



# STEVAL-CBL006V1

## Demonstration board: power supply for LNB based on the LNBH24 (QFN32)

Data Brief

### Features

- Complete interface between LNBs and I<sup>2</sup>C bus
- Built-in DC-DC converter for single 12 V supply (8 V to 15 V  $V_{in}$  range) operation and high efficiency (typ. 93% @ 0.5 A)
- Compliant with main satellite receivers output voltage specification
- Accurate built-in 22 kHz tone generator meets widely accepted standards (patent pending)
- Fast oscillator start-up facilitates DiSEqC<sup>TM</sup> encoding
- Built-in 22 kHz tone detector supports bidirectional DiSEqC<sup>TM</sup> 2.0
- Over-load and over-temperature internal protections with I<sup>2</sup>C diagnostic bits
- Output voltage and output current level diagnostic feedback by I<sup>2</sup>C bits
- LNB short circuit dynamic protection
- +/- 4 kV ESD tolerant on output power pins
- Based on LNBH24 in QFN32 package

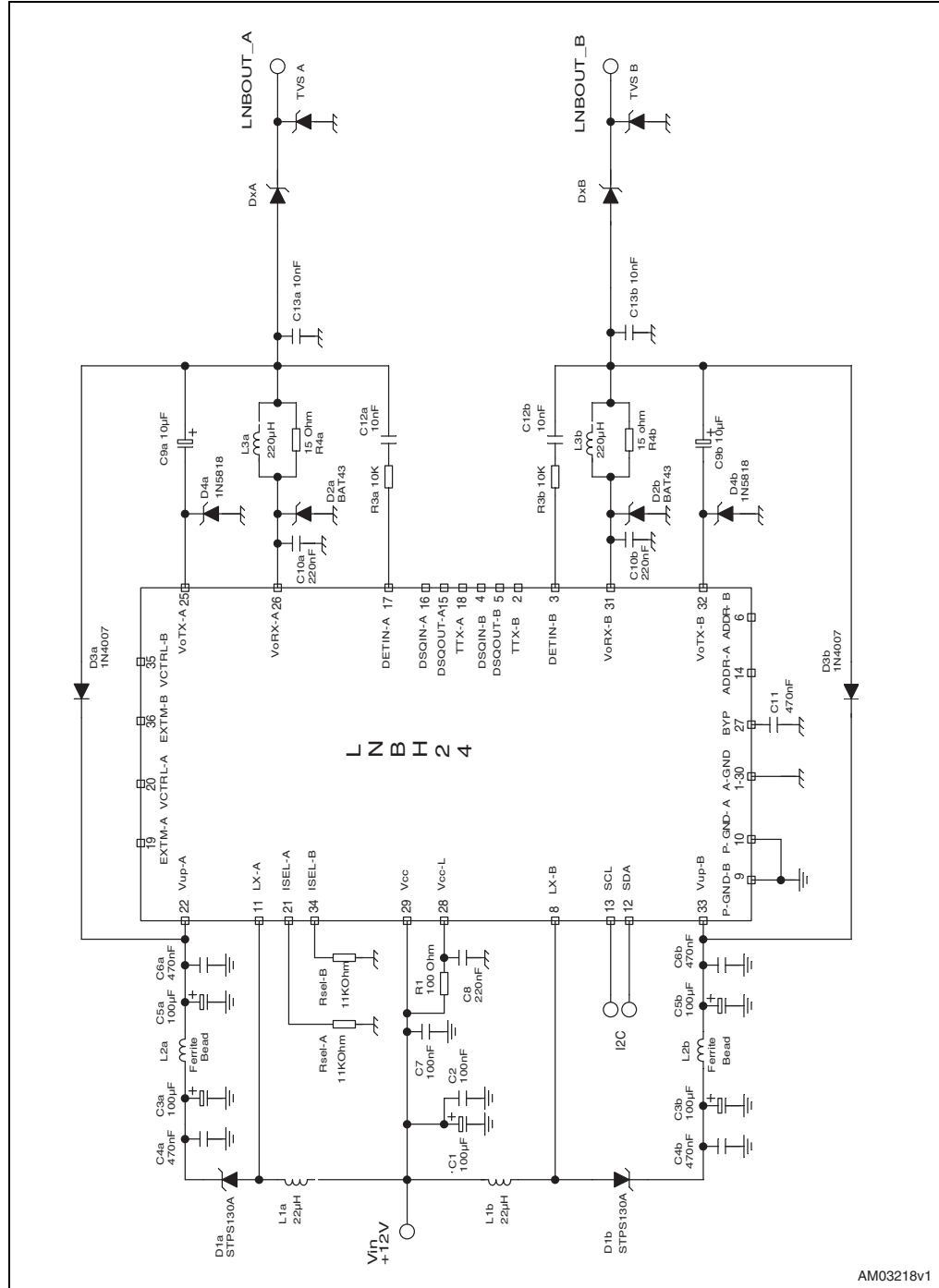


### Description

The demonstration board STEVAL-CBL006V1 implements a DC-DC converter based on the device LNBH24. It gives good performance in a simple and cheap way and minimum external components are required. It includes all the functions that allow the design of a dual tuner STBs with supplying/interfacing function in accordance with the international standards. It also 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 in the range of 8 V to 15 V.

# 1 Circuit schematic

Figure 1. Schematic diagram



## 2 Revision history

**Table 1. Document revision history**

Date	Revision	Changes
19-Feb-2009	1	Initial release.

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