

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

Data brief



### Features

- Complete interface between LNB and I<sup>2</sup>C 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

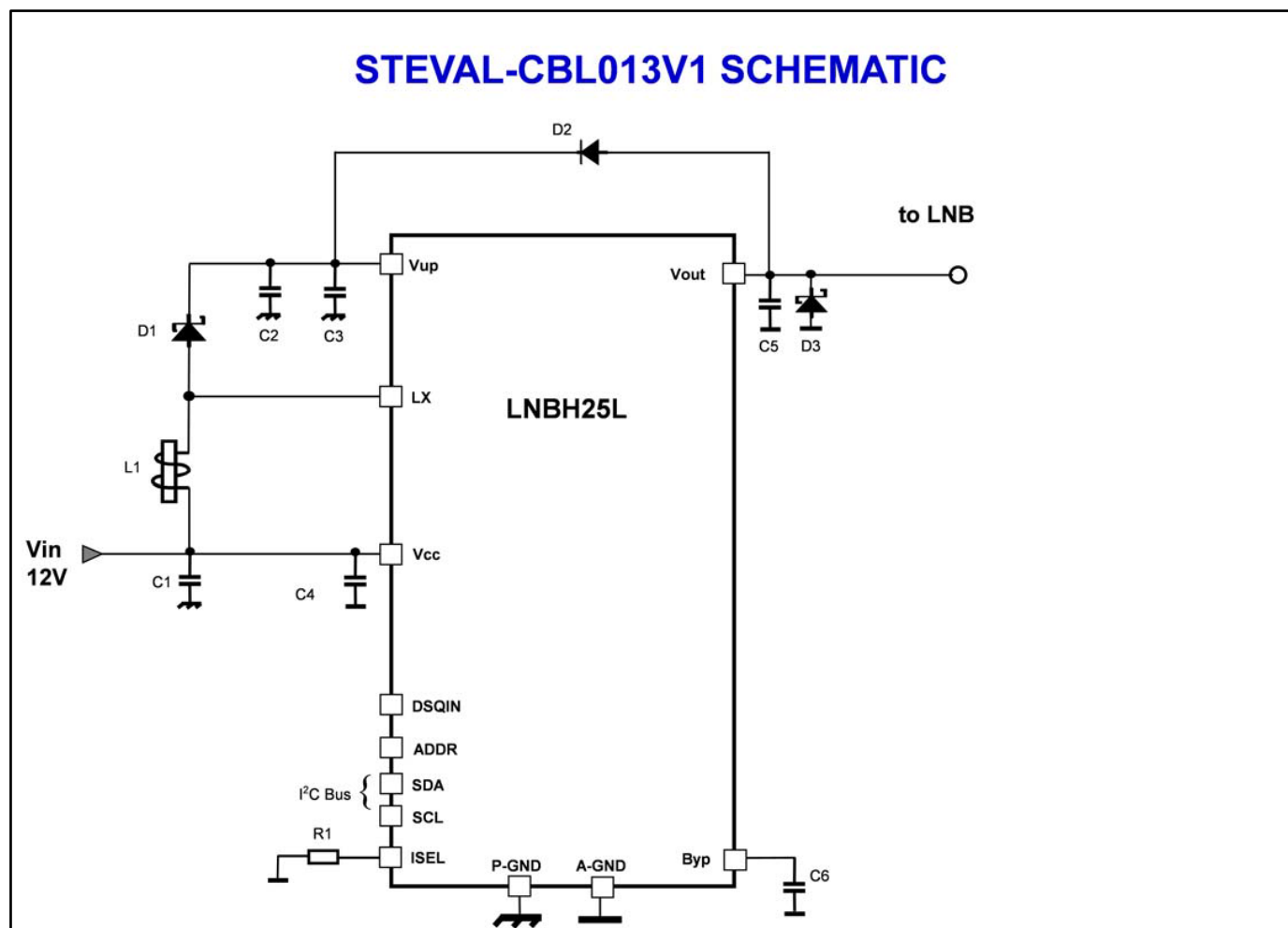
- 22 kHz tone waveform integrity guaranteed also at no load
- Low-drop post regulator and high-efficiency step-up PWM with integrated power N-MOS allowing low power losses
- Overload and overtemperature internal protection with I<sup>2</sup>C diagnostic bits
- LNB short-circuit dynamic protection
- RoHS 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 I<sup>2</sup>C 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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