
- Increased test lab productivity
- Decreased time to market for new products
- Increased equipment usage through equipment sharing

HIGH SPEED MCC PRODUCT FAMILY

MRV's high-speed product family includes chassis offerings that support 10Gbps bidirectional, unidirectional, or multicast mappings. The HS chassis product family maintains compatibility with existing MCC blades while supporting the next generation of high-speed blades and protocols. The high-speed chassis is available in three sizes; a single slot model that supports 36 non-blocking ports, a four slot model that supports 144 non-blocking ports, and an eight slot model that supports up to 288 non-blocking high speed ports.

The High Speed chassis family supports a wide range of high speed network connectivity and protocol options. The 10G SFP+ 36-port interface blade supports 10 Gbps Ethernet LAN or WAN PHY, SONET OC-192 and 10 Gbps FCoE. As with all MCC chassis, all supported blades are hot-swappable and support MSA compliant optics, digital diagnostics, clock and data recovery (CDR), link integrity notification (LIN) and link flapping.

Refer to the MCC Chassis datasheet for information on the entire MCC product family. For a complete description and list of all MCC interface blades, refer to the MCC Interface Blade datasheet. Both documents can be found at *www.mrv.com*.

Application 1: SHARED LAB RESOURCES

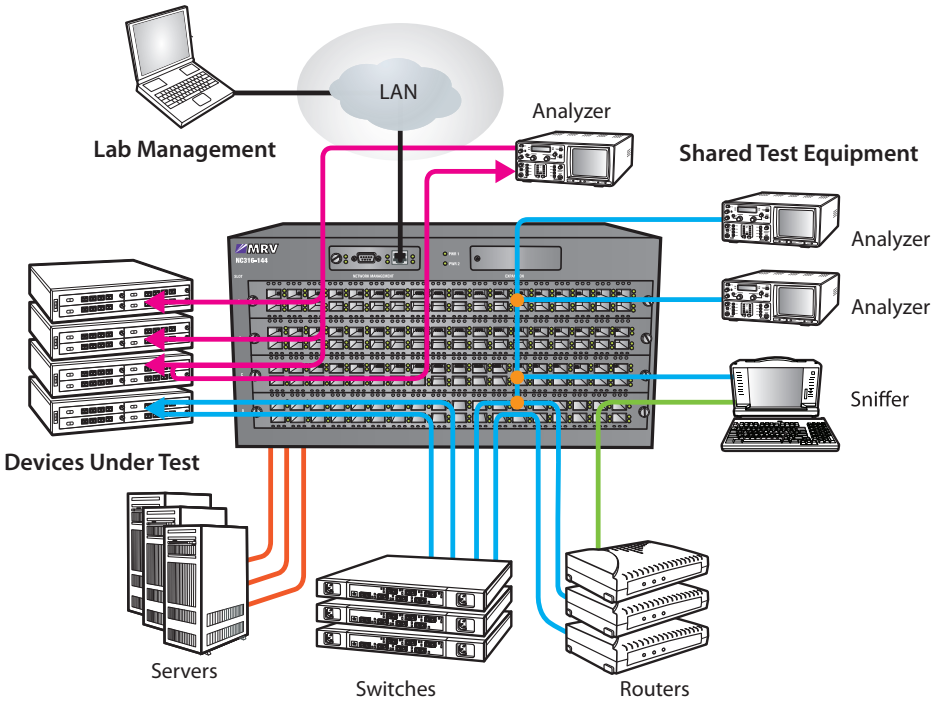

Table 1: MCC BLADE/CHASSIS COMPATABILITY

Blade Type	Ports	# of Ports	Interfaces/Protocols	Chassis Compatibility
EMPMC-36T1E1	**T1/E1**	36	T1/E1	Any
EMPMC-18DT3E3	**DS3/E3/STS-1**	18	DS3/E3/STS-1	4X or 1-Slot HS
EMPMC-36RJ	**RJ-45**	36	10/100/1000 Base TX Copper Ethernet	Any
EMPMC-36RJ-C	**RJ-45-C**	36	10/100/1000 Base TX Copper Ethernet, 100/1000 Copper/Fiber media conversion, uni-directional traffic	Any
EMPMC-36SFP	**SFP**	36	Any 2R protocol up to 3.0 Gbps, 10/100/1000 Base Fiber Ethernet, 1 Gbps/2 Gbps Fibre Channel, Sonet OC-3, OC-12, OC-48	Any
EMPMC-36SFP3R	**SFP FC CDR**	36	Any 2R protocol up to 3.0 Gbps, 1 Gbps/2 Gbps/4 Gbps Fibre Channel with CDR	Any
EMPMC-36SFP3RMR	**SFP MR CDR**	36	Any 2R protocol up to 3.0 Gbps, 10/100/1000 Base Fiber Ethernet with CDR, 1 Gbps/2 Gbps/4 Gbps Fibre Channel with CDR, Sonet OC-3, OC-12, OC-48 with CDR	Any
EMPMC-36FC8G	**8G SFP+ FC**	36	Any 2R protocol up to 3.0 Gbps, 1 Gbps/2 Gbps/4 Gbps/8 Gbps Fibre Channel with CDR	8X, HS or 1-Slot HS
EMPMC-36SAS	**6G SAS**	36	SAS/SATA 3.0/6.0 Gbps via 9 physical connectors, 4 SAS ports each)	8X, 1-Slot HS, 8-slot HS
EMPMC-9XFP	**10G XFP**	9	10 Gbps Ethernet LAN Phy , Fibre Channel	Any
EMPMC-3610GMR	**10G SFP+ MR**	36	Multi-rate 1Gbps to 10 Gbps support including Ethernet LAN, WAN PHY or SONET OC-192 (does not support 8GFC)	Any
InterChassis	**InterChassis**	36	Multi-rate 1 Gbps to 10 Gbps support including Ethernet LAN	Any

Datasheet

MCC HIGH-SPEED EQUIPMENT

Chassis	Blade Slots	Mapping Speed	Max # Ports (@ Max Speed)	Power Supplies	Size
NC316-36PMCHS	1	10.3125 Gbps	36 (10G)	2 AC, Fixed	1 RU*
NC316-144PMCHS	4	10.3125 Gbps	144 (10G)	4 AC (NC316-144RPSAC for spares)	5 RU*
NC316-144PMCHSD	4	10.3125 Gbps	144 (10G)	1 DC (NC316-144RPSDC for spares)	5 RU*
NC316-288PMCHS	8	10.3125 Gbps	288 (10G)	4 AC	10 RU*

* 1U = 1.75 inches (44.45 mm)

REDUNDANT POWER SUPPLIES

HS Chassis Redundant Power Supplies	Weight	Voltages
NC316-144RPSAC (AC Version)	2.5 kg (5.5 lbs)	90 VAC - 240 VAC
NC316-144RPSDC (DC Version)	1.9 kg (4.2 lbs)	40 VDC - 58 VDC

Physical Specifications	
Dimensions: 36 HS Chassis	43 mm (H) x 438 mm (W) x 381 mm (D) (1.7"x 17.25"x 15.00")
144 HS Chassis	221 mm (H) x 438 mm (W) x 305 mm (D) (8.7" x 17.25" x 12.00")
288 HS Chassis	443 mm (H) x 438 mm (W) x 305 mm (D) (17.45" x 17.25" x 12.00")
Power Usage: Chassis/Manager	34 Watts
Power (Max.): Loaded 36 HS Chassis	85 Watts
Loaded 144 HS Chassis	353 Watts
Loaded 288 HS Chassis	1040 Watts
Weight: 36 HS Chassis (As Shipped)	3.5 kg (7.5 lb)
144 HS Chassis (As Shipped)	8.1 kg (17.8 lbs)
288 HS Chassis (As Shipped)	17 kg (37.5 lbs)
Operating Temperature Range	0°C to 50°C (32°F to 122°F)
Storage Temperature Range	-40°C to 70°C (-40°F to 158°F)
Relative Humidity	85% maximum, non-condensing
Cooling Airflow	1 inch (2.54 centimeters) clearance from external vents
Regulatory Compliances	Media Cross Connect Chassis: FCC Part 15 (Class A); IC (Class A); EMC Directive: Emission (Class A) and Immunity; LVD Directive: Electrical Safety; RoHS 2 Directive, REACH SVHC Directive, WEEE Directive: Wheelie Bin Mark

MRV operates Worldwide sales and service offices across four continents.

Contact us at **info@mrv.com**

MRV Communications

Corporate Headquarters

300 Apollo Drive

Chelmsford, MA 01824

http://www.mrv.com