

Single LNB supply and control IC DiSEqC 1.x compliant with DSQIN based on the LNBH29 in a QFN16 (4x4)

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% @ 0.5 A)
- Selectable output current limit using an external resistor
- Compliant with main satellite receiver output voltage specifications (6 programmable levels)
- Accurate built-in 22 kHz tone generator suits widely-accepted standards
- 22 kHz tone waveform integrity guaranteed also at no load

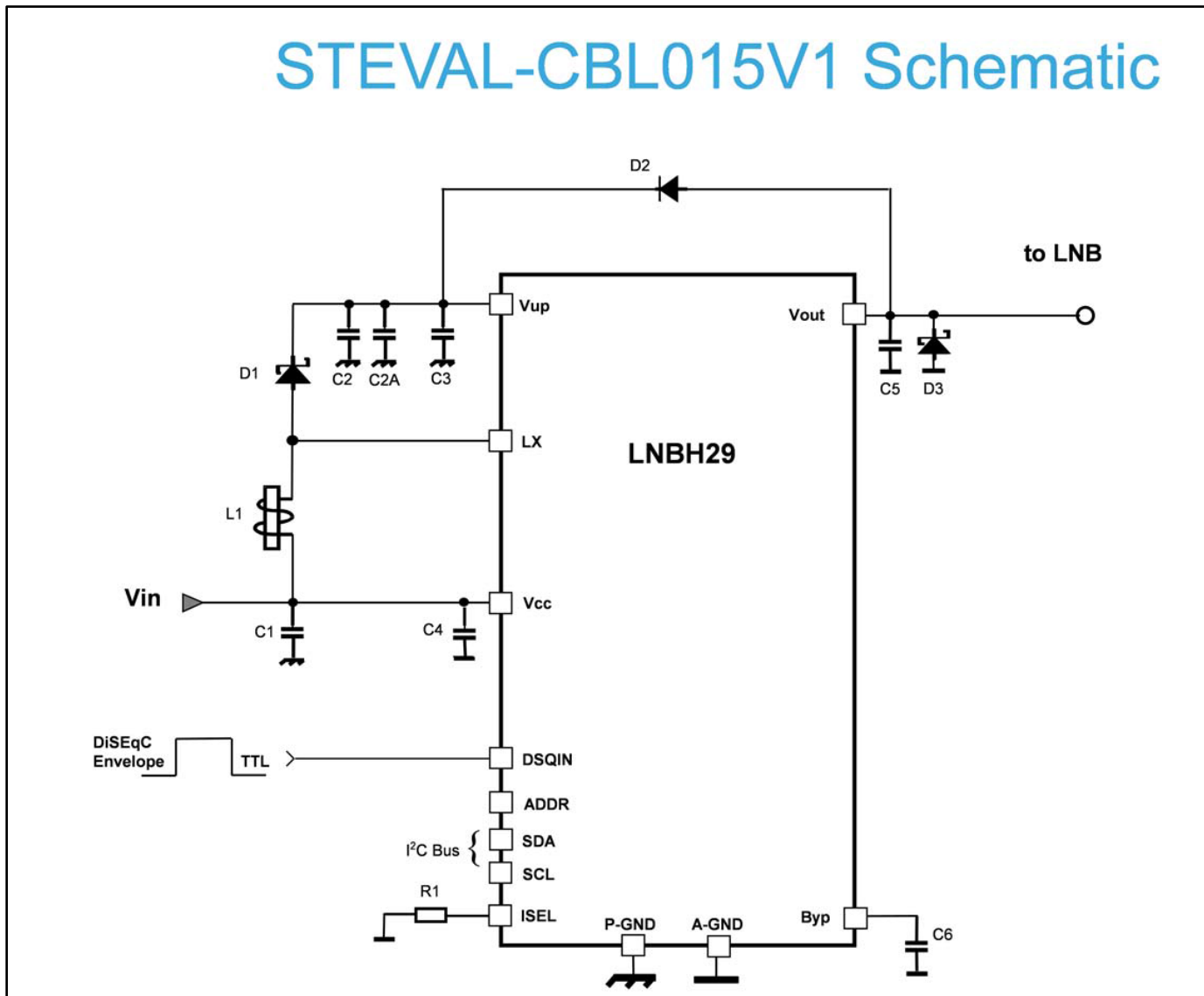
- Low-drop post regulator and high-efficiency step-up PWM with integrated power N-MOS allowing low power losses
- Overload and overtemperature internal protection with I²C diagnostic bits
- LNB short-circuit dynamic protection
- RoHS compliant

Description

This product evaluation board implements a DC-DC converter based on the LNBH29 device used to power LNB inside dish antennas which receive satellite TV signals. The LNBH29 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 LNBH29 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 17.5 V.

1 Schematic

Figure 1: STEVAL-CBL015V1 schematic



2 Revision history

Table 1: Revision history

Date	Revision	Changes
27-Jan-2014	1	Initial release

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