DVB-ASI output module for Luminato platform

The DVB-ASI output module enables flexible multiplexing of SPTS and MPTS video services and also PSI/SI table streams. High quality multiplexing module is ideal for an IP centric headend to create MPTS at the main headend for sending through DVB-ASI or IP network to remote headends.

Versatile functionality

Luminato multiplexer enables flexible multiplexing of SPTS and MPTS video services and also PSI/SI table streams. The multiplexer is ideal for an IP centric headend to create MPTS at the main headend and send them through to IP network to remote headends.

The Luminato quad ASI output module support selection of free-to-air and scrambled services from IP stream sources, which can be adjusted to the operator's service line-up with the built-in advanced transport stream processing capabilities. The Luminato quad ASI output module support Standard Definition, High Definition and 3D video in MPEG-2 and MPEG-4 AVC video formats and numerous audio formats.

Effective flexibility

Luminato quad ASI output module is fully compatible with the high-

performance Luminato chassis, where it can be fitted freely to any of the six module slots. In accordance with the Luminato system architecture, the video processing is performed on the quad ASI output modules, which enables low-cost applications even with partially equipped chassis, while having the performance scalability to fully equipped chassis.

Embedded content protection

Quad QAM module has the optional capability to do DVB Common Scrambling Algorithm content protection. The embedded scrambling doesn't require any additional hardware and the user can freely select which services will be scrambled. The component level scrambling is also supported to allow only video and audio scrambling and leave other streams untouched to avoid de-scrambling challenges for bursty data in set-top box.

Efficiency and reliability

With the advanced transport stream processing, operator can select the services and components which are relevant to his network. The Luminato will follow-up any changes on the stream to automatically readjust the processing to provide uninterrupted service. This will allow the operator to efficiently manage network capacity usage.

The available tools provide high degree of automated features to minimise the cost of system set-up and operation, and avoiding downtime due to changes in the received services.
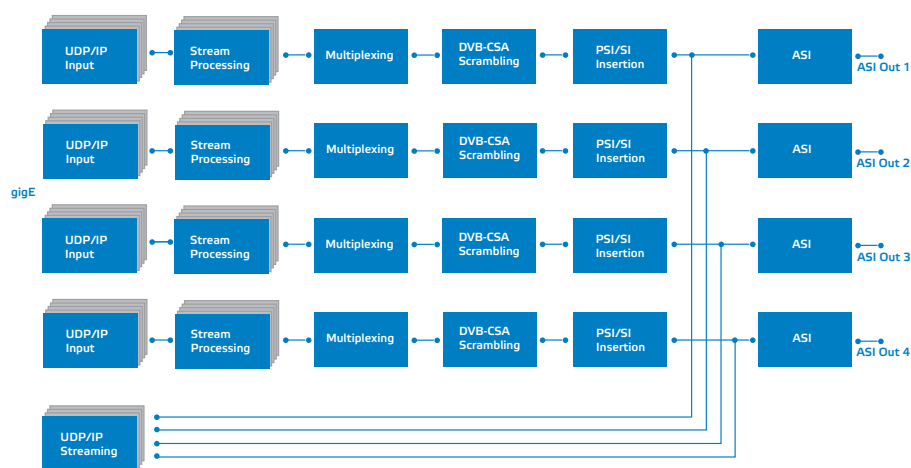
Block Diagram, Quad ASI Out

Features

- DVB TS over UDP/IP or RTP/UDP/IP reception
- IP address / UDP port selector for input streams
- Network dejittering
- Support CBR and VBR TS
- Advanced transport stream processing

- Supports SPTS and MPTS multiplexing
- PCR processing
- Automatic PSI/SI table generation
- Custom PSI/SI table creation and streaming
- DVB CSA content protection (LAS-D)

- MPEG transport stream over UDP/IP and RTP/UDP/IP streaming
- MPTS passthrough
- DVB-ASI output
- Multiplex IP streaming (VBR or CBR)

Technical specifications

Parameter	Specification	Note	Parameter	Specification	Note
IP inputs			**IP streamer output of multiplexer**		
Frame formats	UDP/IP, RTP/UDP/IP		Framing format	UDP/IP, RTP/UDP/IP	
TS packets per UDP frame	1…7		Traffic type	unicast or multicast	
Max inputs streams per module	120		TS format	VBR, CBR	
Dejittering buffersize	200 ms		Max TS speed per streamer	75 Mb/s	
Multiplexers			Maximum speed total	250 Mb/s	shared with 4 outputs
Number of multiplexer per			**General**		
module	4		Power consumption	6,5 W	
Max input services per multiplexer	120		Supply voltages	24 V	
Max input services per module	120		Connectors, DVB ASI out	BNC 75 ohm	
Max components per service	32		Dimensions	20 x 109 x 253 mm	(HxWxD), 1)
DVB Common Scrambling Algorithm Content Protection			Weight	0,3 kg	
Max scrambled services per module	120	LAS-D	Enclosure classification	IP21	
DBV ASI Output			Operating temperature range	-10…+55 ºC	
Impedance	75 ohm		Storage temperature range	-30…+70 ºC	
Traffic mode	adjustable	variable/constant bit rate	Specification is met	0…+45 ºC	
Output speed for constant bitrate	adjustable	1…75 Mb/s			
Maximum speed per interface	75 Mb/s	payload traffic			
Maximum speed total (4 ports)	250 Mb/s	shared with 4 outputs	**Note!**		
Standard	EN 50083-9		1) Dimensions excluding connectors and locking screws		

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