

The Path 1 Chameleon vidX™ IP to ASI muX is a high-end and space-efficient edge device targeted towards cable operators for use in video-on-demand (VOD) applications. By adding VOD to their available services, cable MSOs can distinguish their offerings from satellite services, enhance revenues, and protect their valued subscriber base. Through its flexible high-speed Gigabit Ethernet interfaces, the Chameleon vidX™ 1810MX-B muX version can receive up to 252 IP-encapsulated MPEG-2 video streams per unit, with a program bitrate of 3 - 5 Mbps and a total throughput of 952 Mbps. It can then extract the MPEG-2 content and re-multiplex the programs into up to 8 DVB-ASI multi-program transport streams, which are then ready for QAM modulation and distribution.



Highest-Quality Video Over IP Networks

The Chameleon vidX™ muX enables cable MSOs to distribute hundreds of narrowcast channels generated by IP VOD servers to digital set-top boxes over their existing IP fiber-optic transport networks. Video integrity and quality are maintained by utilizing

RTP transmission, QoS techniques such as DiffServ, and an advanced synchronization algorithm that compensates for and corrects jitter introduced by the network. Precise Program Clock Reference correction further ensures that video quality is not compromised.

Complies With Standards For Full Inter-Operability

The Chameleon vidX™ muX has been designed to be interoperable with standard IP switching and routing equipment. The Chameleon vidX™ muX complies with relevant compressed video standards, i.e. MPEG-2 and DVB-ASI, and network interface standards, i.e. 1000 SX/LX/LH/TX Gigabit Ethernet (SFP optical or RJ-45 copper) and 10/100 BaseT Fast Ethernet.

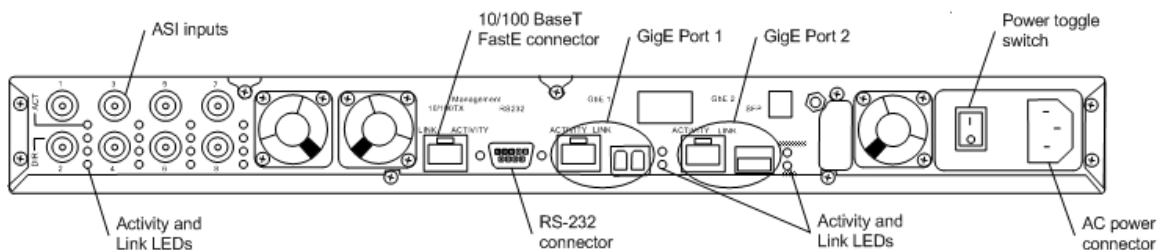
Proven, Cost-Effective Solutions

The Chameleon vidX™ muX enables cable MSOs to leverage the cost effectiveness, ease of use, and flexibility of widely available IP networks in providing VOD and other interactive services in a fully scalable and flexible fashion. By meeting or exceeding broadcast video standards and incorporating years of accumulated experience and know-how on video-over-IP technologies, the Chameleon vidX™ muX is the ideal choice for demanding real-time video distribution...all in an easily manageable and upgradeable, compact 1 RU package.

Key Features and Benefits

- **Flexible programming options**
 - ▶ Up to 252 programs per unit at 3 – 5 Mbps per program, with a total throughput of 952 Mbps
- **Delivers broadcast-quality SD and HD, and VOD streams, over HFC networks**
 - ▶ Lowers the cost of VOD deployment
- **Meets or exceeds broadcast video standards**
 - ▶ Suitable for demanding real-time broadcast distribution requirements
- **Standard video interfaces: DVB-ASI (MPEG-2 Transport Streams)**
 - ▶ Plug-and-play in cable head-end/hub environment
- **Standard network interfaces: Gigabit Ethernet and Fast Ethernet**
 - ▶ Works with current and legacy Ethernet equipment
- **Fast, adaptive clock acquisition and synchronization**
 - ▶ Instant quality video
- **Remote management via SNMP, FTP, Telnet, and built-in HTTP web interface**
 - ▶ Manageable from any computer in the network

Rear Panel



Specifications

Digital Video Interface	
Type	DVB-ASI (output)
Number of ports	8, 6, or 4 - depending on version
Connector	Female BNC
Formats	MPEG-2 System layer (MPEG-2 or MPEG-4)
Bit rate	952 Mbps total MPEG-2 Transport Stream output 3-5 Mbps per program, up to 40 programs per port 3-156 Mbps per port
Video Network Interface	
Type	(2) Gigabit Ethernet ports (SFP or RJ-45 copper) 1+1 port configuration, 1 interface active per port
Connector	SFP (flexible SFP bay accepts a variety of formats) or RJ-45 copper Supports direct MPTS de-encapsulation to ASI output port Multicast capable using IGMP version 2
IP Video Protocol	UDP/RTP
In-Band Management Protocol	SNMP, FTP, Telnet, HTTP Web Interface
Out of Band Management Interface	
Type	10/100 BaseT Fast Ethernet
Connector	RJ-45
Maintenance Interface	
Type	1 RS-232 (male DB-9) serial interface
Processing	
Clock Recovery	Patent-pending fast and adaptive clock acquisition and synchronization Smart buffer provides strong protection against network jitter (up to 250 ms) Precise PCR re-stamping
MPEG-2 Program Translation	Automatic and manual mapping of UDP port numbers to MPEG-2 program numbers and PIDs Automatic regeneration of MPEG-2 tables for the output MPEG-2 MPTS Supports program filtering
MPEG-2 Mapping	Supports both RTP/UDP/IP and UDP/IP encapsulation formats
Processing Capacity	IP de-encapsulation of up to 512 MPEG-2 SPTS
Front Panel	
Display	2 lines by 24 characters
Interface	12 numeric and 5 navigational buttons
Indicators	4 LEDs: power, activity, fault, log
Chassis Specifications	
Rack Size	1 RU
Height	1.75 inches
Width	17.25 inches
Depth	17.5 inches
Weight	5 pounds
Environmental Specifications	
Operating Temperature	32° to 131° F (0° to 50° C)
Operating Humidity	10% to 95% non-condensing
Storage Temperature	14° to 158° F (-10° to 70° C)
Certifications	CE, UL, and FCC certified
Electrical	
Input Voltage	100 - 240 VAC / 50-60 Hz / 0.5 Amps

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