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.

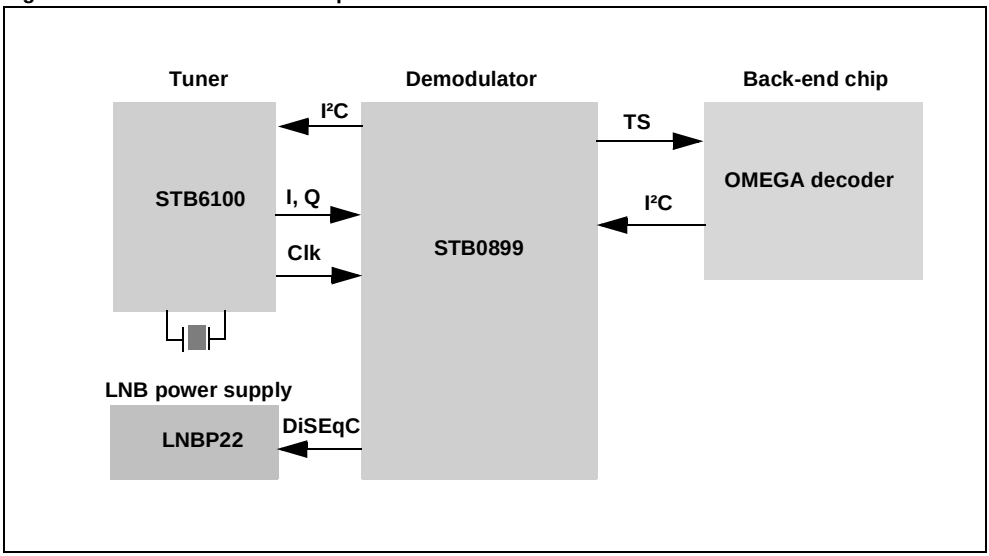
The STB0899 and STB6100 silicon tuner may be coupled with a decoder from ST's OMEGA range, thus forming a complete silicon solution for DVB-S / DVB-S2 set-top boxes.

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



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 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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