



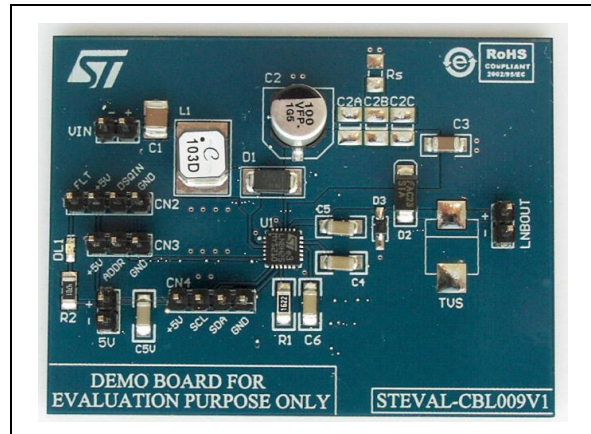
# STEVAL-CBL009V1

DiSEqC 1.X-compliant single LNB supply and control IC based on the LNBH25

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 by external resistor
- 22 kHz tone waveform integrity guaranteed also in no load condition
- Low-drop post regulator and high efficiency step-up PWM with integrated power N-MOS for low power loss
- LPM (low power mode) function to reduce dissipation
- Overload and overtemperature internal protection with I<sup>2</sup>C diagnostic bits
- LNB short-circuit dynamic protection
- DiSEqC 1.x communication
- RoHS compliant



## Description

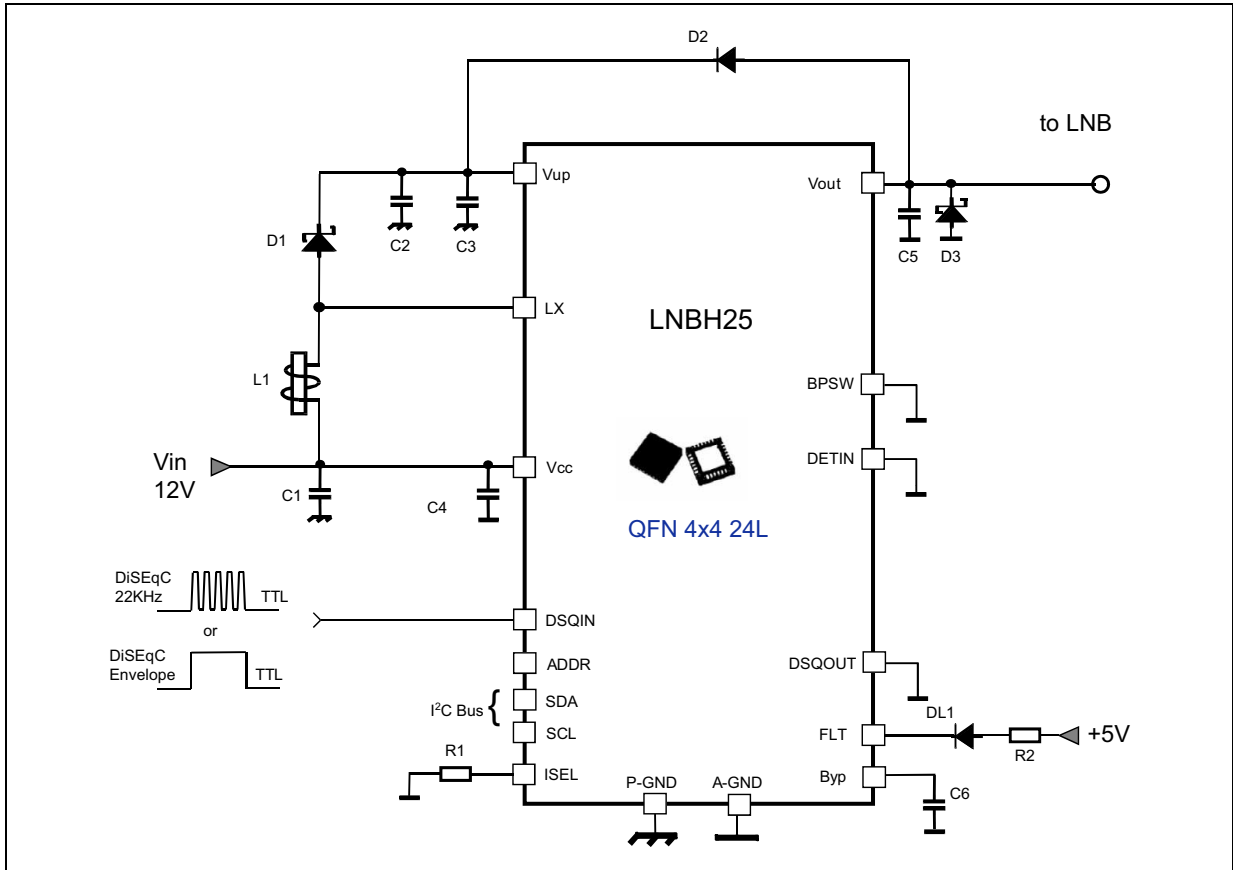
The STEVAL-CBL009V1 demonstration board implements a DC-DC converter based on ST's LNBH25 device. It is used to power LNBs in dish antennas to receive satellite TV signals.

It provides good performance at low cost using a low external component count, and includes all functions needed for supplying/interfacing LNB modules in accordance with international standards.

The device includes an I<sup>2</sup>C bus interface and, thanks to a fully integrated step-up DC-DC converter, it works with a single input voltage supply ranging from 8 V to 16 V.

# 1 Schematic diagram

Figure 1. STEVAL-CBL009V1 circuit schematic



## 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
11-Feb-2013	1	Initial release.