XFM50-DVDA-C2X1N

3G SDI Dual Channel Distribution Amplifier

Description

XFM50-DVDA-C2X1N is a digital distribution amplifier module for all SDI video signals up to 3GBit/s with dual inputs and up to 8 outputs per input, depending on selected I/O panel. XFM50-DVDA-C2X1N is also configurable as a single channel distribution amplifier module with up to 16 outputs.

Supported Signals

The XFM50-DVDA-C2X1N module supports the following signals:

- SD SDI
- HD SDI
- 3G HD SDI

Processing and Control

Cable equalization compensates for up to 350m of cable length (depending on used SDI format).
Format detection and monitoring of input signal is supported.
The module fully integrates into SNMP and ICONN environment.

Output Setup

Four different I/O Panels are available for XFM50-DVDA-C2X1N module:

- XFM50-DVDA-C2X1N-S with Standard BNC
- XFM50-DVDA-C2X1N-SB with Standard BNC and bypass output
- XFM50-DVDA-C2X1N-H with HD-BNC[1]
- XFM50-DVDA-C2X1N-HB with HD-BNC[1] and bypass output

Failover Switch

XFM50-DVDA-C2X1N module supports to be setup as a failover switch. If the selected input signal fails, it automatically selects the other input as source.
Also the optional Test Signal Generator can be used as failover source.

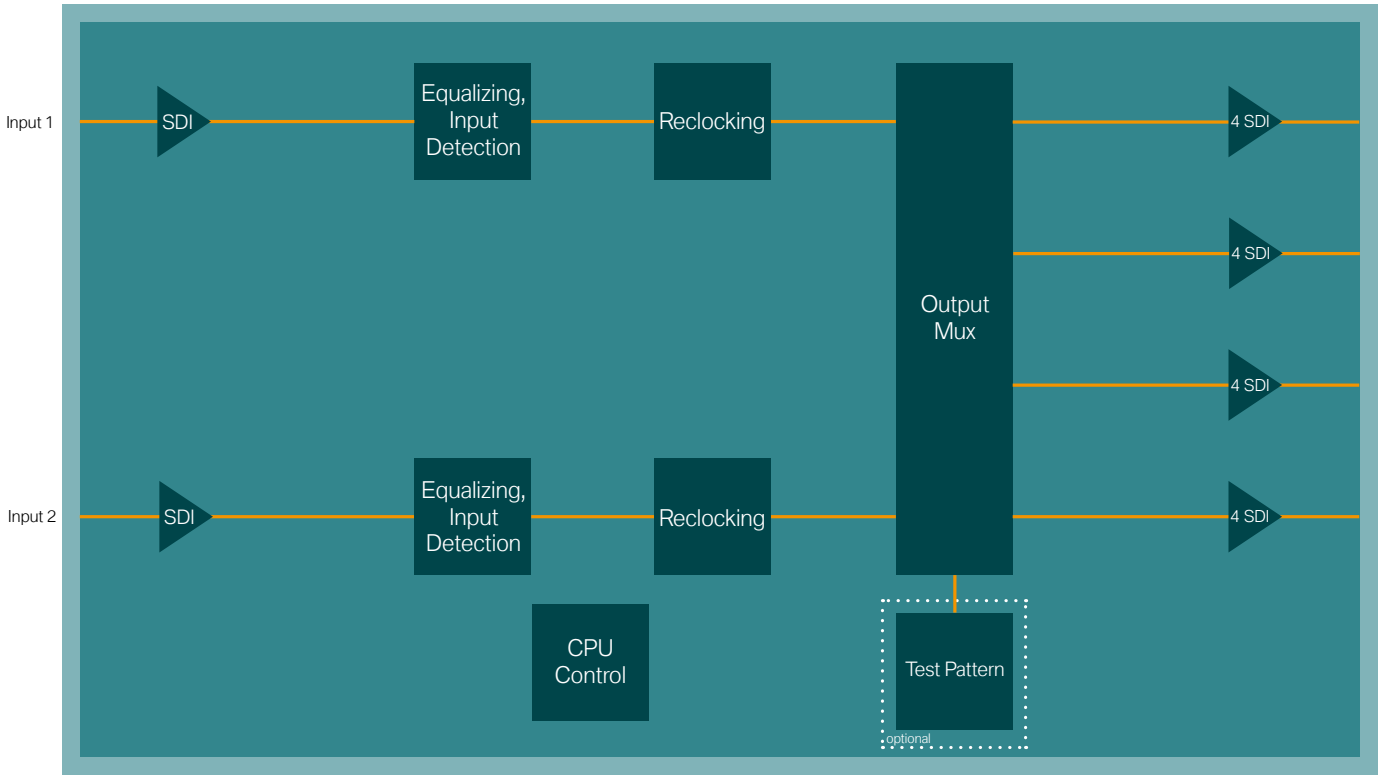
Test signal generator (optional)

An internal test signal generator with standard patterns like Color Bars is available as option. This eases wire tests, especially in complex infrastructures.

I/O Configuration

Outputs are organized in groups (see block diagram). Each group is assigned to the input or the optional test signal generator.
All modules are configured via CDesk remote control software, local or LAN panel. The configuration is stored on the modules for standalone operation.

Functional Blockdiagram



[1] HD-BNC connectors such as Amphenol part No. 034-1017-300

SDI - Input

No. of Inputs

with XFM50-DVDA-C2X1N-S	2 BNC
with XFM50-DVDA-C2X1N-SB	2 BNC
with XFM50-DVDA-C2X1N-H	2 HD-BNC
with XFM50-DVDA-C2X1N-HB	2 HD-BNC

Signal Type	SMPTE 259M, 292M, 424M 270 MHz SDI, 1.485 GHz SDI, 2.97 GHz SDI
Signal Level	800 mV
Impedance	75 Ohm
Return loss	>15 dB at 1.485 GHz >10 dB at 2.97 GHz
Equalizer	120m cable length (SMPTE 424M) 180m cable length (SMPTE 292M) 350m cable length (SMPTE 259M)
Format detection	available via SNMP / ICONN

GPI

Connector	8-pin Terminal Block
No. of Inputs	2
No. of Outputs	2

Settings

Configuration memory	8 global settings

SDI - Output

No. of Outputs

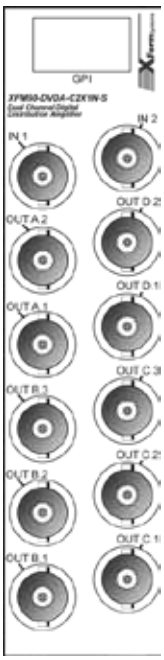
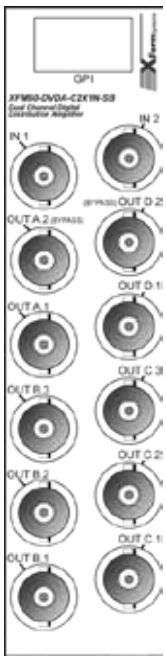
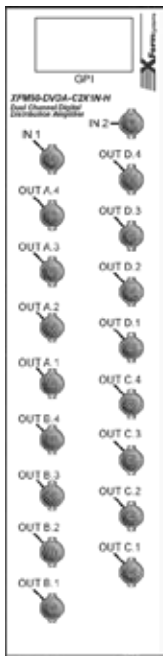
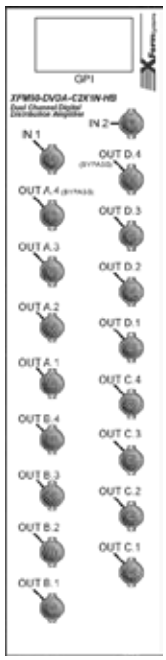
with XFM50-DVDA-C2X1N-S	2x5 BNC or 1x10 BNC
with XFM50-DVDA-C2X1N-SB	2x5 BNC or 1x10 BNC with 2 Bypass Output
with XFM50-DVDA-C2X1N-H	2x8 HD-BNC or 1x16 HD-BNC
with XFM50-DVDA-C2X1N-HB	2x8 HD-BNC or 1x16 HD-BNC with 2 Bypass Output

Signal Type	SMPTE 259M, 292M, 424M 270 MHz SDI, 1.485 GHz SDI, 2.97 GHz SDI
Signal Level	800 mV
Impedance	75 Ohm
Return loss	>15 dB at 1.485 GHz >10 dB at 2.97 GHz
Jitter	< 0.1 UI for SMPTE 259M < 0.15 UI for SMPTE 292M < 0.25 UI for SMPTE 424M

Physical

Temperature	0°C - 35°C (operation) -20°C - 75°C (storage)
Humidity	10% - 90% non condensing
Power Requirements	4.5 Watts

Available I/O Panels

Name	XFM50-DVDA-C2X1N-S	XFM50-DVDA-C2X1N-SB	XFM50-DVDA-C2X1N-H	XFM50-DVDA-C2X1N-HB
Layout				
Inputs	2 BNC	2 BNC	2 HD-BNC	2 HD-BNC
Total Outputs	10 / 2 x 5 BNC	10 / 2 x 5 BNC	16 / 2 x 8 HD-BNC	16 / 2 x 8 HD-BNC
Bypass Outputs	no	1 / 2 x 1 BNC	no	1 / 2 x 1 HD-BNC

Version2 20.02.2014

XForm Systems GmbH
Spechtweg 1, D-38108 Braunschweig
Telephone +49 531 302928 91
Facsimile +49 531 302928 99
E-Mail: info@xformsystems.de
Internet: www.xformsystems.de