

# STB0899

# 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.

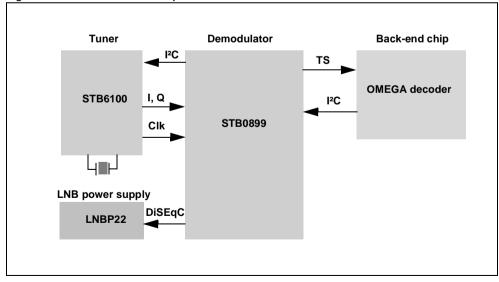
By incorporating the DVB-S standard, the STB0899 supports seamless migration to DVB-S2 services.

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

# STB0899

# 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<sup>®</sup> 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
- 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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