

Single LNB supply and control IC DiSEqC 1.x compliant based on the LNBH25L

Data brief



Features

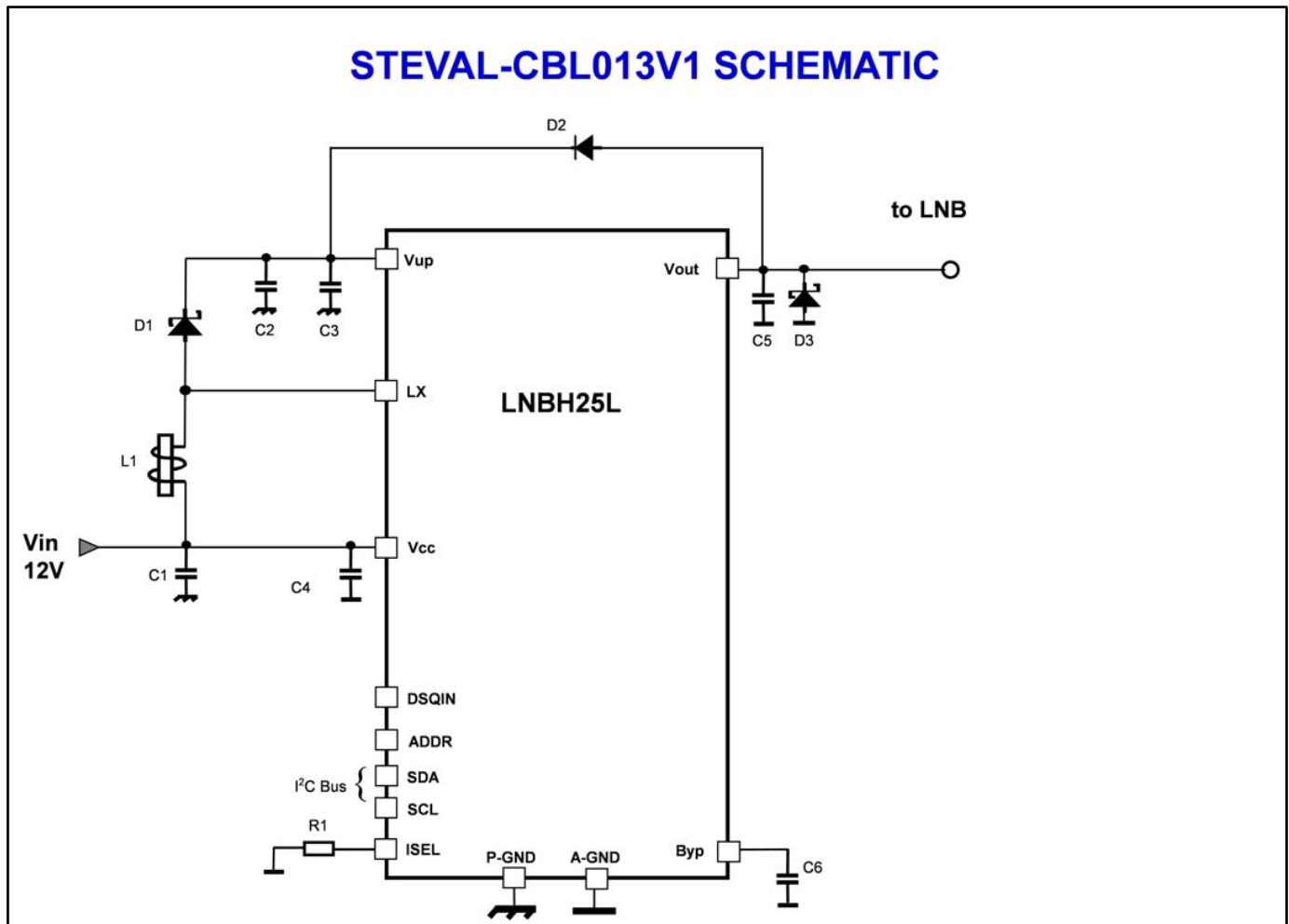
- Complete interface between LNB and I²C bus
 - Built-in DC-DC converter for single 12 V supply operation and high efficiency (typ. 93% @ 0.5 A)
 - Selectable output current limit using an external resistor
 - Compliant with main satellite receiver output voltage specifications (8 programmable levels)
 - 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 LNBH25L device used to power LNB inside dish antennas which receive satellite TV signals. The LNBH25L 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 LNBH25L 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 Schematic

Figure 1: STEVAL-CBL013V1 schematic



2 Revision history

Table 1: Revision history

Date	Revision	Changes
28-Jan-2014	1	Initial release

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