

## Multistandard advance demodulator STB0899 Digital TV satellite set-top boxes

DATA BRIEF

### DESCRIPTION

The STB0899 advanced demodulator from STMicroelectronics enables digital set-top boxes to process base-band DVB-S2 signals into digital video transport stream data. This data is then ready to be fed directly to the STB decoder.

By incorporating the DVB-S standard, the STB0899 supports seamless migration to DVB-S2 services.

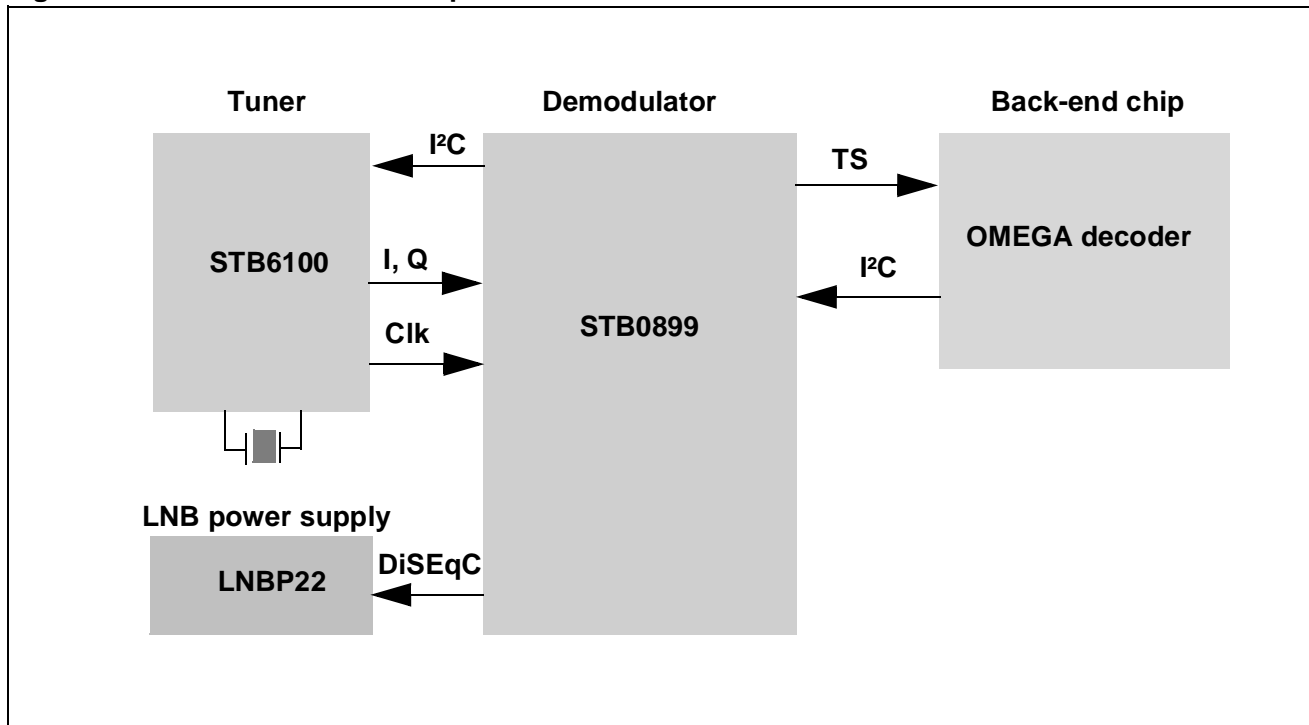
The STB0899 and STB6100 silicon tuner may be coupled with a decoder from ST's OMEGA range, thus forming a complete silicon solution for DVB-S / DVB-S2 set-top boxes.

The interface between these devices has been designed to ensure simple layouts and the lowest possible bill of materials cost.

Package (208 pin PQFP package)



Figure 1. STB0899 DVB-S2 set-top box



**FEATURES**

- DVB-Q2 demodulator and decoder
  - QPSK, 8PSK, 4 + 12 APSK
  - Hierarchical 8PSK enhanced processor
  - DVB-S2 pilot processing
  - LDPC and BCH decoding
  - Supports all DVB-S2 bit rates
  - DVB-S2 framing
- Legacy support for DVB-S and DIRECTV® QPSK modes
- Digital carrier and timing recovery loops
- Compatible with direct conversion tuners
  - Dual 8-bit analogue conversion
  - Dual  $\Sigma\Delta$  digital split AGC RF/BB
  - Wide range carrier tracking loop
  - Flexible clock generation
- Transport decoder
  - Compliant with DVB common interface
  - 12-bit parallel and 7-bit serial interface
- DiSEqC 2.0 22 kHz to 100 kHz interface
- TQFPF 100 exposed pad package

**PART NUMBERING****Table 1. Order codes**

| Part Number | Description        |
|-------------|--------------------|
| STB0899     | DVB-S2 demodulator |
| EVALDVBS2   | Evaluation board   |

**REVISION HISTORY****Table 2. Revision history**

| Date          | Revision | Description of changes |
|---------------|----------|------------------------|
| December-2004 | 1        | First issue            |

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