

DVB-CID (Digital Video Broadcast - Carrier Identification System) is an ETSI standard for interference prevention within digital data transmission via satellites that was first published in 2013. Its goal is the identification of interfering transmissions from other sources, in order to respond to Radio Frequency Interference (RFI).

The Creonic DVB-CID high performance modulator can be configured by a simple configuration interface and outputs a baseband signal split into real and imaginary part.

# Components

- Frame formating
- CRC8 calculation
- BCH Forward Error Correction encoder
- Scrambler
- · Differential encoder
- Signal Spreader
- · BPSK Symbol mapper
- · Nyquist filter with interpolation
- · Gain adjusting
- · Complex Mixing

#### **Benefits**

- · Low-power and low-complexity design.
- Available for ASIC and FPGAs (AMD Xilinx, Intel).

## **Related Products**

**DVB-S2 LDPC and BCH Decoder** 

**DVB-S2 Demodulator** 

**DVB-RCS2 Turbo Decoder** 

**DVB-RCS Turbo Decoder** 



## **Features**

- Compliant with ETSI TS 103 129 V1.1.1 (2013-05) (DVB-CID).
- Support for complete Content ID table.
- · Fine adjustable output gain.
- Baseband output with real and imaginary part.

# **Applications**

- · Satellite communication
  - Quality of Service Improvement
  - Interference localization
  - Professional Services

### **Deliverables**

- VHDL source code or synthesized netlist
- · comprehensive documentation
- bit-accurate Matlab, C or C++ simulation model
- VHDL simulation testbench with testdata



### **About Creonic**

Creonic is an ISO 9001:2015 certified provider of ready-for-use IP cores for wired, wireless, fiber, and free-space optical communications. All relevant digital signal processing algorithms are covered, including, but not limited to, forward error correction, modulation, equalization, and demodulation. The company offers the richest product portfolio in this field, covering standards like 3GPP 5G, DVB-S2X, DVB-RCS2, CCSDS, and WiFi. The products are applicable for ASIC and FPGA technologies and comply with the highest requirements with respect to quality and performance. For more information please visit our website at <a href="https://www.creonic.com">www.creonic.com</a>.

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