

The AU8521 is a fully integrated DTV + ATV demodulation IC designed specifically for PC-TV applications. Internally, the AU8521 consists of a fully compliant ATSC A/74 8-VSB demodulator, a 64/256 QAM demodulator, a complete NTSC/PAL analog TV demodulator and video decoder, and a BTSC/A2/FM audio decoder. The AU8521 directly accepts IF or low IF from the RF tuner section via a 12-bit internal Analog-to-Digital Converter, and outputs MPEG-2 transport stream to either PCI or a DMA interface. The AU8521 utilizes Auvitek's proprietary demodulation and signal-tracking algorithms and is ideally suited for any PC-TV system that requires full support for legacy TV broadcast alongside DTV reception.

AU8521 FEATURES

- ◆ ATSC A/74 compliant 8-VSB demodulation
- ◆ OpenCable, ANSI/SCTE DVS-031, ITU-T J.83 Annex B, and DOCSIS compliant 64/256 QAM decoder
- ◆ EIA/CEA-909 Smart Antenna IF
- ◆ Integrated 12-bit ADC
- ◆ Integrated -30dB range analog RF and IF AGC controllers
- ◆ Fully programmable IF frequency
- ◆ Multiple GPIO pins
- ◆ PCI-bus and DMA PC interfaces

Audio TV Decoder:

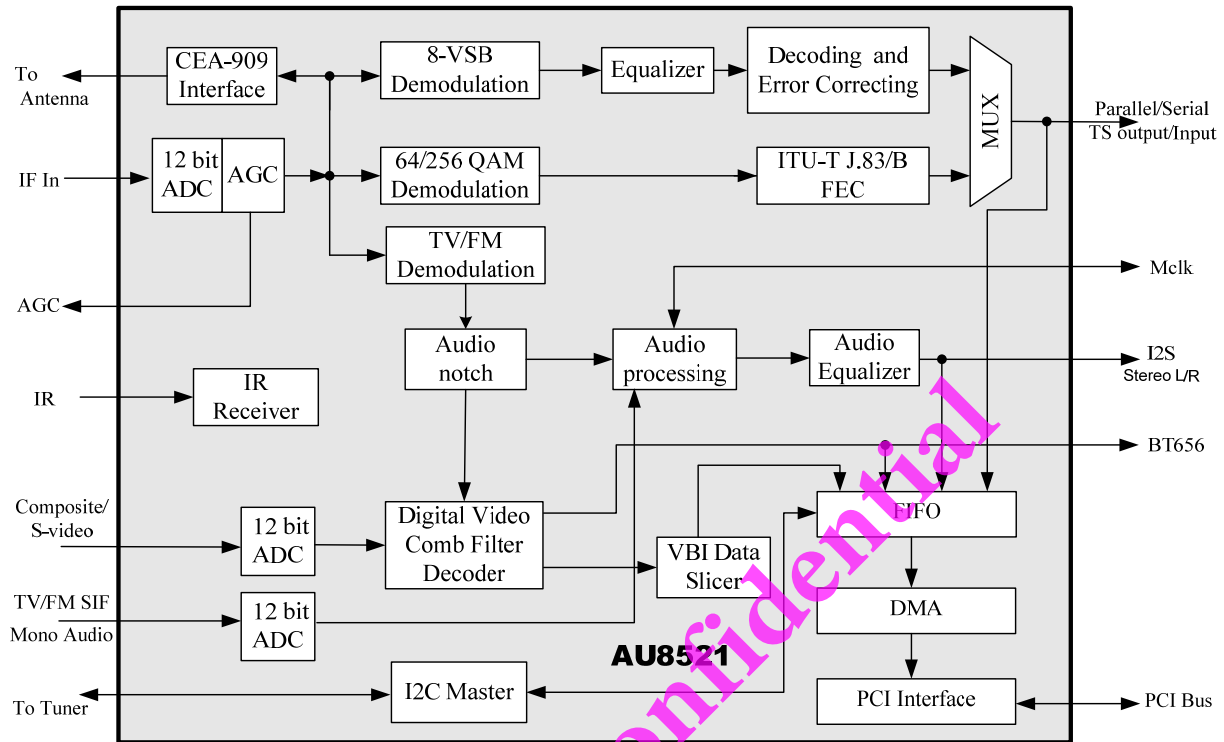
- ◆ NTSC/PAL demodulation and separation
- ◆ VBI data slicer and color controls
- ◆ Macrovision support
- ◆ BTSC/A2/FM compliant decoding
- ◆ 3-band audio EQ

Package: 128-pin LQFP
144-pin LQFP

APPLICATIONS

- 1) HDTV and STB receivers
- 2) PC peripherals

AU8521 BLOCK DIAGRAM



Auvitek Confidential