DVB-S2X LDPC/ BCH Decoder

The DVB-S2X LDPC Decoder is a powerful FEC core decoder for Digital Video Broadcasting via Satellite. It implements extensions to the DVB-S2 design for better performance and efficiency as well as robust service availability.

Features
- Irregular parity check matrix
- Layered Decoding
- Minimum sum algorithm
- Soft decision decoding
- BCH decoder works on GF (2m) where m=16 or 14 and corrects up to t errors, where t = 8, 10 or 12
- ETSI EN 302 307-1 V1.4.1 (2014-11) compliant

Key Features
- Medium codeword length
- Extra code rates for finer gradation
- Adding 64, 128, 256 APSK
- Very low SNR down to -10dB
- **Wideband support**

Benefits
- Improved performance
- Improved efficiency wrt Shannon's limit
- Finer gradation of code rate and SNR
- Very high data rate
- Maximum service availability at highest efficiency
- Enables cross layer optimization

Deliverables
- Synthesizable Verilog
- System Model (Matlab)
- Verilog Test Benches
- Documentation

A comprehensive DVB-S2X LDPC/ BCH decoder datasheet can be provided under an NDA, please contact info@global-ipc.com.