LYNX

C AD 5135

SERIES 5000
CardModules

CONVERSION   C AD 5135

Conversion

C AD 5135

RGB / Y,Cr,Cb to SDI Converter (12 bit)

Description

Featuring high quality 12 bit A-D conversion with 2 x oversampling and a choice of RGB or Y,Cr,Cb component analog inputs the CAD 5135 provides a flexible cost effective solution for the most demanding high quality conversion applications.

The C AD 5135 utilizes the very latest analog and digital signal processing technology to provide unmatched performance and feature sets. Auto detecting multi-standard capability (PAL/NTSC), internal test patterns and an integrated 12 bit proc amp with adjustments for color balance, gain, saturation and pedestal adds to the module flexibility.
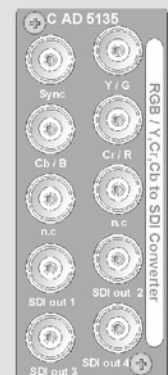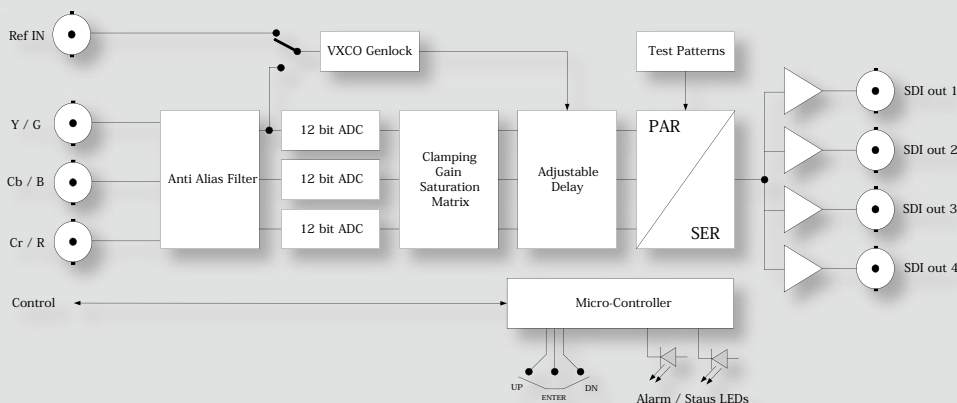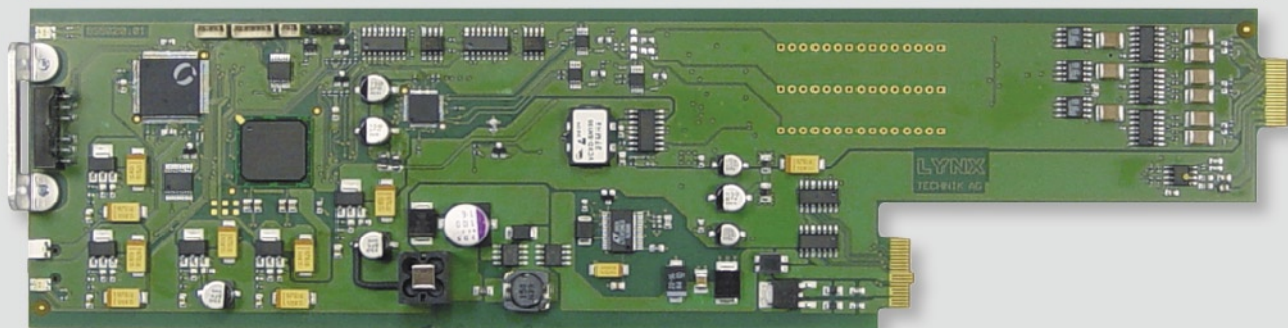
Input anti alias filtering with individual 12 bit conversion for each color component plus 2 x oversampling ensure the highest level of conversion quality for any component analog video source.

Horizontal video timing and also a output video delay adjustment of up to 6 lines facilitates input timing into downstream switchers and routers.

Microprocessor control and on board flash ram enable configurations and settings to be stored within the module (through power cycles and module removal). Local control capability is provided via the integrated alphanumeric display and control switch. Access to extended feature sets, remote control, status monitoring and error reporting is possible when using the LYNX control system.

Features

- High Quality 12 bit analog to digital conversion
- RGB or Y,Cr,Cb inputs (selectable)
- Differential inputs.
- 525 / 625 modes of operation - Auto detect
- 27 MHz sampling (2 x oversampling)
- Low pass video reconstruction filter
- Integrated test signals
- 4 x 10 bit SDI outputs SMPTE 259M-C
- VXCO Genlock.
- Proc amp with adjustable Gain, Saturation and Pedestal.
- Horizontal video timing adjustment +/- 127 pixels

- Adjustable delay in pixel and line increments (0.15 to 4 lines)
- Integrated alphanumeric display and menu system for local configurations
- Microprocessor controlled with internal flash ram for storing configuration
- Remote control, status monitoring and error reporting possible when used with LYNX control system
- Full SNMP support when used with master controller option
- Hot Swappable

Backplane

RGB / Y,Cr,Cb to SDI Converter (12 bit)

Specifications

Video Inputs

Signal Type	Component analog RGB or Y,Cr,Cb (Selectable)
Input coupling	AC differential
Input standard detection	Automatic (525/625) or Manual (Selectable)
No. Of inputs	1
Connector	75 Ohm BNC
Return Loss	> 35dB to 5.5 MHz

Outputs

No. Of Outputs	4
Signal Type	Serial component digital video SMPTE 259M-C
Connector	75 Ohm BNC Connection
Return Loss	> 15dB to 270MHz
Jitter	Conforms to SMPTE 17.12/002

Sync Input

Signal Type	SMPTE 170M (525 line) CCIR 624 (625)
Connector	75 Ohm BNC
Return loss	> 35dB to 5.5 MHz
Sync Sources	External Reference / Sync on Y/G
Genlock capability	High quality VCXO

Performance

AD quantization	12 bits (each component)
Sampling	27 MHz (2 x Over sampling)
Digital processing accuracy	12 bit digital Proc Amp Processing
Channel response	+/- 0.1dB to 5 MHz
Channel matching	< +/- 2ns
Signal to noise	< -60 dB (unweighted to 5.75 MHz)
Internal test signals	Full field color Bars, color bars with red, EQ/PLL Pathological, and black (selectable).
Input video gain	Factory preset to 700mv (+/-350mv) - with manual adjustment
Color balance adjustments	Individual RGB / Y,Cr,Cb Adjustments.
Proc amp adjustments	Gain, Pedestal and Saturation.
Horizontal video timing	Adjustable +/- 127 pixels.
Video Delay	Adjustable 0.15 - 6 lines in pixel and line increments.

Electrical Specifications

Operating Voltage	12 VDC
Power Consumption	< 7W
Safety	IEC 60950/ EN 60950/ VDE 0805

Mechanical

Size	283mm x 78mm
Weight	CardModule 120g, connector plate 50g

Ambient

Temperature	5°C to 40°C Maintaining specifications
Humidity	90% Max non condensing

Specifications subject to change

Settings and Control

Local Settings Using Alpha Numeric Display and Selection Switch

Mode select	RGB / Y,Cr, Cb
Reference	Video / External
G / Y input Gain	0...4095
B / Cb input Gain	0...4095
R / Cr input Gain	0...4095
Output when no input	Black / Blue
Luminance Gain	0...4095
Saturation	0...4095
Pedestal	0...4095
Horizontal Position	-128...127 pixels
Output delay - Pixels	0..1715/1727
Output delay - Lines	0..6
Vertical Blanking	Transparent / Blanked
Test Signal Select	Off / Black / Pathological / Color Bars / Color Bars over Red
Test Signal Standard	525 / 625
Reset	Restore Factory Defaults

Additional Settings Available from Control System

No additional settings available from control system.

On Board Indicators / LEDs

Video Status : Input Present / Not Present (sync detection)

Genlock Status : Locked / Not Locked

Video Mode: 525 / 625 / None detected

General Alarm Indicator – 3 Color

Ordering Information

Model #	Part Number	Description	Includes
C AD 5135	5155007245	RGB / Y,Cr,Cb to SDI Converter.	CardModule, Rear termination Panel, + Mounting Screws, and Reference Manual