ESSENTIAL IRD DVBS/S2

MPEG2/H264 SD/HD Integrated Receiver Decoder

Return to the H264 Essence

ESSENTIAL IRD

Essential IRD, is a real-time compact 1RU MPEG2/H264 SD/HD IRD for Broadcast applications. His design is based on a generic architecture widely used on many IRD platform in the market, it is created to be simple , reliable and cost effective.
Essential IRD can be used in:

- IP Distribution
- IP Reception for VHE
- IP Contribution link

DVBS/S2 , ASI and IP inputs

Essential IRD has multi inputs, it hosts a DVBS/S2 receiver and includes ASI and IP inputs:

- 4 ASI inputs , 2 inputs, 2 outputs
- 2 TS over IP Gbe Ports
- 2 RF DVB S/S2 Ports

TS Processing and Descrambling

Essential IRD includes processing features

- Builtin Mux to remux or mux incoming services.
- 2 CI slots for DVB Simulcrypt supporting Multi Channels descrambling
- BISS0/1/E descrambling.
- PSI/SI processing or regeneration .
- FEC ProMPEG CoP3v2

Add Transcoder or Transmodulator

Essential IRD family offers IRD with builtin Transcoder/Transrater and Transmodulation:

- Transcoder/transrater: used with the builtin Mux offer you a single platform to adjust service in bitrate and CODEC before remuxing the entire TS for local Cable networks (Request Essential TC series)
- Transmodulation: a QAM or COFDM modulation can be added in output, turning the IRD into a digital turn around platform , taking an entire TS and change modulation for injection in a local Cable or T/T2 loop (Request Essential TM series)

KEY FEATURES:

- Compact 1RU chassis with SNMP, Web interface and Front Control
- 2 CI modules Multi Channels descrambling
- BISS Descrambling
- RF, IP and ASI inputs
- HDMI for monitoring
- Mux/Remux of services
- Satellite TS Inband control

SPECIFICATIONS:

Decoder

Features	Descriptions
Inputs	2 RF inputs DVB-S2 Multi-stream (Optional) 4 ASI 2 inputs 2 outputs 2 IP Gbe1 input, 1 output ASI/IP Path redundancy 1 IP port 100Mbs Control
Outputs	1 SDI output (2 embedded Audios) 1 AES/EBU digital audio output, 2 pairs Analog balanced/unbalanced output GPI alarm and cue tone output HDMI output for monitoring
Processing	PID filtering PCR re-mapping filling (VBR/CBR) PSI/SI processing and regeneration VBI subtitle insertion from analogue video TS or Service Mux/Remux TS or EIT pass-through
Video Decoding	MPEG-2 SD/HD 420 MP@ML H264 AVC SD MP@L3 H264 AVC HD MP@L4.0 / HP@4.0
Audio Decoding	Musicam (MPEG1 LII) AC3 (Optional), E-AC3 (Optional) AAC (MPEG2, MPEG4/ HE V1.2, MPEG4/LC) (Optional)
Control	Web GUI , SNMP , Front panel keypad , Satellite TS inband control

ASI inputs

Features	Descriptions
ASI	4 ASI BNC 75 Ohm 2 Inputs, 2 Outputs
Max Birtrate	100Mbs per Port
Packet	188/204 Bytes
Input Mode	Spreed and Burst
Output Mode	Burst
Bypass	MPEG2/H264 stream, AC3/ EAC3 Audio bypass

Descrambling

Features	Descriptions
CI	2 CI slots Multi-channel descrambling
Bitrate	100Mbs Max
CAM	Aston, SMIT, Neotion… (list on request)
CAS	Conax, Irdeto, Viaccess, NDS, Novel-SuperTV, CTI… (List on request)
BISS	BISS on TS and Service level

IP Inputs and Outputs

Features	Descriptions
Port	2 Gbe RJ45
Speed	Up to 1000Mbs
Streaming	UDP, RTP - Auto detection Unicast/Multicast V2, V3 (Optional)
FEC	ProMPEG CoP3v2
TCP/IP protocol	IPV4, IPV6 (Optional)

RF inputs

Features	Descriptions
Inputs	2 RF F-type 75 Ohm, 1 input, 1 loop
Constellation	QPSK, 8PSK
Symbol rate	1-45Msps
Input Fq.	950-2150 MHz
Max Bitrate	150 Mbps
Signal Level	-65 to –25 dBm
LNB	DC 13V/18V
22K	On/Off

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