

Dual Channel 12G SDI Video Distribution Amplifier

with 12G Single Link <=> Quad Link (2SI) Conversion - High Density BNC connectors

CardModules

Description

The DVD 5480 H module is a high-performance state of the art, 12G SDI distribution amplifier with dual 12G Single Link <=> Quad Link (2SI) conversion on electrical interfaces. This module can be used in various applications depending on user settings:

1. Dual 12G SDI (1 > 5) distribution amplifier or single 12G SDI (1 > 10) distribution amplifier
2. Dual 12G SDI Single Link to Quad Link (2SI) converter (Demux)
3. Dual Quad Link 3G SDI (2SI) to 12G SDI Single Link Converter (Mux)

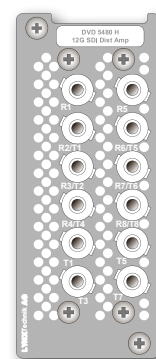
DVD 5480 H is ideally suited for demanding high quality broadcast and professional video applications. Along with six bi-directional 12G SDI high density microBNC electrical

interfaces, the module also provides two dedicated input and four dedicated output electrical interfaces on microBNCs as well.

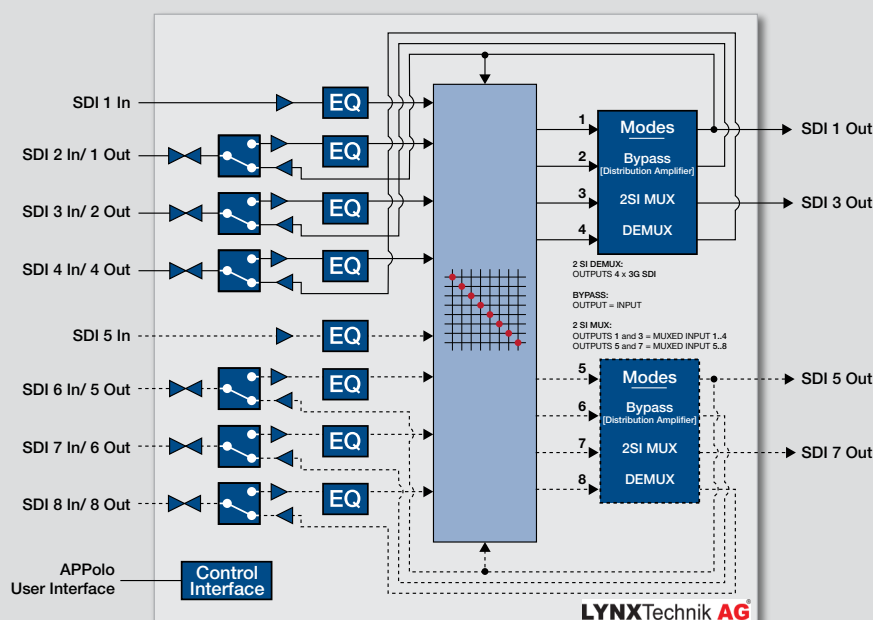
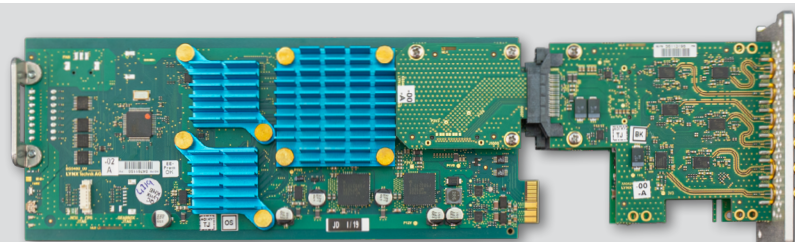
Designed for the use in SERIES 5000, DVD 5480 H is part of CardModules, which offers high quality, modularity and flexibility in a small form factor ideal for applications where space is at a premium. Like other 5000 series CardModules, this module is fully integrated into LYNX APPolo Control system which provides remote control, status monitoring and error reporting for the module

Features

- Supports six bidirectional electrical inputs/outputs with additional two input and four output electrical interfaces.
- Several applications:
 - o Dual 12G SDI single link input signal can be demultiplexed to quad link (2SI) independently
 - o Dual Quad link 3G SDI (2SI) signals can be multiplexed to 12G SDI Single link independently
 - o One 12G SDI signal can be distributed to ten electrical outputs
 - o Supports user selectable mixture of operation via Appolo User interface
- Incoming and outgoing 12G SDI signals are reclocked.
- Input presence detection with LED indication
- Microprocessor controlled with internal flash RAM for storing configuration
- Remote control, status monitoring and error reporting when used with LYNX Appolo Control System
- Hot swappable



Backplane

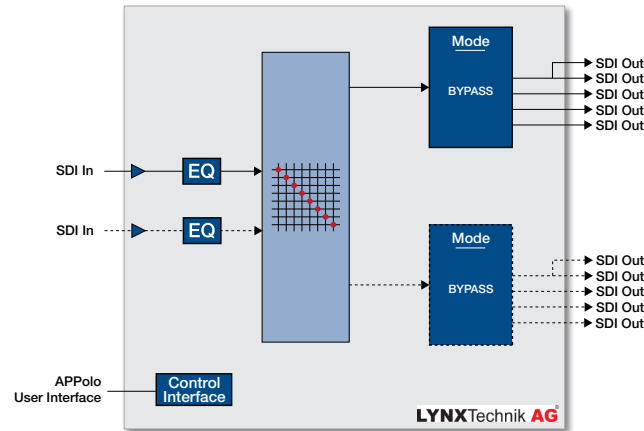


Application

Below are some of the applications for the DVD 5480 H. The card allows configuration of two different modes at the same time which means the card can perform two applications mentioned below simultaneously.

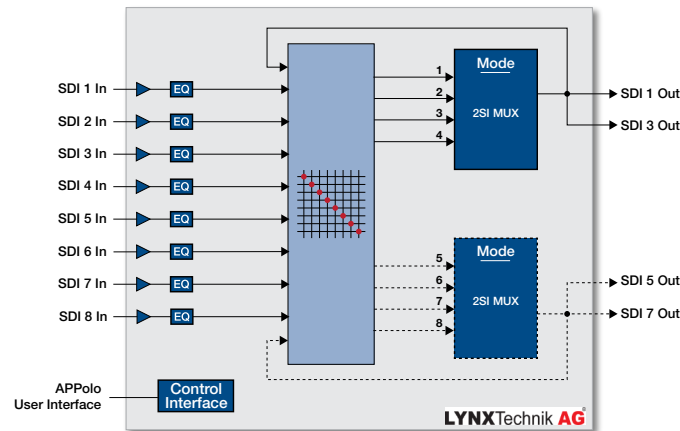
Application 1: Distribution Mode

In this mode, dual 12G SDI signals are distributed to five outputs each (1 > 5) or a single 12G SDI input is distributed to 10 outputs (1 > 10). The output path can be manually selected by the user via LYNX Appolo User interface.



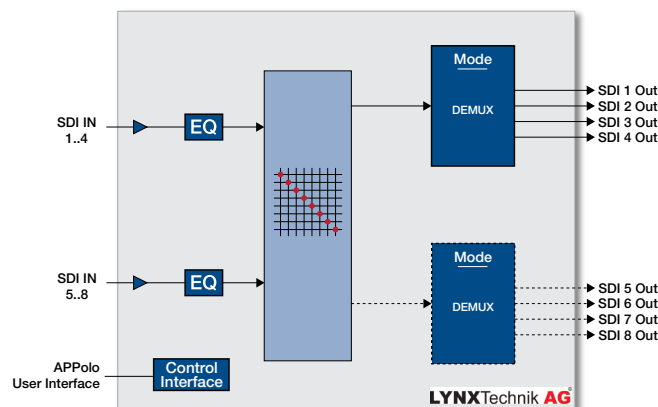
Application 2: Multiplex Mode

In this mode, dual quad link 3G SDI (2SI) signals are multiplexed in to two 12G SDI single link electrical outputs. Each of the output 12G SDI single link is also distributed on to two other 12G SDI electrical interfaces thereby providing two 12G SDI single link output for each quad link 2SI to single link conversion.



Application 3: Demultiplex mode

In this mode, dual 12G SDI single link are demultiplexed into dual quad link (2SI) electrical outputs.



Dual Channel 12G SDI Video Distribution Amplifier

with 12G Single Link <> Quad Link (2SI) Conversion - High Density BNC connectors

CardModules

Specifications

Video Input

Signal type	SMPTE 292M, 424M, 2082-1
Input Impedance	75 ohms
No. of inputs	6 x bi-directional 12G-SDI BNC, 2x 12G-SDI BNC
Connector	microBNC
Return Loss	>4dB up to 12 Gbit/s
Cable Equalization	190m @ 1.5 Gbps, 130m @ 3 Gbps, 55m @12 Gbps

Video Output

Signal Type	SMPTE 292M, 424M, 2082-1
No. of outputs	6 x bi-directional 12G-SDI BNC, 4x 12G-SDI BNC
Connector	microBNC
Return Loss	>4dB up to 12 Gbit/s

Performance

2SI Demux	Two Converters for 12G SDI Single Link to Quad Link (2SI) Conversion or Quad Link (2SI) to 12G SDI Single Link can be activated
-----------	---

Electrical Specifications

Operating voltage	+12 VDC
Power consumption	19W
Safety	IEC 60950/ EN 60950/VDE 0805

Mechanical

Size	283mm x 78mm
Weight	CardModule 120g, connector plate 100g

Ambient*

Temperature	5°C to 40°C (41°F - 104°F) maintaining specifications
Humidity	90% maximum, non-condensing

*It is strongly recommended to operate DVD 5480 H in a Series 5000 Rack with front panel fans and to keep the front panel closed during operation. This will avoid any signal error caused due to overheating in DVD 5480 H.

Note: A maximum of 8 DVD 5480 H cards can be installed in RFR 5018 rack frame due to the fan unit present at the bottom of slots 1 & 2.

Settings and Control

Control

Remote control	Full remote control and status monitoring supported with the APPolo control system Supported Version: APPolo 8.11.0 or above
----------------	---

On Board Indicators / LEDs

Input Port status	8 x LED
Master status	1 x LED
Power status	2 x LED

Supported Video Standards

Bits / color	10 Bit / 4:2:2 (Y,Cr,Cb)
Formats : 1.5 Gbit	720p / 60 / 59.94 / 50 / 30 / 29.97 / 25 / 24 / 23.98 Hz 1080i / 60 / 59.94 / 50 Hz 1080p / 30 / 29.97 / 25 / 24 / 23.98 Hz 1080psF / 25 / 24 / 23.98 Hz
Formats : 3.0 Gbit	1080p / 60 / 59.94 / 50 Hz (Level A)
Formats : 12.0 Gbit	2160p / 60 / 59.94 / 50 Hz

Ordering Information

Model #	Description	Includes
DVD 5480 H (EAN#: 4250479326590)	Dual Channel 12G SDI Video Distribution Amplifier with 12G Single Link <> Quad Link (2SI) Conversion - High Density BNC connectors	CardModule, Rear Termination Panel and Mounting Screws

Specifications subject to change