

IRD1511Pro

DIBVISION | DIBSYS

Single Channel 4K HDMI 60fps H.264 H.265 Decoder&IRD

H.265 DVB-S2 DVB-S2X DVB-T2 DVB-C
CABLE



With the significant increase in TV sets hitting the Head-end market, content providers and TV broadcasters are looking for low cost Video solution to address the needs of Collect the H264, H265, MPEG2, AVS+ 4K Channels from Cable, Terrestrial, Satellite and IPTV Networks, **IRD1511Pro Decoder** is the answer.

Advanced Modular Receiver has the capability to provide the ultimate feature-set of HEVC, 4K/1080p allowing broadcasters to achieve the highest possible video quality.

IRD1511Pro offers Main, Main 10 High Definition decoding in all industry-standard compression formats combined with optional one Tuners in DVB-S2, **DVB-S2X(optional)**, DVB-T2, DVB-C, works as ASI and TS/IP together. Up to 2 CI slots capable of working with most of well-known CAS in the market to de-encrypt multiple pay TV services. The unit ingests is through DVB-ASI or GigE and output is through HDMI2.0, CVBS ports. This efficient and flexible configuration enhances the use cases and overall effectiveness of the product.

Key Features

- MPEG2,H264,AVS/AVS+ and HEVC Decoded in HD and SD
- Inputs signals: UDP/IP, ASI and Tuners simultaneously in DTV,only IP for UDP/RTP, (HTTP/HTTPS/HLS M3U8/RTSP/RTMP/MMS/SRT optional) in Network Decode
- Optional Tuners DVB-S2, DVB-S2X(optional), DVB-T2 or DVB-C inputs
- Multiple Analog and Digital Outputs, ASI, CVBS, HDMI, TS/IP
- Decode to 4K@60fps inputs and outputs
- 1*MPTS (tuner/ASI passthrough) and 14*SPTS output
- 2x DVB-CI Slots, Multi Programs,BISS-1 and BISS-E decryption
- Low Latency decode
- Audio decoding: AC3/E-AC3/AAC/MPEG1 L2
- Front-panel and web-based user interfaces

Application

- Video Contribution and Distribution in TV studio Station
- Satellite digital TV, Terrestrial digital TV, Cable TV broadcasting
- Contribution decode of high bitrate HEVC/H.264 video service

TECHNICAL SPECIFICATIONS

DVB-S/S2 Tuner input

DVB-S/S2 Tuner Input	1*RF input, 1*RF loop out 75Ω
Input frequency	950~2150MHz
Input level	-25~ -65 dbm
Symbol Rate	1 ~ 45msps
Roll-off Factor	0. 2, 0.25, 0.35
FEC Code Rate	All rates compatible with the standard
LNB power supply	13V, 18V selectable, 22KHz selectable
Constellation	QPSK, 8PSK, 16APSK, 32APSK

DVB-S2X (optional)

Input Frequency	950-2150Mhz
Symbol rate	QPSK/8PSK /16APSK :0.5~45 Msps 8APSK: 0.5~40Msps 32APSK: 0.5~34Msps;
FEC Demodulation	QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 8APSK: 5/9-L, 26/45-L 16APSK:2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 1/2-L, 8/15-L, 5/9-L, 26/45, 3/5, 3/5-L, 28/45, 23/36, 2/3-L, 25/36, 13/18, 7/9, 77/90 32APSK: 3/4, 4/5, 5/6, 8/9, 9/10, 2/3-L, 32/45, 11/15, 7/9
Demodulation Mode	QPSK, 8PSK, 8APSK, 16APSK, 32APSK
Max input bitrate	≤125 Mbps

DVB-C Tuner input

DVB-C Tuner Input	1*RF input, 1*RF loop out 75Ω
Input Frequency Range	48~862MHz
Input Level	45~75dbuV
Modulation mode	16/32/64/128/256QAM

DVB-T/T2 Tuner input

DVB-T/T2 Tuner Input	1*RF input, 1*RF loop out 75Ω
Input Frequency	44~1002MHZ
Input Level	-20 ~ -100dbm
Modulation mode	DVB-T: QPSK, 16/64 QAM DVB-T2: QPSK, 16/64/256 QAM
Bandwidth	6MHz, 7MHz, 8MHz
Guard Interval	DVB-T: 1/4, 1/8, 1/16, 1/32 DVB-T2: 1/4, 1/8, 1/16, 1/32, 1/64, 1/128
Carrier wave	DVB-T: 2K/8K DVB-T2: 1K/2K/4K/8K/16K/32K
FEC: DVB-T	DVB-T: 1/4, 1/8, 1/16, 1/32 DVB-T2: 1/2, 3/5, 2/3, 3/4, 4/5, 5 /6

TS in/output interfaces

DVB-ASI	1xASI input, 2x ASI outputs. ≤99Mbps Impedance 75Ω
IP Input	UDP/RTP, (HTTP/HTTPS/HLS/M3U8/RTSP/RTMP/ MMS/SRT optional), Multicast/unicast
IP output	MPEG-TS over UDP IP out , Multicast 1*MPTS (tuner/ASI passthrough) and 14*SPTS
Connectors	1xRJ-45,1000Base-T

Output Ports

HDMI Output	
standards	1 * HDMI 2.0a with HDCP2.2/1.4
Resolution	up to 4K@60fps,1080p@60fps, 1080i@60fps, 1080i@50fps,720p,480i,576i
Embed Audio	One Channel Decoded

Analog Audio Video Output

Connector Type	1* CVBS , 1 pairs of R/L analog, RCA, 75Ω,
Output level	I.0 Vp-p±5% Standard test stream
CVBS Standard	PALBDGHI, PALN, NTSCM, PALN-C, NTSCM, NTSCM443, PALM, SECAM, NTSCMJ
SNR	≥ 56dB
synchronizing amplitude	300±20mVP-P
frequency characteristic	±0.8 dB (4.8MHz); ±1 dB (4.8-5MHz); +0.5/-4 dB` (5.5 MHz)
Output amplitude	700±30mVP-P
Differential gain	≤ 8%

Video Decoding

MPEG-2(MP@ ML for SD, MP@HL for HD)	
MPEG-4/H.264 AVC Part 10 (MP@L3 for SD,HP@L4.1 for HD)	
HEVC(main and main 10 profile, main/high tier up to level 4.1)	
AVS/AVS+(Jizhun/Guanbo profile, level6.0)	
Chroma Sample	4:2:0
Bit Depth	8-bit, 10-bit
Decoding Latency	300-1000ms

Audio Decoding

Audio Standard	MPEG-1 Audio Layers I & II AAC-LC, HE AAC V1/V2 AC3/E-AC3 Dolby Digital/Dolby Digital Plus Dolby Digital Passthrough DRA
Dual Audio Tracks	1 by default, 2 optional

Control & Monitoring

Interface	1*RJ-45, 10/100 Base-T, for equipment IP Control
Remote Control	Web management
Local Control	LCD display and keypad

Environment

Power Supply	AC 90V~250V, 50/60Hz
Power consumption	24W
Dimension	450*350*44mm
Operating temperature	0 ~ 45℃
Storage temperature	-10 ~ 60℃
Humidity	10 ~ 90% non-condensed
Weight	5KG