

Single LNB supply and control IC DiSEqC 2.0 compliant based on the LNBH25

Data brief



Features

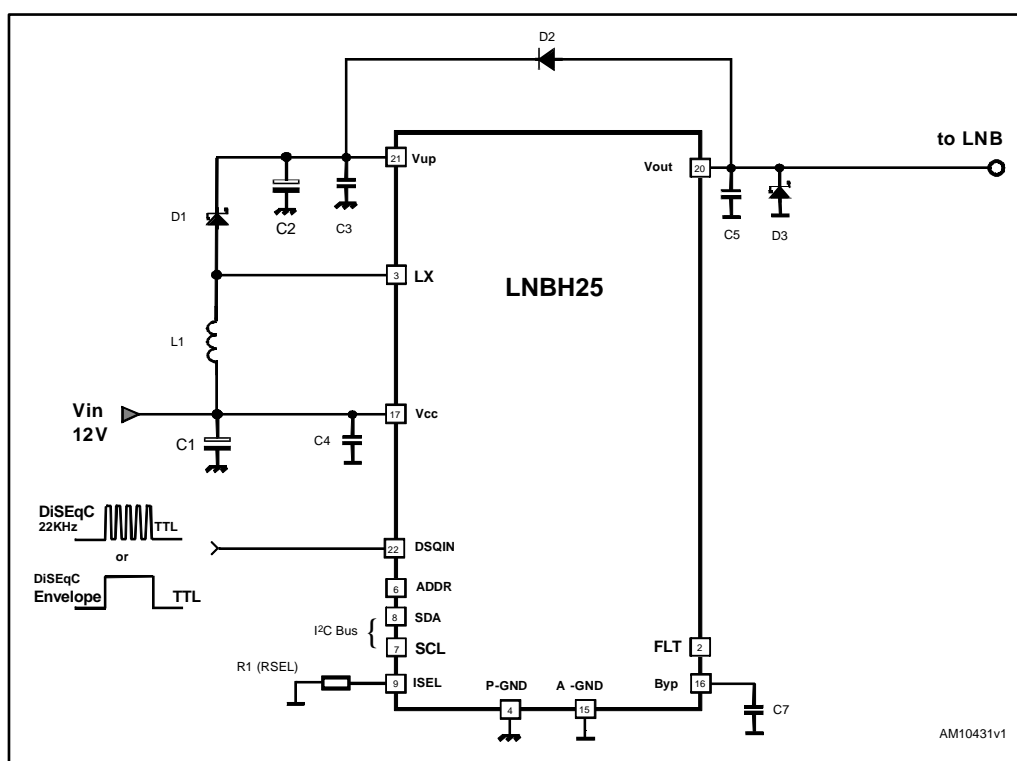
- Complete interface between LNB and I²C bus
- Built-in DC-DC converter for single 12 V supply operation and high efficiency (typ. 93% at 0.5 A)
- Selectable output current limit using an external resistor
- Compliant with main satellite receiver output voltage specifications (15 programmable levels)
- Accurate built-in 22 kHz tone generator suits widely accepted standards
- 22 kHz tone waveform integrity guaranteed also at no load
- Low-drop post-regulator and high-efficiency step-up PWM with integrated power N-MOS allowing low power losses
- LMP function (low-power mode) to reduce dissipation
- Overload and overtemperature internal protection with I²C diagnostic bits
- LNB short-circuit dynamic protection
- RoHS compliant

Description

This product evaluation board implements a DC-DC converter based on the LNBH25 device used to power LNBs inside dish antennas which receive satellite TV signals. The LNBH25 is an integrated solution for supplying/interfacing satellite LNB modules in accordance with international standards, offering a complete solution for single tuner satellite receivers and good performance at low cost using few external components. The LNBH25 evaluation board includes an I²C bus interface and the internal 22 kHz tone generator (factory trimmed) is controlled by the DSQIN pin (TTL compatible), permitting immediate DiSEqC™ data encoding. A fully integrated step-up DC-DC converter allows operation with a single input voltage supply source ranging from 8 V to 16 V.

1 Application circuit

Figure 1: STEVAL-CBL010V1



2 Revision history

Table 1: Document revision history

Date	Revision	Changes
01-Apr-2014	1	Initial release.

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