

DVB-T/H Demodulator

The DVBT/H demodulator offers high performance for signal quality measurement purposes.

Features

- Very high measurable Modulation Error Ratio (MER) value (up to 48 dB).
- Compliant with DVB-T/H EN 300 744 ETSI standard.
- 2K, 4K and 8K mode supported.
- 1/4, 1/8, 1/16 and 1/32 guard interval supported.
- QPSK, 16-QAM and 64-QAM modulation supported.
- Mode, modulation and guard interval length autodetection.
- Digital re-sampling with clock frequency and phase recovery.
- Adaptive minimum mean square error equalisation.
- Tunable IF demodulator.
- TPS extraction.

Signal quality monitoring

The DVBT/H demodulator allows to measure various quality figures of the input signal. Through a serial interface, the user has access to the following.

- Mode, modulation and guard interval length.
- Per-subcarrier MER.
- Mean MER.
- Equaliser response (modulus and phase).
- Baseband signal constellation (I,Q).
- Carrier frequency offset.
- Clock frequency offset.
- TPS data.

Typical DVB-T/H demodulator integration scheme

The DVB-T/H demodulator has to be integrated with a Conventional DVB-T/H Tuner, a 100 MHz oscillator and an Analog-to-Digital Converter (ADC). Figure 1 shows the typical integration scheme.

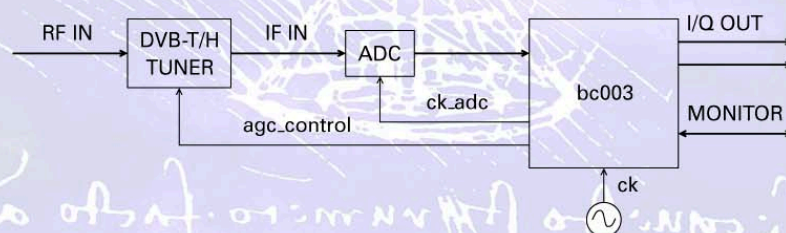


Figure 1: Typical DVB-T/H Demodulator integration scheme