



EB30HDRT-LM-PL

3Gbps SDI emSFP Coaxial Transceiver
Long reach with Passive loopback, MSA, HD-BNC™

Features

- SMPTE 424M, SMPTE 344M, SMPTE 292M and SMPTE 259M compliant
- HD-BNC™ connectors (75Ω)
- Integrated Equalizer:
 - Typical equalized length of Belden 1694A cable: 140m at 2.97Gb/s, 200m at 1.485Gb/s and 400m at 270Mb/s
- **Typical Loopback length of Belden 125 meters at 2.97Gbps***
- Integrated Cable Driver
- Supports DVB-ASI at 270Mb/s
- Supports video pathological patterns for SD-SDI, HD-SDI and 3G-SDI
- Control via serial interface including:
 - Input signal detection
 - Voltage & Temperature Monitoring
 - Passive loopback control
 - Module Information
- Power Consumption - typical 1000 mW
- Single Supply +3.3V
- 56.6mm x 13.4mm x 8.6mm SFP Package

* depends of the equalizer from the end equipment

Summary of Benefits

- **Flexibility:** Build a totally optimized system by mixing electrical and optical video SFP;
- **Cost:** Design cost effective system;
- **Modularity:** Allow hot scalability and replacement of critical components wherever possible;
- **Density:** Highest density ever achieved for standard 75Ω coaxial SDI interface with **Passive loopback feature**;
- **Time-to-market:** Reduce development cost and risk;
- **Interchangeable:** Fully compatible with existing MSA video optical SFP;
- **Hot-Pluggable:** Swap without affecting system behaviour;
- **Advanced Packaging:** Support ganged cages, belly-to-belly and superposed cages mounting;
- **Inventory:** Just in time inventory management;
- **Green:** The EB30HDRT-LM-PL is Pb-free and ROHS compliant. In addition, it has very low power consumption.

Applications

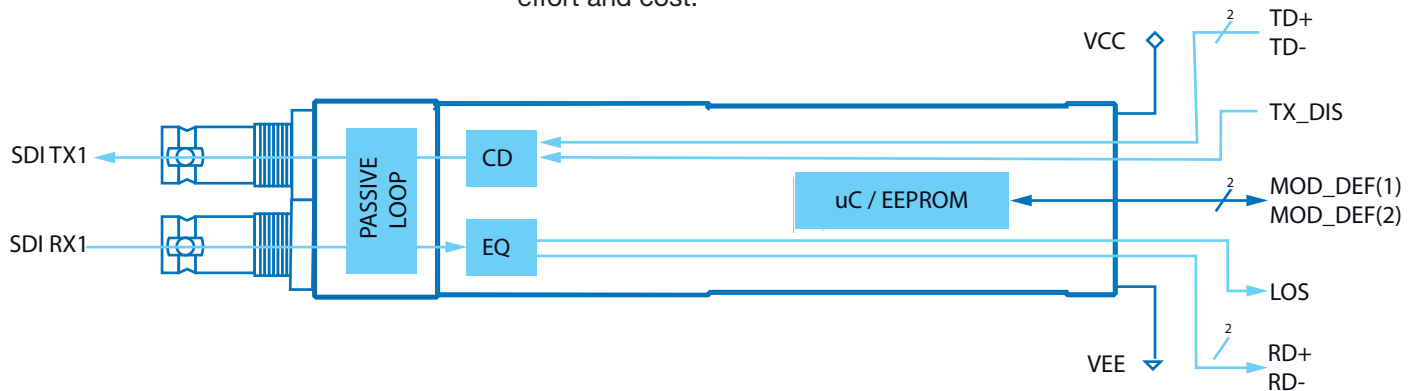
- Low cost video optical SFP replacement
- Distribution amplifiers
- Processing cards
- Video routers
- Broadcast cameras

Overview

The EB30HDRT-LM-PL is a medium reach electrical emSFP transceiver module designed with reclockers to transmit and receive SDI signals up to 2.97Gbps over 75Ω coaxial cables via HD-BNC™ connectors. The cable driver slew rate is automatically configured in order to achieve compliance to SMPTE 424M, SMPTE 292M and SMPTE 259M. The EB30HDRT-LM-PL is equipped with a passive loopback (relay) circuit. The passive loop enable cascading of several units or using the emSFP in a critical application. The passive loop control enable the user to turn on/off the loop after few seconds if required.

The EB30HDRT-LM-PL provides module identification information and configuration through a two wire serial interface. It is also a hot-pluggable solution for field system upgrade and maintenance.

The EB30HDRT-LM-PL is interchangeable with other MSA optical video SFP improving product flexibility. Ganged cages, belly-to-belly and superposed cages mounting are supported. The module is SMPTE compliant resulting in quick time-to-market and reduced development effort and cost.



Related Products

Part Number	Type	Pinout	Package	Temperature Range
EB30HDRT-LNR	Rx/Tx	Non-MSA	SFP	-40°C to 80°C
EB30HD2R-LNR	2Rx	Non-MSA	SFP	-40°C to 80°C
EB30HD2T-LNR	2Tx	Non-MSA	SFP	-40°C to 80°C

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