

## STEVAL-CBL004V1

# Power supply demonstration board for LNB based on the LNBH24

Data brief

### **Features**

- Complete interface between LNBs and I<sup>2</sup>C bus
- Built-in DC-DC converter for single 12 V supply operation (8 - 15 volt V<sub>in</sub> range) and high efficiency (typ. 93%@0.5 A)
- Compliant with main satellite receiver output voltage specifications
- Accurate 22 kHz tone generator supports bidirectional DiSEqC<sup>TM</sup> 2.0 and meets widely accepted standards (patent pending)
- Fast oscillator startup facilitates DiSEqC<sup>TM</sup> encoding
- Overload and overtemperature internal protection with I<sup>2</sup>C diagnostic bits
- Output voltage and output current level diagnostic feedback through I<sup>2</sup>C bits
- LNB short-circuit dynamic protection
- +/- 4 kV ESD tolerant on output power pins
- RoHS compliant

## **Description**

The STEVAL-CBL004V1 demonstration board implements a DC-DC converter based on the LNBH24 dual LNB supply and control IC with step-up and  $\rm I^2C$  interface.

This simple, cost-effective design represents an integrated solution for supplying/interfacing two independent LNB down-converters in satellite antenna dishes. It provides good performance with a minimum of external components.

The STEVAL-CBL004V1 includes all the functions needed for the design of dual tuner STBs, with supplying/interfacing functions that are compliant with the international standards.

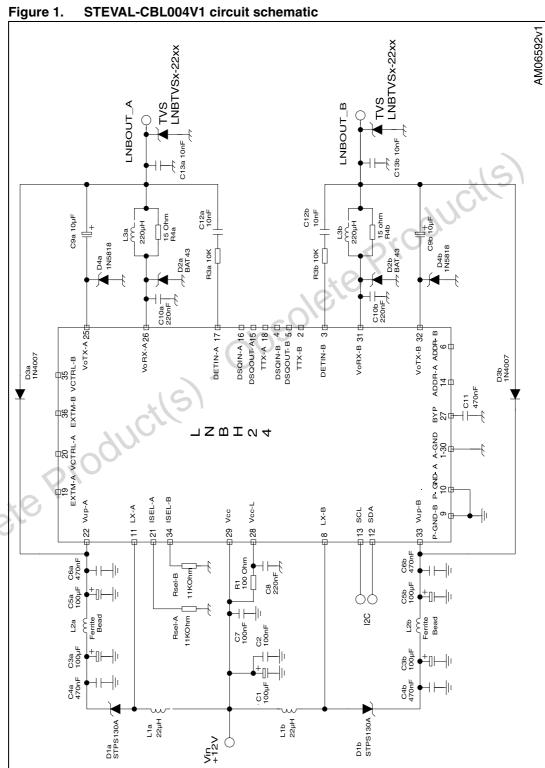
It features an I<sup>2</sup>C bus interface and, thanks to the fully integrated step-up DC-DC converter, it works



with a single input voltage supply in the range of 8 V to 15 V.

Schematic diagram STEVAL-CBL004V1

#### **Schematic diagram** 1



STEVAL-CBL004V1 Revision history

## 2 Revision history

Table 1. Document revision history

Date	Revision	Changes
26-Apr-2010	1	Initial release.



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