



# EB30HDRT-AN

Composite Codec emSFP™ Coaxial  
Transceiver, Non-MSA, HD-BNC™

## Features

- SMPTE 259M-C compliant
- HD-BNC™ connectors (75Ω)
- Supported Composite Standards:
  - NTSC M, NTSC J, NTSC 4.43
  - PAL B/G/H/I/D, PAL M, PAL N, PAL 60
- Rx Channel:
  - 10-bit Composite to SD-SDI video decoder
  - 4x Oversampling (54Mhz)
  - Test Pattern Generation
- Tx Channel:
  - SD-SDI to Composite 10-bit video encoder
  - Up to 16x Oversampling (216Mhz)
  - Multiple Chroma & Luma filters
  - Test Pattern Generation
- Control via serial interface including:
  - Voltage & Temperature Monitoring
  - Module Information
  - Analog Status and Control registers
- Low Power Consumption - typical 1100mW
- Single Supply +3.3V  
58.5mm x 13.4mm x 8.6mm SFP Package

## Summary of Benefits

- **Flexibility:** Build a totally optimized system by mixing electrical SDI, NTSC/PAL converter 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 interfaces combined with converters;
- **Time-to-market:** Reduce development cost and risk;
- **Interchangeable:** Fully compatible with existing Non-MSA video optical SFP and SDI emSFP™;
- **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-AN is Pb-free and ROHS compliant.

## Applications

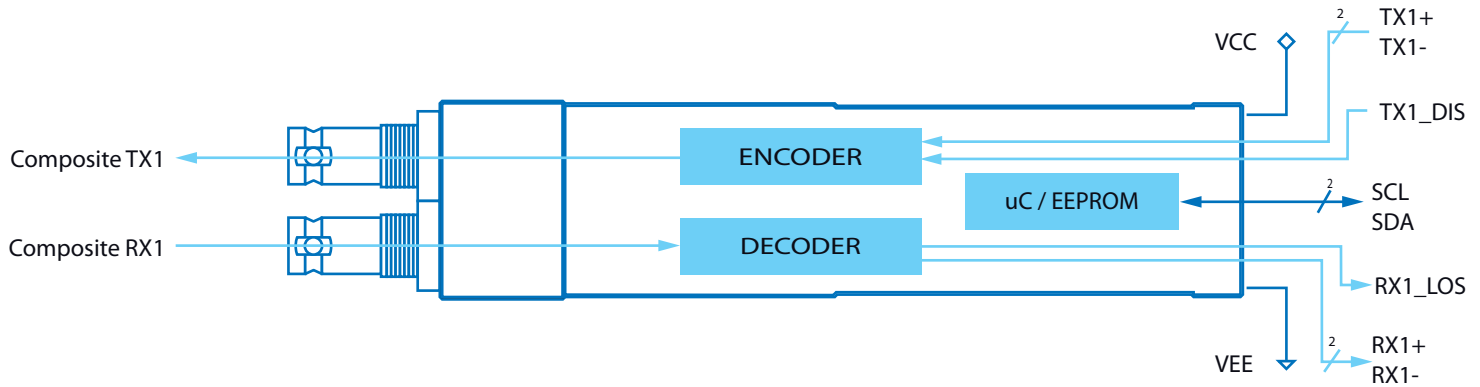
- Low cost video converters replacement
- Processing cards
- Video routers
- Broadcast cameras

# Overview

The EB30HDRT-AN is an electrical emSFP™ transceiver module designed to encode and decode composite signals over 75Ω coaxial cables via HD-BNC™ connectors. On the receive channel, the module decodes NTSC/PAL composite inputs and convert to SD-SDI signal. On the transmit channel, the module encodes the SD-SDI signal to NTSC/PAL composite.

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

The EB30HDRT-AN is interchangeable with other non-MSA optical video SFP or coaxial emSFP™ 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-AN is Pb-free and ROHS compliant.



## Related Products

Part Number	TYPE (CVBS)	Pinout	Package	Temperature Range
EB30HDRT-AM	Rx/Tx	MSA	SFP	0°C to 65°C
EB30HD2R-AN	2Rx	Non-MSA	SFP	0°C to 65°C
EB30HD2T-AN	2Tx	Non-MSA	SFP	0°C to 65°C
EB00CA02-xxA	HD-BNC to BNC cable adaptor			

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