IRD1511C

DIBSYS

Universal Single Channel H.265 Decoder and IRD

4K ULTRA HD H.265 DVB S2 DVB C CABLE DVB T2

With the significant increase in 4K/UHD 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 UHD H264, H265, MPEG2, AVS+ Channels from Cable, Terrestrial, Satellite and IPTV Networks, IRD1511C Decoder is the answer.

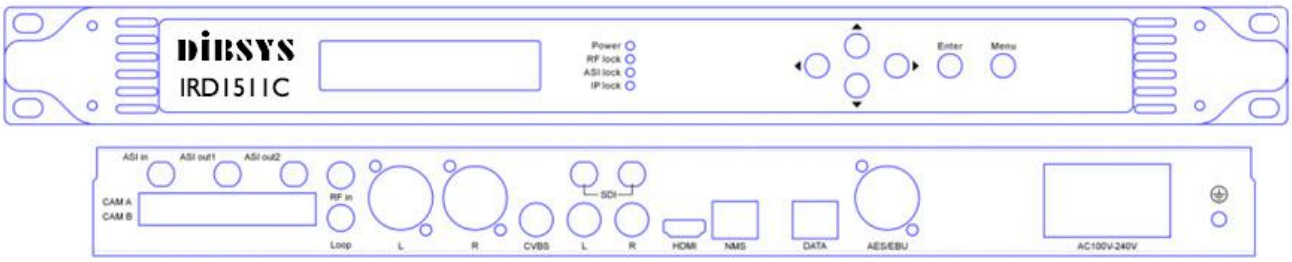
Advanced Modular Receiver has the capability to provide the ultimate feature-set of HEVC UHD/4K, 2160p@30fps, 1080p allowing broadcasters to achieve the highest possible video quality.

IRD1511 offers Main, Main 10 and Main 4:2:0 4:2:2 High Definition decoding in all industry-standard compression formats combined with optional one Tuners in DVB-S2, 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-crypt multiple pay TV services. The unit ingests is through DVB-ASI or GigE and output is through 3G SDI, HDMI2.0, AV ports. This efficient and flexible configuration enhances the use cases and overall effectiveness of the product.

Key Features

- MPEG2, H.264, AVS+, HEVC Decoded in UHD/4K,HD and SD
- Locking Inputs signals: IP, ASI and Tuners simultaneously
- Optional Tuners DVB-S2, DVB-T2 or DVB-C inputs
- Teletext and DVB subtitle supported
- 1*MPTS and 8*SPTS UDP/RTP over Gbe IP out
- Up to 2 CI slots, Biss 1/Biss E decryption
- MPEG-TS of Tuners ingest through DVB-ASI 1/GbE Ports, TS of ASI ingest through
- DVB-ASI 2 /GbE Ports
- Low Latency decode
- Image enhancement, denoising, sharpening, deinterlace, anti-sawtooth flicker
- Audio decoding: AC3/E-AC3/AAC/MPEG1 L2
- Front-panel and web-based user interfaces

Front and Back Panel Picture



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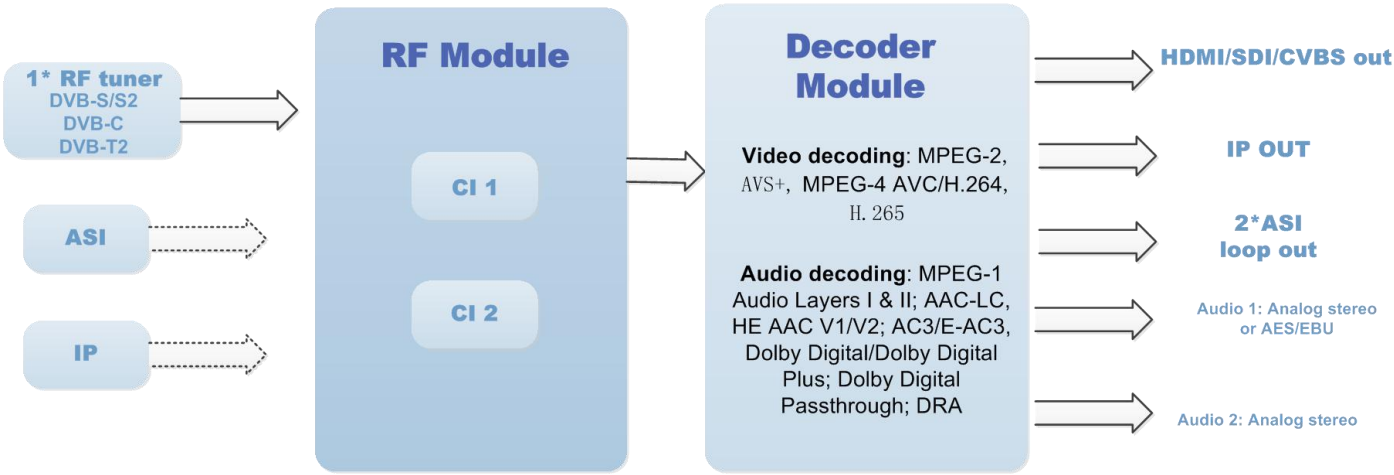
Application

- Video Contribution and Distribution in TV studio Station
- Satellite digital TV,Terrestrial digital TV, Cable TV broadcasting
- Contribution decode of high bitrate 4K/UHD HEVC/H.264 video service

Principle Chart



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

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	2*RF input, 2*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/8K16K/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. ≤120Mbps Impedance 75Ω
IP input MPEG over IP	URL ip input Multicast/unicast Connectors 1x100/1000M Base-T, RJ45 Encapsulation Protocols MPEG-TS over UDP/RTP
DVB Mode:	The IP stream will include all The programs and will be sent to the specified multicast or unicast IP Address. IPTV Mode: The input transport stream is de-muxed into individual programs, each in a different IP stream. Up to 8 IPTV addresses

Output Ports

HDMI Output

Implementation standards	1 * HDMI 2.0a with HDCP1.2
Resolution	up to UHD/4K @30fps, 1080p@60fps

SD/HD SDI Output

Interface	2×BNC, 75Ω
Resolution	up to 1080i@60fps
SD-SDI output	SMPTE 259M, 270 Mb/s (10bit)
HD-SDI output	SMPTE 292M, 1.485 Gbit/s (20bit)
Output level	800mV+-20 p-p

Analog Audio Output

Connector Type	1*RCA, 1*XLR
Audio Output mode	Left, Right, Dual Mono, Stereo

Analog Video Output

Connector Type	1*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%

Digital audio output

Connector Type	1*AES/EBU

Video Decoding

Video Standard	MPEG-2; MPEG 4 AVC/H.264; H.265; AVS+
Video Resolution	3840x2160@30(UHD) 1920x1080P60, 1920x1080P50 1920x1080i60, 1920x 1080i50 1080x720p60, 1080x720p50 720x 576P, 720x 576I 720x 480P, 720x 480I
Chroma Sample	4:2:0, 4:2:2
Bit Depth	8-bit, 10-bit
Decoding Latency	low latency mode: 300-1000ms
HEVC (H.265/MPEG-H)	Main @ L4.1 & L5.1 Main 10 @ L4.1 & L5.1 Main 10 422 @ L4.1 & L5.1
H.264 Profiles	H.264 BP/MP/HP@ level 5.0
MPEG2 Profiles	MPEG2 SP@ML,MP@HL
AVS+ Profiles	AVS-P16(AVS+)

Input mode: IP/ASI/DVB-S2/URL, select one to decode and output

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

Data output

Subtitle	DVB/EBU/Teletext
Closed Caption	EIA 608, EIA 708, EIA 608-to-708

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

