embrionix

EB30CS2R-LNR
3Gbps SDI emSFP Coaxial Dual Receiver
Long reach with Reclocker, Non-MSA, DIN 1.0/2.3

Features

- SMPTE 424M, SMPTE 292M and SMPTE 259M compliant

- DIN 1.0/2.3 connectors (75Ω)

- Integrated reclocker and equalizer:
  - Typical equalized length of Belden1694A cable: up to 140m at 2.97Gb/s, 200m at 1.485Gb/s and 400m at 270Mb/s

- Supports DVB-ASI at 270Mb/s

- Supports video pathological patterns for SD-SDI, HD-SDI and 3G-SDI

- Control via serial interface including:
  - Module information
  - Loss of signal status
  - Signal detection (SD, HD, 3G)
  - Voltage & temperature monitoring
  - Reclocker lock monitoring
  - Autosleep feature

- Power Consumption - typical 1360mW

- 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 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 non-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 EB30CS2R-LNR is Pb-free and ROHS compliant. In addition, it has very low power consumption.
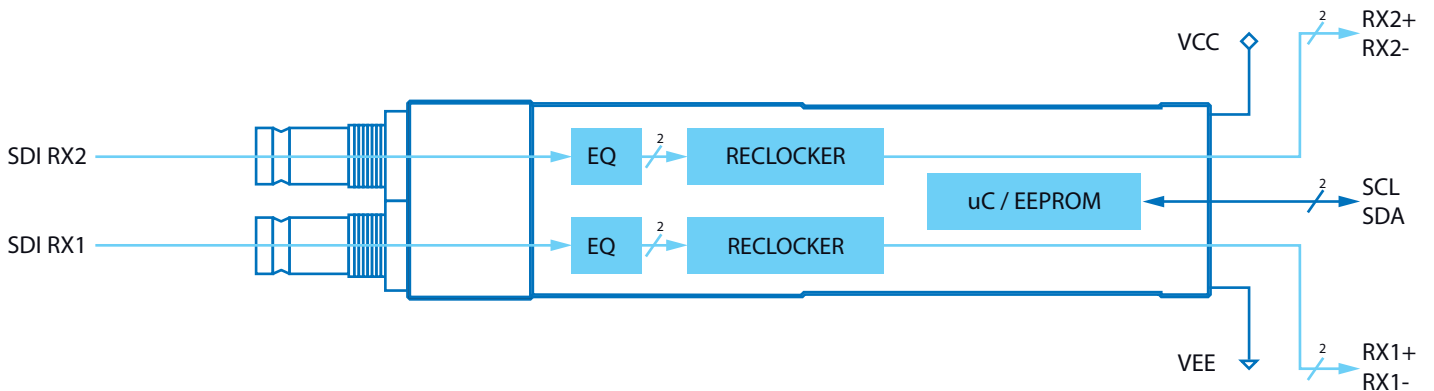
Applications

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

Overview

The EB30CS2R-LNR is an electrical long reach SFP dual receiver with Reclocker module designed to receive two SDI signals up to 2.97Gbps over 75Ω coaxial cables via DIN 1.0/2.3 connectors. The equalizer features DC restoration to compensate for the DC content of SMPTE pathological test patterns. By suppressing accumulated jitter, each Reclocker procures predictable cable length on every system.

The EB30CS2R-LNR 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 EB30CS2R-LNR is interchangeable with other non-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 EB30CS2R-LNR is Pb-free and ROHS compliant.

Related Products

Part Number	Type	Pinout	Package	Temperature Range
EB30CSRT-LMR	Rx/Tx	MSA	SFP	-40°C to 80°C
EB30CSRT-LNR	Rx/Tx	Non-MSA	SFP	-40°C to 80°C
EB30CS2T-LNR	2Tx	Non-MSA	SFP	-40°C to 80°C

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