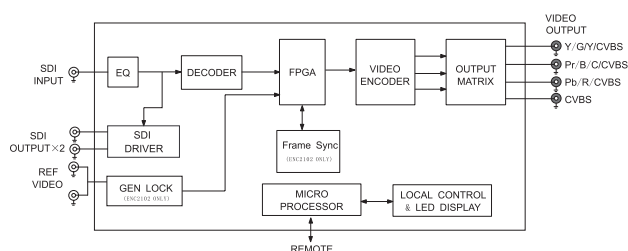


The ENC-2102 is a SDI-to-analog video converter with frame sync. It is used in i-MOD platform. The module converts SDI input signal to CVBS, Y/C, YUV and RGB outputs. Two additional SDI outputs are provided for loop-thru function. Equalizing is up to 656 ft (200 m). Genlock to reference input and continuous H/V/subcarrier phase adjustment are available.

The ENC-2102 can be controlled locally by means of an intuitive card-edge interface or remotely using i-MOD platform control software IM-MASTER.

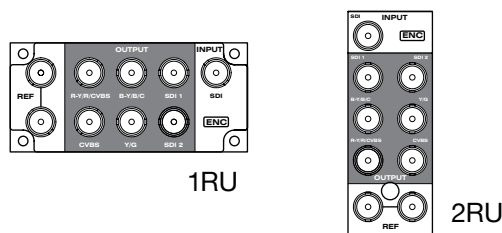
BLOCK DIAGRAM



FEATURES

- NTSC/PAL compliant
- 10-bit processing
- 2 additional SDI outputs, loop-thru supported
- Output signals supported include CVBS, Y/C, YUV and RGB
- 2 reference video inputs, hi-z loop-thru supported
- Output frame sync and H/V/subcarrier phase adjustment available
- Equalizing up to 656 ft (200 m)
- Non-volatile memory
- Hot-swappable
- IM-MASTER control supported

BACK MODULES



SPECIFICATIONS

Specifications are subject to change without notice.

DIGITAL VIDEO INPUT

Signal Format.....SMPTE 259M, 270 Mbps, 4:2:2,
10 bits, 525/625 component
Connector.....BNC (x1)
Impedance.....75 Ω
Return Loss.....>15 dB @ 270 MHz
Cable EQ.....<656 ft (200 m), 270 Mbps,
Belden1694A cable or equivalent

REF VIDEO INPUT

Signal Format.....CVBS
Standards.....NTSC, PAL
Connector.....BNC (x2), hi-z loop-thru

ANALOG VIDEO OUTPUT

Signal Format.....CVBS, Y/C, YUV, RGB
Standards.....NTSC, PAL
Quantization.....10 bits
Connector.....BNC (x4)
Impedance.....75 Ω
Return Loss.....>40 dB @ 5.5 MHz
Amplitude.....1.0 Vp-p ±3%
Frequency Response.....±0.1 dB @ 6 MHz
Differential Gain.....≤0.5%
Differential Phase.....≤0.5°

Chr/Lum Delay Diff.....<5 ns
S/N Ratio.....>70 dB @ 6 MHz

DIGITAL VIDEO OUTPUT

Signal Format.....SMPTE 259M-C, 270 Mbps,
4:2:2, 10 bits
Connector.....BNC (x2)
Impedance.....75 Ω
Return Loss.....>15 dB @ 270 MHz
Amplitude.....800 mVp-p ±10%
Jitter.....<0.2 UI
Rise/Fall Time.....400 ~ 1500 ps,
20% ~ 80% of amplitude
Overshoot.....<10% of amplitude
H Adjustment Precision.....±1/2H
V Adjustment Precision.....±1/2F

ELECTRICAL

Power.....4.5 W

ENVIRONMENTAL

Operating Temperature.....32° ~ 104° F (0° ~ 40° C)
Relative Humidity.....10% ~ 90%