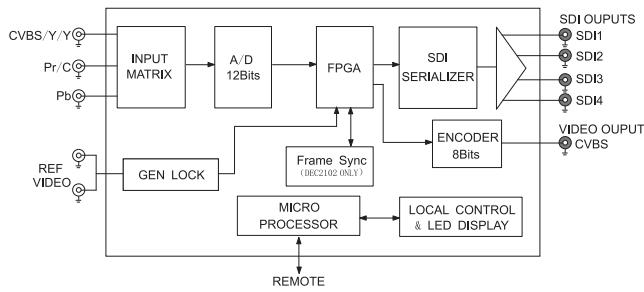


The DEC-2102 is an analog-to-digital video converter with frame sync. It is used in i-MOD platform. The module converts CVBS, Y/C, YUV to SDI video signals. 12-bit processing and 4-time oversampling are used. It provides 4 SDI outputs and 1 CVBS output for monitoring. Genlock to reference input and continuous H/V phase adjustment are available.

The DEC-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



### SPECIFICATIONS

Specifications are subject to change without notice.

#### ANALOG VIDEO INPUT

Signal Format.....	CVBS, Y/C, YUV
Standards.....	NTSC, PAL
Quantization.....	12 bits
Connector.....	BNC (x3)
Impedance.....	75 Ω
S/N Ratio.....	>40 dB @ 5.5 MHz

#### REF VIDEO INPUT

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

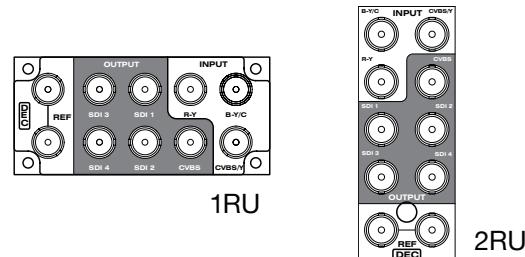
#### ANALOG VIDEO OUTPUT

Signal Format.....	CVBS
Standards.....	NTSC, PAL
Quantization.....	8 bits
Connector.....	BNC (x1)
Impedance.....	75 Ω
Amplitude.....	1.0 Vp-p ±3%
Chr/Lum Delay Diff.....	<5 ns

### FEATURES

- NTSC/PAL compliant
- 12-bit processing
- 4-time oversampling
- Accommodates CVBS, Y/C, Y/U/V inputs
- 4 SDI outputs
- 1 CVBS output for monitoring
- Reference video input, hi-z loop-thru supported
- Output frame sync and H/V phase adjustment available
- Non-volatile memory
- Hot-swappable
- IM-MASTER control supported

### BACK MODULES



S/N Ratio.....>70 dB @ 6 MHz

#### DIGITAL VIDEO OUTPUT

Signal Format.....	SMPTE 259M-C, 270Mbps, 4:2:2, 10bits
Connector.....	BNC (x4)
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.....5 W

#### ENVIRONMENTAL

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