



STEVAL-CBL011V1

DiSEqC 1.X-compliant dual LNB supply and control IC based on the LNBH26

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 by external resistor
- Compliant with main satellite receiver output voltage specification (15 programmable levels)
- Accurate built-in 22 kHz tone generator compliant with widely accepted standards
- 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 I²C diagnostic bits
- LNB short-circuit dynamic protection
- RoHS compliant

Description

The STEVAL-CBL011V1 demonstration board implements a DC-DC converter based on ST's LNBH26 device. It is used to power LNBs in dish antennas to receive satellite TV signals.

The LNBH26 is an integrated solution for supplying/interfacing satellite LNB modules in accordance with international standards.

This single device offers a complete solution for dual-tuner satellite receivers and provides good performance at low cost using a low external component count.

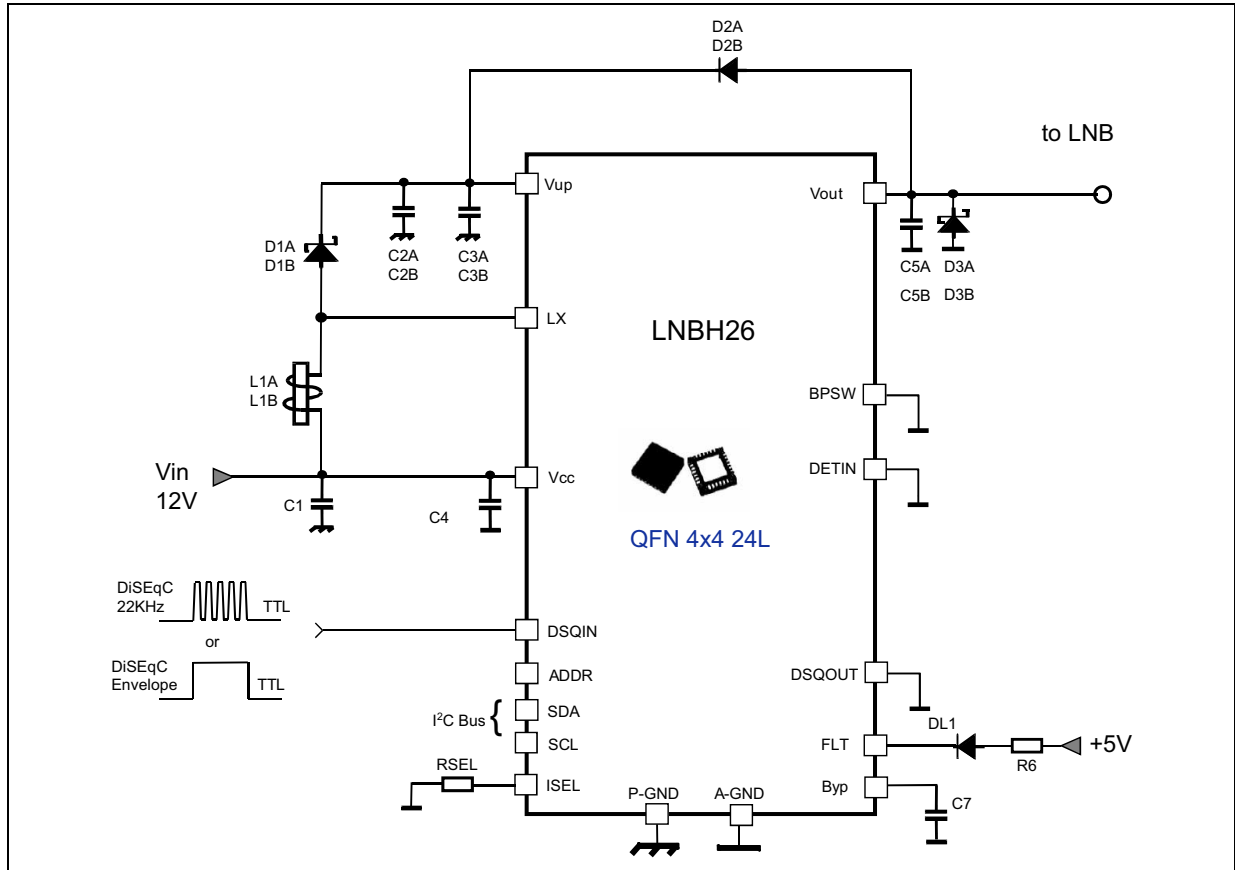


The LNBH26 demonstration board includes an I²C bus interface and a factory-trimmed internal 22 kHz tone generator which can be controlled through the DSQIN pin (TTL compatible). This allows immediate DiSEqC™ data encoding.

Thanks to a fully integrated step-up DC-DC converter, the STEVAL-CBL011V1 demonstration board can operate with a single input voltage supply source, ranging from 8 to 15 V.

1 Schematic diagram

Figure 1. STEVAL-CBL011V1 circuit schematic



2 Revision history

Table 1. Document revision history

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

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