

CMP201/203 Media Platform

Product Overview

CMP201/203 Media Platform



CMP201



CMP203



CMP201/203

What is CMP201?

- Video processing platform with flexible configuration.
- Satellite/Cable/Terrestrial program receiving&descrambling
- Local program encoding.
- Processing&distributing programs to Cable/IPTV network.

What is CMP203?

- CMP201 + fixed 8-CH modulation module on front panel.

Which application is it used for?

- MDU digital TV head-end system, such as hotel, cruise...
- Remote education video distribution
- Small DTV head-end system (e.g. digitalization)
- Various signal sources processing for IPTV/OTT system
- and etc.

Product Features

➤ Dense modular design

- 1 RU, up to 6 hot-swappable functional modules and 1 fixed module
- Embedded 4 GbE RJ45 interfaces for management and IP stream in/out

➤ Flexible combination

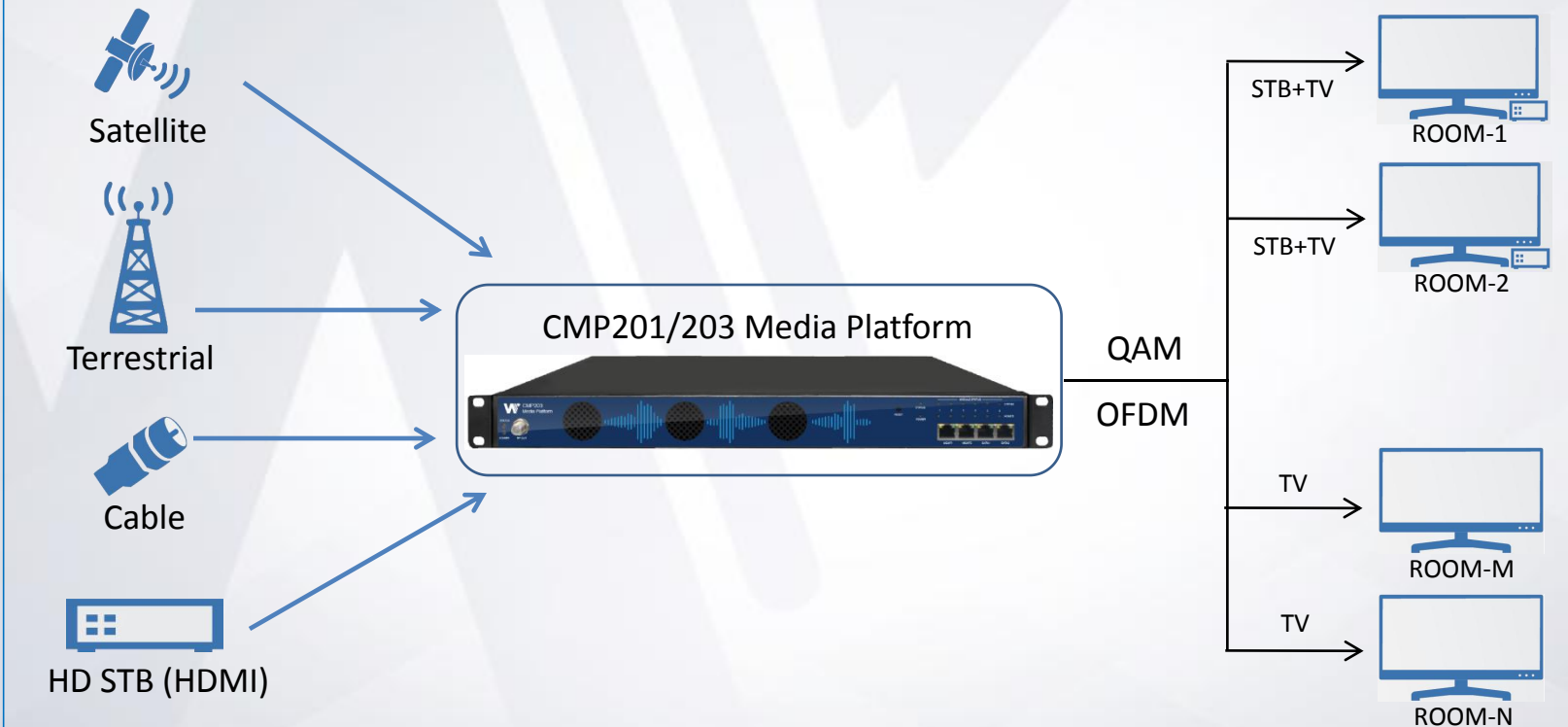
- HDMI/SDI/CVBS encoder (logo/image/text overlay in HiSilicon solution)
- DVB-S/S2/T/T2/C&8VSB&ISDB-T receiver with CI slots for descrambling
- QAM-A/B/C&DTMB&OFDM&ISDB-T modulator (ISDB-T is coming soon)

➤ Service level multiplexing crossing different modules

➤ Any PID pass-through, keep important original data without any change.

➤ Real-time service monitoring on signal sources and output streams.

Digital Head-End for MDU's cable TV System



CASE -- Hotel Digital TV System



Cable

8 x DVBC



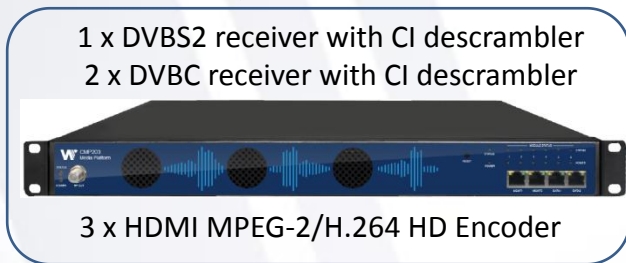
Satellite

4 x DVBS2



HD STB

12 x HDMI HD Video
(Logo, image, QR code, text overlay)



Part Number
1 x CMP203 Chassis
1 x CR2-DVBS2CI-00
2 x CR2-DVBC-00
3 x CE2-HDMI-R01



STB+TV

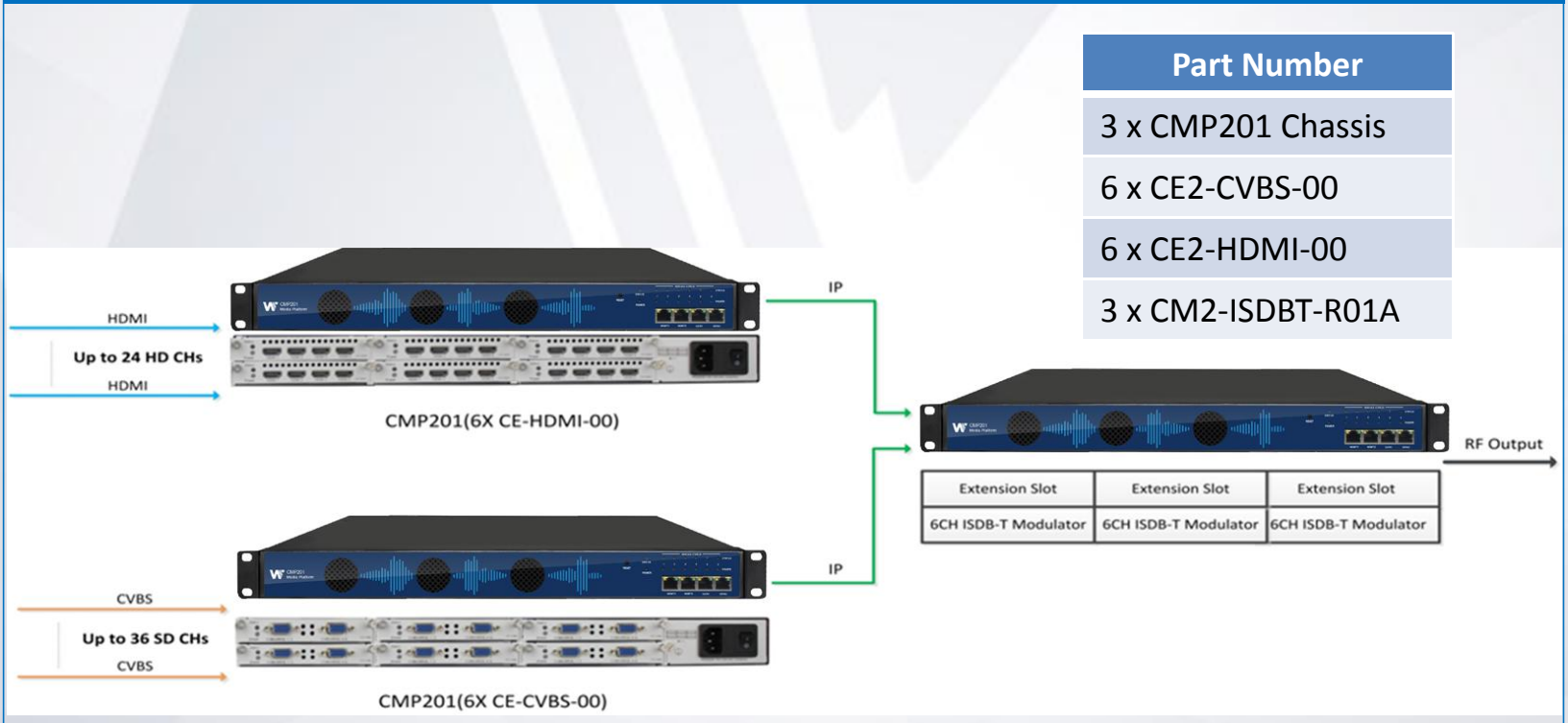
8 x QAM

50 Programs

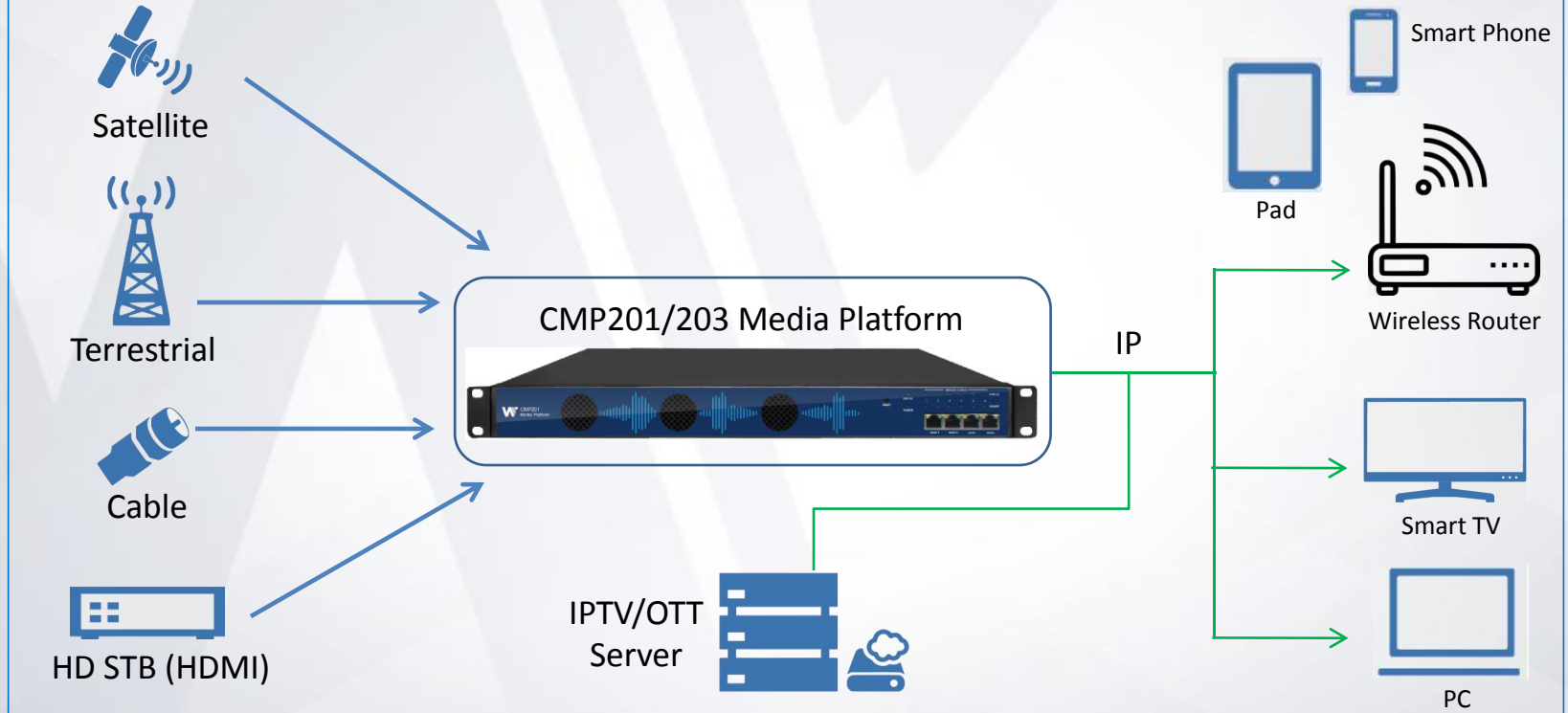
TV



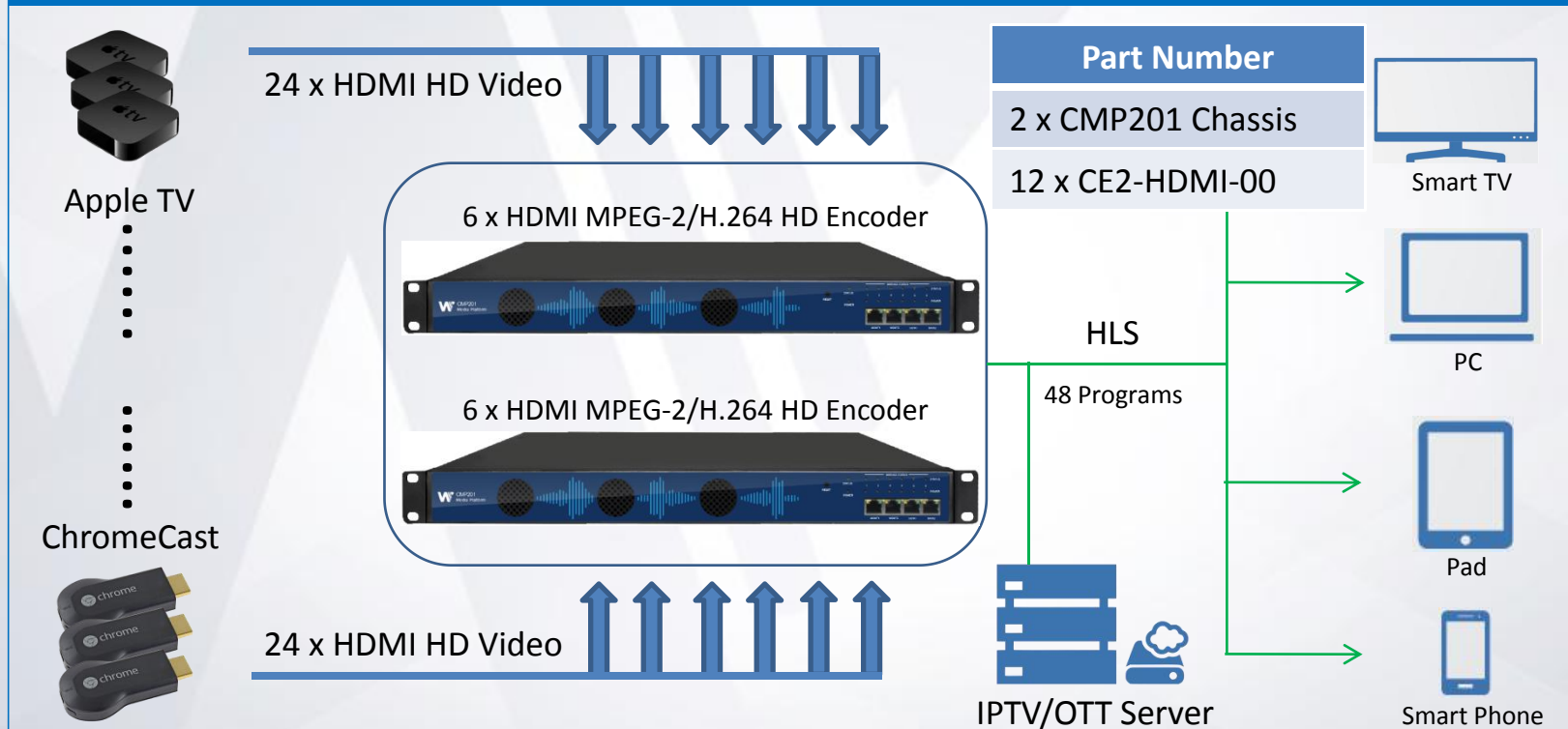
Analog to Digital Turnaround



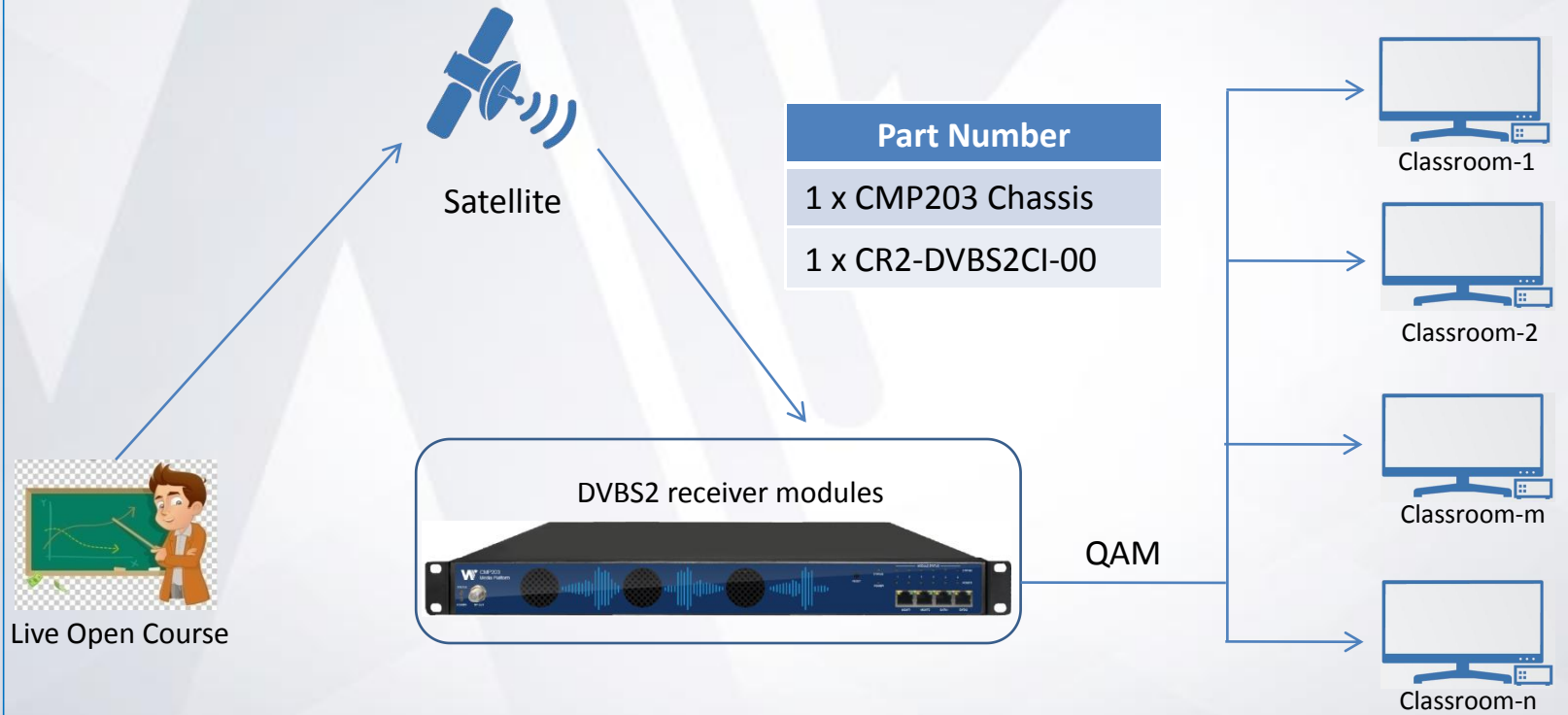
Digital Head-End for IPTV/OTT System



CASE -- Cruise Digital TV Entertainment System



Remote Education Video Distribution



CMP201/203 vs DMP900

Features	CMP201/203	DMP900
Chassis	1RU, 6 slots, 4 GbE ports for IP input/output and management	1RU, 6 slots, multiplexing, 1 100M IP port for management
Module Type	RF receiver with CI, Encoder, RF modulator, EAS	RF receiver, CI, Scrambler, Encoder, Transcoder, IP, ASI, Switch, EAS, RF modulator
Data Exchange	Each module including backplane exchanges data via Internal GbE switch module.	Each module exchanges data via mainboard, it's limited to mainboard performance.
Multiplexing	Service level	PID level
Redundancy	Not support	Module/TS/Service level



- 6 hot-swappable slots, 1 fixed module (CMP203)
- 4 x Gigabit RJ45 (2 x MGMT ports, 2 x data ports)
- MPEG TS over UDP/RTP multicast/unicast
- SPTS/MPTS
- Max. 120 inputs and 120 outputs
- Max. 840Mbps effective bandwidth
- Service level multiplexing
- Dual redundant power supplies (CMP201D)



**DVB-C Annex A/C /DTMB Receiver Module
(CR2-DVBC-00)**

DVB-C Mode:

- Annex A/C
- 1 x female F-type RF input, 4 frequencies.
- 2 x PCMCIA CI slots
- Frequency Range: 47-862MHz
- Symbol Rate: 5.057 Ms/s (64QAM), 5.360 Ms/s (256QAM)
- Signal Level: 40~80 dBuV

DTMB Mode:

- 1 x female F-type RF input, 4 frequencies.
- 2 x PCMCIA CI slots
- Frequency Range: 47-862MHz
- Signal Level: -65~-25 dm



**DVB-C Annex B /ISDB-T Receiver Module
(CR2-DVBC-01)**

DVB-C Mode:

- Annex B
- 1 x female F-type RF input, 4 frequencies.
- 2 x PCMCIA CI slots
- Frequency Range: 47-862MHz
- Symbol Rate: 5.057 Ms/s (64QAM), 5.360 Ms/s (256QAM)
- Signal Level: 40~80 dBuV

ISDB-T Mode:

- 1 x female F-type RF input, 4 frequencies.
- 2 x PCMCIA CI slots
- Frequency Range: 47-862MHz
- Signal Level: -80~-20 dBm



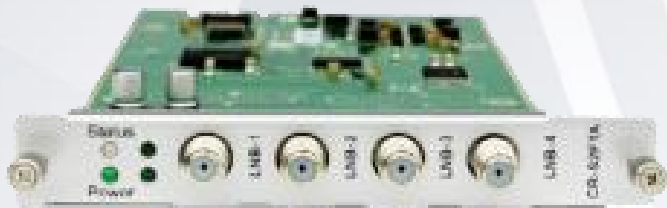
**DVB-T/T2 Receiver Module
(CR2-DVBT2CI-00)**

- DVB-T/T2
- 1 x female F-type RF input, 4 frequencies
- 2 x PCMCIA CI slots
- Frequency Range: 47-862MHz
- FFT Size: 2K/8K(DVBT), 1K/2K/4K/8K/16K/32K(DVBT2)
- Signal Level: -80~-20 dBm



**DVB-S/S2 FTA Receiver Module
(CR2-DVBS2FTA-00A)**

- DVB-S/S2, FTA
- 8 x female F-type RF inputs, 8 frequencies
- LNB Power: 13V / 18V
- Symbol Rate: 1~45 Msps (DVB-S/S2)
- Frequency Range: 950-2150MHz
- Signal Level: -70~-20 dBm



**DVB-S/S2 FTA Receiver Module
(CR2-DVBS2FTA-00)**

- DVB-S/S2, FTA
- 4 x female F-type RF inputs, 4 frequencies
- LNB Power: 13V / 18V
- Symbol Rate: 1~45 Msps (DVB-S/S2)
- Frequency Range: 950-2150MHz
- Signal Level: -70~-20 dBm



**DVB-S/S2 with CI Receiver Module
(CR2-DVBS2CI-00)**

- DVB-S/S2, Encrypted
- 2 x female F-type RF inputs, 4 frequencies
- 2 x PCMCIA CI slots
- LNB Power: 13V / 18V
- Symbol Rate: 1~45 Msps (DVB-S/S2)
- Frequency Range: 950-2150MHz
- Signal Level: -70~-20 dBm



**8VSB Receiver Module
(CR2-8VSB-00)**

- 8VSB, FTA
 - 4 x female F-type RF inputs, 4 frequencies
 - Bandwidth: 6MHz
 - Frequency Range: 50-860MHz
 - Signal Level: -80~-20 dBm
-



**EAS processing Module
(CP-EAS-00)**

- 1*ASI EAS IN, 1*IP EAS IN, 3* RCA IN (for analog video/audio)
- 1*Contact closure (3 PINs)
- Analog signaling or digital signaling(SCTE-18)
- Analogue encoding format: H.264/MPEG-2, AC3/AAC/MPEG1L2
- Program switching time: less than 1s



**Professional HDMI Encoder Module
(CE2-HDMI-00)**

- Socionext chipset solution
- 4 x HDMI 1.4
- H.264/AVC HD/SD, MPEG-2 SD
- Resolution: SD 576i/480i, HD 720p/1080i/1080p30
- Video Bitrate: 1,000~14,000 Kbps
- Audio format: MPEG-1 Layer II, AAC, AC3



**Commercial HDMI Encoder Module
(CE2-HDMI-01/R01)**

- HiSilicon chipset solution
- 4 x HDMI 1.4
- H.264/AVC HD/SD
- Resolution: SD 576i/480i, HD 720p/1080i/1080p30
- Video Bitrate: 600~12,000 Kbps
- Audio format: MPEG-1 Layer II, AAC, AC3
- Logo(transparent background), image, QR Code, text overlay



**HDMI Encoder Module
(CE2-HDMI-02)**



**HDMI Encoder Module
(CE2-HDMI-02C)**

- ViXS chipset solution
- 2 x HDMI 1.4, 2 x RCA (for CC input)
- H.264/AVC SD/HD(up to 1080p60) , MPEG-2 SD/HD(up to 1080i60)
- Resolution: SD 576i/480i, HD 720p/1080i/1080p60
- Video Bitrate: 1,000~14,000 Kbps
- Audio format: MPEG-1 Layer II, AAC, AC3
- Dual audios encoding

- ViXS chipset solution
- 2 x HDMI 1.4, 1 x DB15 (for YPbPr/CC/analog audio inputs)
- H.264/AVC SD/HD(up to 1080p60) , MPEG-2 SD/HD(up to 1080i60)
- Resolution: SD 576i/480i, HD 720p/1080i/1080p60
- Video Bitrate: 1,000~14,000 Kbps
- Audio format: MPEG-1 Layer II, AAC, AC3
- Dual audios encoding



**Commercial HDMI Encoder Module
(CE2-HDMI-04) Coming soon**

- HiSilicon chipset solution
- 4 x HDMI 1.4
- H.264/AVC HD/SD
- Resolution: SD 576i/480i, HD 720p/1080i/1080p30
- Video Bitrate: 600~12,000 Kbps
- Audio format: MPEG-1 Layer II, AAC, AC3
- Logo(transparent background), image, QR Code, text overlay



**SDI Encoder Module
(CE2-SDI-00)**

- ViXS chipset solution
- 2 x BNC, 2 x 6-pins interfaces (for analog audio inputs)
- H.264/AVC SD/HD(up to 1080p60) , MPEG-2 SD/HD(up to 1080i60)
- Resolution: SD 576i/480i, HD 720p/1080i/1080p60
- Video Bitrate: 1,000~14,000 Kbps
- Audio format: MPEG-1 Layer II, AAC, AC3
- Dual audios encoding



**Professional CVBS Encoder Module
(CE2-CVBS-00)**

- Socionext chipset solution
- 2 x DB15, support 6 analog video/audio inputs
- H.264/AVC SD, MPEG-2 SD
- Resolution: SD 576i/480i
- Video Bitrate: 1,000~6,000 Kbps
- Audio format: MPEG-1 Layer II, AAC, AC3



**Commercial CVBS Encoder Module
(CE2-CVBS-R01)**

- HiSilicon chipset solution
- 2 x DB15, support 8 analog video/audio inputs
- H.264/AVC SD
- Resolution: SD 576i/480i
- Video Bitrate: 600~6,000 Kbps
- Audio format: MPEG-1 Layer II, AAC, AC3
- Logo, image, text overlay



**QAM Modulation Module
(CM2-QAMA/QAMB-00/R00)**

- QAM, Annex-A/C or B
- 1 x RF OUT, 16 non-adjacent frequencies
- Frequency Range: 47~862 MHz
- Symbol Rate: 3.6~6.9 Ms/s
- Output Level: Max. 106 dB μ V
- MER: \geq 40dB



**QAM Modulation Module
(CM2-QAMA/QAMB-R01/R01A)**

- QAM, Annex-A/C or B
- 1 x RF OUT, 4/8 frequencies
- Frequency Range: 47~862 MHz
- Symbol Rate: 3.6~6.9 Ms/s
- Output Level: Max. 105 dB μ V
- MER: \geq 32dB



**OFDM Modulation Module
(CM2-OFDM-R01/R01A)**

- OFDM
- 1 x RF OUT, 4/8 frequencies
- Frequency Range: 47~862 MHz
- Output Level: Max. 105 dB μ V
- MER: ≥ 32 dB
- FFT Size: 2K, 8K



**DTMB Modulation Module
(CM2-DTMB-R01/R01A)**

- DTMB, Single Carrier
- 1 x RF OUT, 4/8 frequencies
- Frequency Range: 47~862 MHz
- Output Level: Max. 105 dB μ V
- MER: ≥ 32 dB



**ISDB-T Modulation Module
(CM2-ISDBT-R01/R01A)**

- ISDB-T
- 1 x RF OUT, 4/8 frequencies
- Frequency Range: 57-860 MHz
- Output Level: Max. 104 dB μ V
- MER: ≥ 32 dB
- Transmission Mode: 2K



**ATSC(8VSB) Modulation Module
(CM2-ATSC-R01/R01A)**

- ATSC (8VSB)
- 1 x RF OUT, 4/8 frequencies
- Frequency Range: 57~803 MHz
- Output Level: Max. 105 dB μ V
- MER: ≥ 32 dB

THANKS



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