

# BOARD PLUG-IN EK-SFP/4-ETH "ASI/SMPTE 310M/ETH TRANSPARENT MUX/DEMUX SEAMLESS SWITCH"



This software define revolutionary board allows to integrate more function in a single hardware platform with consequential costs reduction and performance maximization. Thanks to this feature the EK-SFP/4 can works as ASI Multiplexer / Demultiplexer / Hit-Less Switch.

This board allows to use at the same time both **ETH and TS ASI/SMPTE 310M** interfaces selecting the data rate preferred for each IN/OUT so it is possible combine ASI and IP technology in broadcasting activities and to prepare a complete migration to IP.

The EK-SFP/4 Board uses 4 SFP modules that allows an incredible modularity and flexibility thus being able to increase features of the board in any time and change the interfaces between Coaxial, Fiber or RJ45 simply changing the relative SFP modules.

A by-pass capability, integrated inside the SFP module, permits also redundancy applications

## Features

- ASI Input / Output
- ETH Input / Output
- SMPTE 310M Input / Output
- ASI / SMPTE310M/ETH Converter configurable
- TS Internal Input / Output
- Transparent Multiplexer
- Transparent Demultiplexer
- ASI Seamless Switch
- 4 different SFP input
- 4 different SFP Output
- GPS Reference
- By-pass output function
- Complete web management

## Applications

- Digital Microwave Links
- DTV, DVB-T2/T/H
- DVB-S/S2
- Professional Broadcast Contribution & Distribution
- Video services over IP
- DVB-T distribution over IP



## TECHNICAL SPECIFICATION

|                            |   |
|----------------------------|---|
| Inputs                     | 4 SFP + 3 Internal + 1 Internal 1pps Reference  |
| Input Stream Type          | ASI 188 Byte and 204 Byte terminated<br>ASI/SMPTE/SDI/GbE   |
| Outputs                    | 4 SFP + 3 Internal + 1 Internal 1pps Reference  |
| Output Stream Type         | ASI           ISO/IEC 13818-1, EN 50083-9:2002<br>SMPTE       SMPTE 310M-2010<br>Ethernet     IEEE 802.3                                    |
| ASI characteristics        | 1÷216 Mbit/s  |
| SMPTE characteristics      | 8VSB (19.39 Mbit/s) 16VSB (38.78 Mbit/s)  |
| GbE characteristics        | 10BASE-T over Copper<br>100BASE-T over Copper<br>1000BASE-T over Copper<br>1000BASE-SX over Optical Fiber<br>1000BASE-LX over Optical Fiber |
| Internal Data-Rate         | 1÷270 Mbit/s  |
| GPS                        | Antenna supply Voltage = 5V<br>Max. allowed current = 50 mA<br>Input impedance = 75 Ohm<br>Connector = F female                             |
| <b>Climatic conditions</b> |   |
| Temperature                | - 10°C ÷ + 55°C   |
| Humidity                   | Max. 90 %   |
| Altitude                   | 3000m 66kPa   |

### BLOCK SCHEME

