



EB30HDRT-MM

3Gbps SDI emSFP Coaxial Transceiver
Medium reach, MSA, HD-BNC™

Features

- SMPTE 424M, SMPTE 344M, SMPTE 292M and SMPTE 259M compliant
- HD-BNC™ connectors (75Ω)
- Rx Equalizer:
 - Typical equalized length of Belden 1694A cable: 120m at 2.97Gb/s, 140m at 1.485Gb/s and 400m at 270Mb/s
- Integrated Tx 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:
 - Output slew rate (SD or HD/3G)
 - Module Information
- Low Power Consumption - typical 468mW
- Single Supply +3.3V
56.6mm x 13.4mm x 8.6mm SFP Package

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;
- **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-MM is Pb-free and ROHS compliant. In addition, it has very low power consumption.

Applications

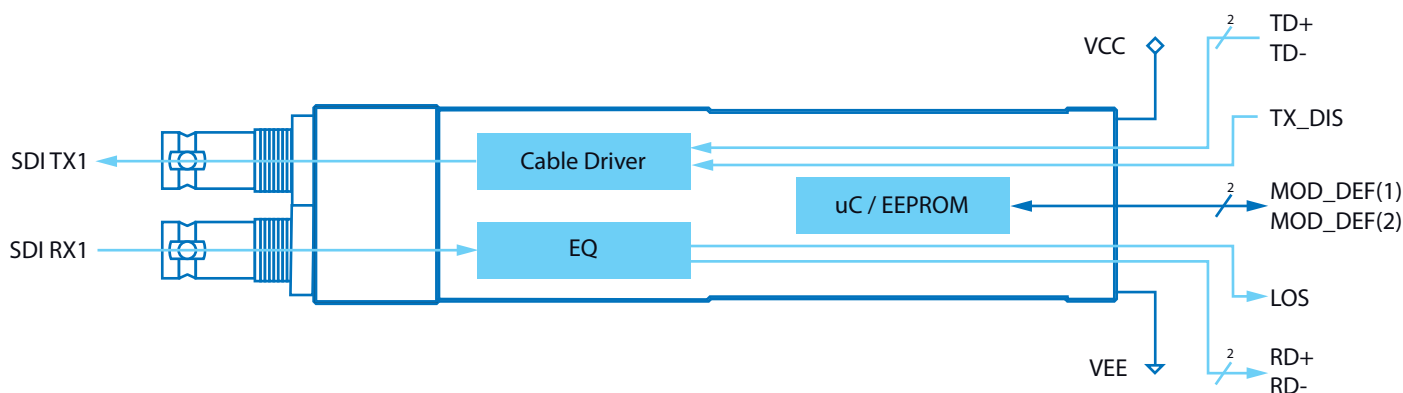
- Low cost video optical SFP replacement
- Distribution amplifiers
- Processing cards
- Video routers
- Broadcast cameras

Overview

The EB30HDRT-MM is a medium reach electrical emSFP™ transceiver module designed to transmit and receive SDI signals up to 2.97Gbps over 75Ω coaxial cables via HD-BNC™ connectors. The cable driver provides two selectable slew rates in order to achieve compliance to SMPTE 424M, SMPTE 292M and SMPTE 259M. The equalizer features DC restoration to compensate for the DC content of SMPTE pathological test patterns.

The EB30HDRT-MM 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-MM 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. The EB30HDRT-MM is Pb-free and ROHS compliant.



Related Products

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

sales@embrionix.com

