



## EB59HD2R-SN

6Gbps (UHD-SDI), 4K emSFP™ Coaxial Dual Receiver  
Short reach, Non-MSA, HD-BNC™

### Features

- 6G UHD-SDI, 4K ready emSFP
- SMPTE ST 424M, ST 292M, and SMPTE ST 259M compliant
- HD-BNC™ connectors (75Ω)
- Rx Equalizer:
  - Typical equalized length of Belden 1694A cable: 80m at 5.94Gbps, 140m at 2.97Gbps, 220m at 1.485Gb/s and 400m at 270Mb/s
- Supports DVB-ASI at 270Mb/s
- Supports video pathological patterns for SD-SDI, HD-SDI, 3G-SDI and 6G-SDI
- Control via serial interface including:
  - Module Information
  - Loss of signal status
- Low Power Consumption - typical 480mW
- Single Supply +3.3V
- 56.6mm x 13.4mm x 8.6mm SFP Package
- Extended Temperature Range -40°C to 80°C

### Summary of Benefits

- **Flexibility:** Build a totally optimized system by mixing video 4K or 3G electrical and 4K, 3G 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 4K interface;
- **Time-to-market:** Reduce development cost and risk;
- **Interchangeable:** Fully compatible with existing non-MSA video optical SFP, 3G electrical SFP and 4k 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 EB59HD2R-SN is Pb-free and ROHS compliant. In addition, it has very low power consumption.

### Applications

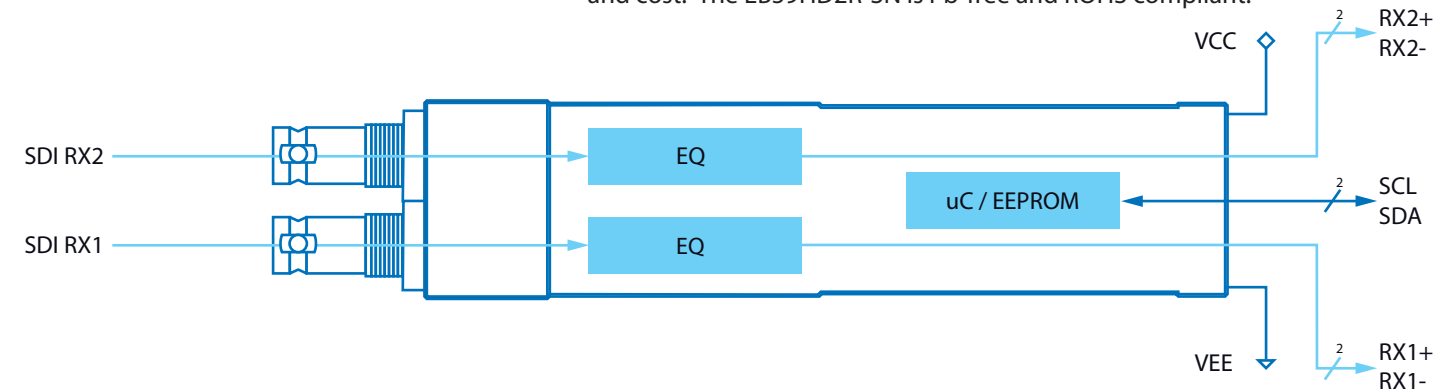
- Low cost video optical SFP replacement
- Distribution amplifiers
- Processing cards
- Video routers
- Multiviewers
- 4K applications

# Overview

The EB59HD2R-SN is an electrical 4K (6G UHD-SDI) emSFP™ dual receiver module designed to receive two SDI signals up to 5.94Gbps over 75Ω coaxial cables via HD-BNC™ connectors. The EB59HD2R-SN emSFP doubles the data capacity per channel, and reduce the number of cables required for 4K transport. The equalizer features DC restoration to compensate for the DC content (up to 5.94Gbps) of SMPTE pathological test patterns.

The EB59HD2R-SN 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 EB59HD2R-SN is interchangeable with other non-MSA optical video SFP or 3G electrical SFP improving product flexibility. The module is SMPTE compliant resulting in quick time-to-market and reduced development effort and cost. The EB59HD2R-SN is Pb-free and ROHS compliant.



# Related Products

Part Number	Type	Pinout	Package	Temperature Range
EB59HDRT-SM	Rx/Tx	MSA	SFP	-40°C to 80°C
EB59HDRT-SN	Rx/Tx	Non-MSA	SFP	-40°C to 80°C
EB59HD2T-SN	2Tx	Non-MSA	SFP	-40°C to 80°C

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