



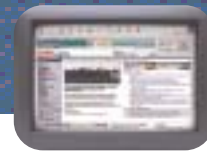
DVB/PCI Multiplexer

Interface Products

MediaPump



Media



MediaPump is a family of open system multiplexer interface boards that provides high-performance MPEG-2 transport stream processing and DVB/PCI interface capabilities. The patented MediaSplice technology enables seamless, artifact-free, real-time splicing of MPEG-2 transport streams while support for multiple boards in a single server allows MediaPump to scale with the needs of intensive video applications.

High Performance Multiplexing

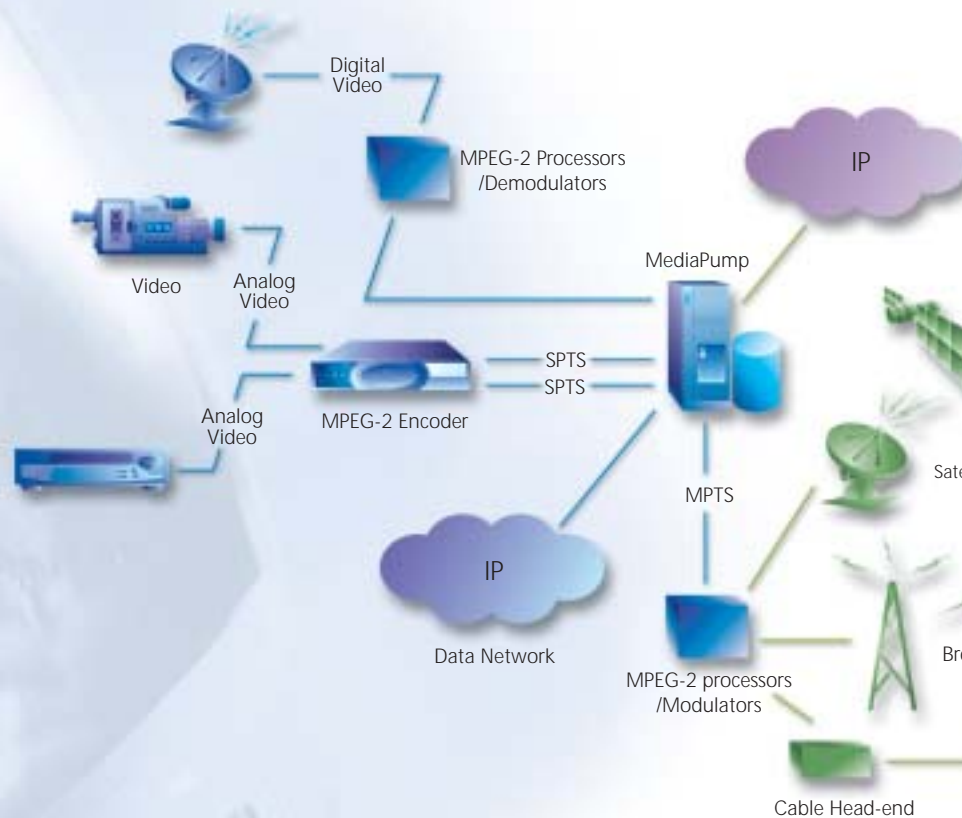
The MediaPump on-board multiplexer provides high performance MPEG-2 transport stream processing and minimizes the host platform overhead required to perform this function. This and all other MediaPump functions are easily accessed via the MediaPump application programming interface (API).

DVB/PCI Interface

By connecting PCI based video servers directly to a broad array of DVB equipment, MediaPump serves as a gateway for integrating digital broadcast systems and has been successfully deployed in video-on-demand, interactive TV, and video over IP applications.

MediaSplice™ Real-Time Splicing

MediaPump's patented award winning MediaSplice™ technology allows the seamless, real-time splicing of any two valid MPEG-2 transport streams enabling successful implementation of ad insertion and video-on-demand applications.



Pump



Available Software

MediaPump SDK

The MediaPump software development kit (SDK) is designed for easy integration with customer applications. The comprehensive SDK provides device drivers for industry standard server platforms, a range of MPEG-2 transport stream processing services, and an easy to use applications programmer's interface (API) for managing the receipt, transmission, and formatting of high-speed MPEG-2 transport streams. The SDK is designed to make MediaPump integration efforts into MPEG-2 digital media applications simple and straightforward.

Available Configurations

Dual Channel MediaPump

- **MediaPump 533-11**- features one DVB-ASI outputs and one DVB-ASI input.
- **MediaPump 503-1 DVB-ASI**- features one DVB ASI output and one DVB ASI input with Genlock support.
- **MediaPump 503-2 DVB-ASI**- features two DVB-ASI outputs.
- **MediaPump 504-1 DVB-DHEI**- features one DVB-DHEI (Digital Headend Expansion Interface) output and one DVB-DHEI input.
- **MediaPump 502-1 DVB-SPI/LVDS**- features one DVB-SPI/LVDS (Synchronous Parallel Interface/Low-Voltage Differential Signaling) output and one DVB-SPI/LVDS.
- **MediaPump 505 DVB-SMPTE310**- features one SMPTE 310 output and one SMPTE 310 input.

Quad Channel MediaPump

- **MediaPump 533-40 DVB-ASI**- features four DVB-ASI outputs and zero DVB-ASI inputs.
- **MediaPump 533-04 DVB-ASI**- features zero DVB-ASI outputs and four DVB-ASI inputs.
- **MediaPump 533-31 DVB-ASI**- features three DVB-ASI outputs and one DVB-ASI input.
- **MediaPump 533-31S DVB-ASI**- DVB scrambling (ETSI ETR-289) version of MediaPump 533-31.

Applications

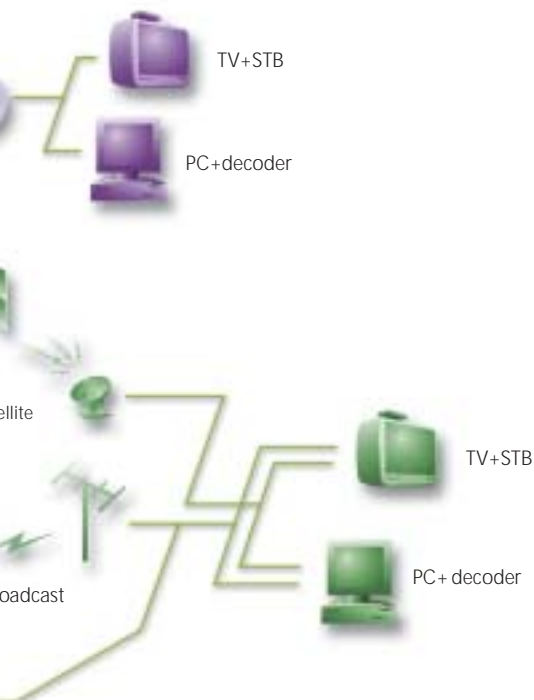
- Video-on-Demand (VOD)
- Interactive/Enhanced Television (iTV/eTV)
- Conditional Access Systems (CAS)
- Ad Insertion/Digital Program Insertion (DPI)
- IP Datacasting
- IP Video Networking/Streaming

Benefits

- High performance MPEG-2 transport stream processing
- Low cost transport stream processing per DVB channel
- Seamless splicing of content into MPEG-2 transport streams
- Scalable video networking solution

Features

- High performance transport stream multiplexing
- Multiple (up to 4) DVB-ASI I/O channel support
- Patented MediaSplice™ seamless real-time splicing technology
- Powerful and comprehensive software development kit
- Multiple board support



MediaPump

Technical Specifications

The following specifications refer to the MediaPump 533-31 which has three DVB ASI outputs and one DVB ASI input.

Standards Compliance

- DVB-ASI supported DVB standards

Input/Output Signal

- | | |
|----------|--|
| Channels | • 4 channels |
| Inputs | • 1 ASI input; external BNC connector |
| Outputs | • 3 ASI outputs; external BNC connectors |

Performance

- | | |
|----------------------------|---|
| Transport Mode Throughput | • Full duplex throughput up to 216 Mbps/channel (full DVB payload rate) |
| Total Multiplex Throughput | • Aggregate board throughput up to 310 Mbps |

Hardware

- | | |
|---------------------------|---|
| Function | • PCI Single Universal Board (5V and 3.3V tolerant)
• MPEG-2 DVB-ASI to PCI Open System Interface |
| PCI Interface | • PCI 2.2 compliant
• 32/64 bit
• 33/66 MHz |
| Embedded Memory | • 256 MB |
| Typical Power Consumption | • Total power consumption ~ 15.5 W
51.5 W @ + 5 VDC
0W @ + 3.3 VDC
01. W @ + 12 VDC
0.1 W @ -12 VDC |
| Physical Size | • Single slot PCI board:
313.78 mm x 100.33 mm, 12.36 in x 3.95 in |
| Storage Temperature | • -55-125 degrees C |
| Operating Temperature | • 0-55 degrees C |

Supported Operating Systems

- Microsoft Windows NT and 2000
- RedHat Linux
- Sun Solaris
- Compaq Tru-64 Unix

Software and notes

Comprehensive API SDK is available separately.

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