

Single LNB supply and control IC DiSEqC 1.X compliant with EXTМ 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

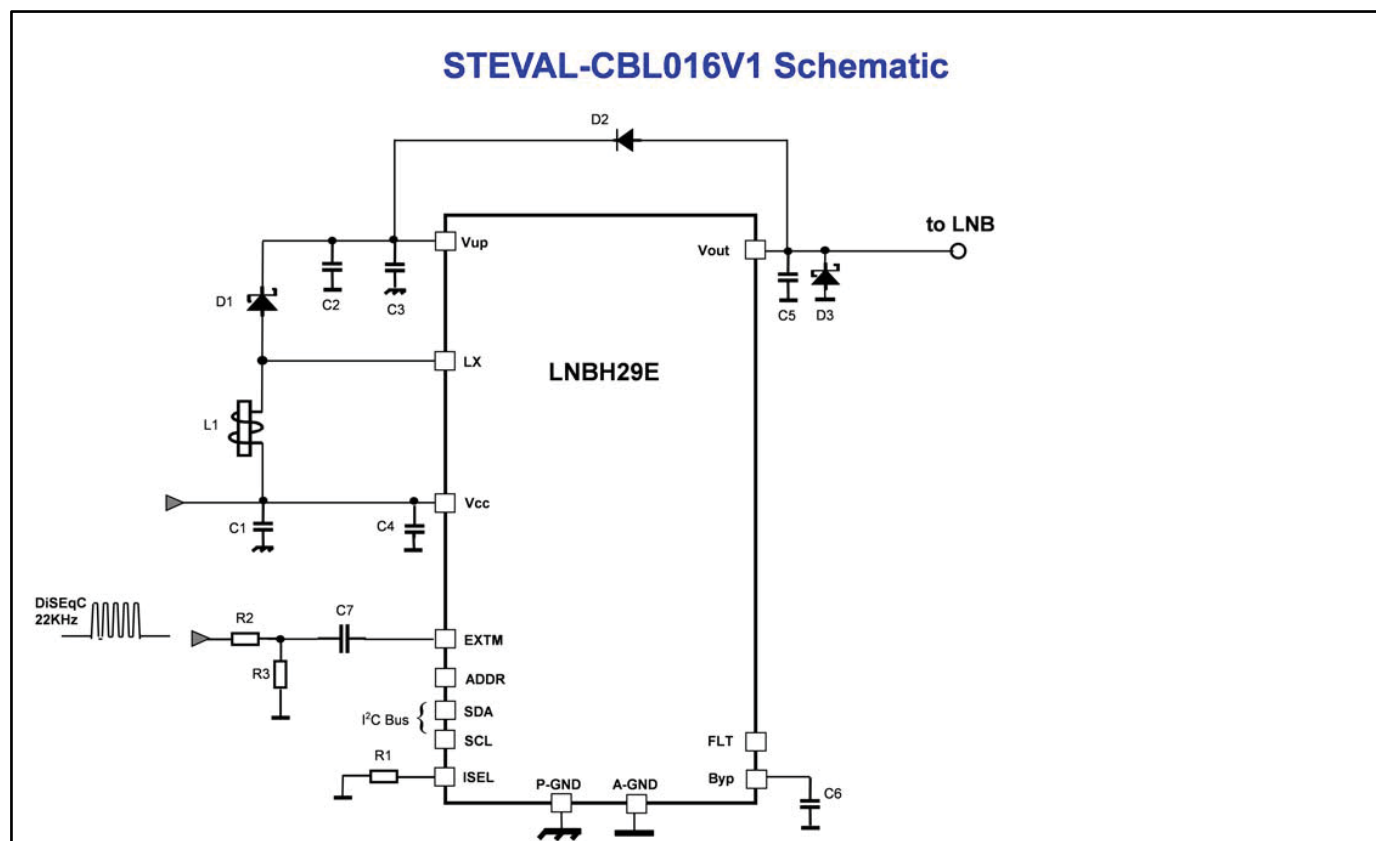
- Low-drop post regulator and high-efficiency step-up PWM with integrated power N-MOS allowing low power loss
- Overload and overtemperature internal protection with I²C diagnostic bits
- LNB short-circuit dynamic protection
- RoHS compliant

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 is provided with the EXTМ analog modulation input pin to be connected to an external 22 kHz DiSEqC tone source. The tone output waveform depends on the characteristics of the external signal provided by the EXTМ pin. 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-CBL016V1 schematic



2 Revision history

Table 1: Revision history

Date	Revision	Changes
27-Jan-2014	1	Initial release

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