

# STEVAL-CBL007V1

LNB power supply demonstration board based on the DiSEqC 1.X-compliant LNBH23L

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 limitation via external resistor
- Compliant with main satellite receiver output voltage specifications
- Auxiliary modulation input (EXTM pin) facilitates DiSEqC<sup>TM</sup> 1.X encoding
- Accurate built-in 22 kHz tone generator suits widely-accepted standards
- Low-drop post regulator and high efficiency step-up PWM with integrated power NMOS to reduce power losses
- Internal overload and over-temperature protection with I<sup>2</sup>C diagnostic bits
- Dynamic LNB short-circuit protection
- RoHS compliant

### **Description**

The STEVAL-CBL007V1 demonstration board is intended to provide information and suggestions on the correct use of the LNBH23L device.

The LNBH23L is an integrated solution for supplying/interfacing satellite LNB modules. Simple and inexpensive, it provides good performance while minimizing the number of external components required.

It includes all functions needed for LNB supply and interfacing, and is compliant with international standards. It includes an I<sup>2</sup>C bus interface and, due to the fully integrated step-up DC-DC converter, functions with a single input voltage supply from 8 V to 15 V.

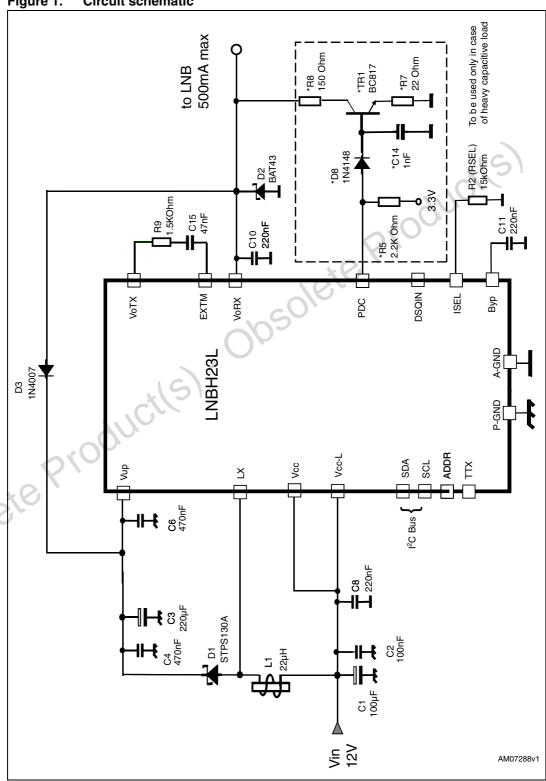


STEVAL-CBL007V1

Schematic diagram STEVAL-CBL007V1

#### **Schematic diagram** 1

Figure 1. **Circuit schematic** 



STEVAL-CBL007V1 Revision history

# 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
12-Aug-2010	1	Initial release.



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