



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.

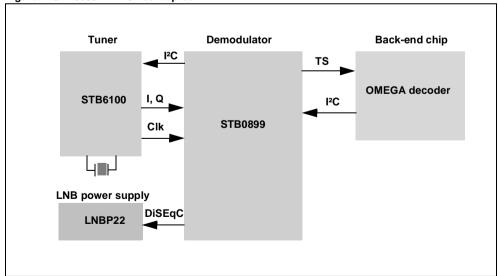
By incorporating the DVB-S standard, the STB0899 supports seamless migration to DVB-S2 services.

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.



Figure 1. STB0899 DVB-S2 set-top box



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FFATURES

- 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 ΣΔ 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
- TQPFP 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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