
Dual, high symbol-rate, satellite demodulator with integrated full-band tuner

Data brief



Features

- Two high-symbol-rate (HSR) demodulators:
 - Maximum baud rate 500 Msymbol/s
 - Up to two slices each
 - DVB-S2/S2X and Annex M compliant
- Up to 8 multi-standard demodulators:
 - S/S2/S2X/DTV
- Integrated full-band tuners and ADCs
- High-speed digital multiplexer to connect any tuner to any demodulator
- NCR PLL support
- Flexible transport stream processor:
 - PID filtering, PCR re-stamping and re-labelling, GSE label filtering
 - TS merger (multiplex)
 - Channel bonding
- Low power consumption
- Wake-on-network PID or GSE label
- Fast auto scan
- Signal monitoring, spectral analysis, bit error rate test and reporting

- Interfaces:
 - Crystal oscillator
 - I2C serial bus interface, including private repeater for optional LNA
 - TS, 8 serial, 2 parallel or multiplexed
 - JTAG for boundary scan
 - DiSEqC 1.x and DiSEqC2.x compatible receiver, 22-kHz
 - FSK modem
 - Flexible GPIOs and interrupts
- Technology:
 - Single rail supply with inbuilt SMPSs for internal supply generation
 - Fine-grained power management
 - VQFPN-mr 13x13 mm² package, RoHS
 - Temperature range -40 to +85 °C ambient

Description

The STiD135 has been designed for Satellite Broadband applications, leveraging Ka-band and multi-spot beam technology carried by the latest high-throughput satellites (HTSs).

The STiD135 has been designed to enable single-carrier usage of HTS transponders. The device implements two high-symbol-rate (HSR) demodulators compliant with Annex M of the DVB-S2/S2X specification EN 302 307, and provides full HW support for network clock recovery (NCR) in order to enable external return-channel modulators.

The STiD135 may be used in standard broadcast environments as an 8-channel DVB-S2/S2X receiver enabling multi-channel distribution and/or fast channel change scenarios.

Revision history

Table 1. Document revision history

Date	Revision	Changes
22-Apr-2015	1	Initial release.

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