

8PSK/QPSK direct conversion tuner IC

DESCRIPTION

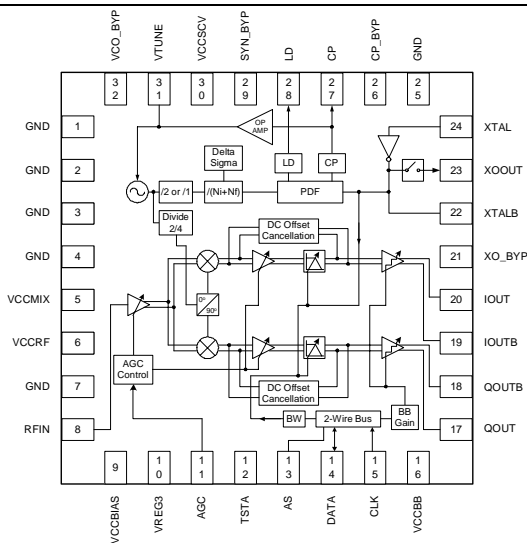
This device includes an LNA, down-converting mixers, baseband low-pass filters, gain control, on-chip VCO and a low noise PLL. Its wide gain control range is well suited for low symbol rate applications.

The DVB-S2 standard increases the capacity of satellite broadcasts by as much as 30%, so enabling the effective deployment of high data rate applications such as high definition TV and broadband internet.

Figure 1. Package (420 + 36 PBGA 27 x 27)



Figure 2. Integrated silicon tuner



FEATURES

- Powered by RF Magic
- Direct conversion
- Input range 950 to 2150 MHz
- Supports 1 to 45 Msymbol/s
- Fully integrated LO and PLL
- Differential I/Q outputs
- Buffered XO output to clock other devices
- Low external component count
- Low power consumption
- 2-wire I²C serial interface
- Low cost integrated ZIF tuner for DVB-S2 and DIRECTV, VSAT and internet through satellite applications
- 8PSK/QPSK support
- Simple interface to ST's satellite demodulator devices
- Low phase noise, excellent linearity and high LO harmonics rejection
- Small QFN-32 pin package

Table 1. Order Codes

Part Number	Description
STB6100	Standard tray version
STB6100T	Tape and reel

REVISION HISTORY

Table 2. Revision History

Date	Revision	Description of Changes
September-2004	1	First Issue

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