

AU8524 Single-Chip Digital TV Demodulator

The AU8524 is a sophisticated demodulator IC for digital terrestrial (ATSC 8-VSB) and digital cable (ITU-T J.83 Annex B) TV signals, which builds on Microtune's powerful and efficient demodulator algorithm and adaptive filter technology.

Related Product Information:

- [Press Release](#)
- [Related Products](#)
- [Order Information](#)
- [Product Selector Guide](#)

Description

The innovative features of the AU8524 consist of the digital ATSC 8-VSB demodulator and 64/256 QAM demodulator. The AU8524 directly accepts IF or low IF from the tuner section via an internal ADC (Analog to Digital Converter). Following demodulation and error correction, it provides the MPEG-2 transport stream to the transport de-multiplexer.

The AU8524's small size and low power make it well suited for any system designed to receive information from DTV broadcasts. This includes stand-alone SDTV or HDTV sets, STBs, and PCTV applications.

Key Features

- Built-in 30dB range analog AGC and 12-bit ADC
- Built-in Tuner RF and IF AGC controllers
- Programmable IF frequency
- ATSC compliant 8-VSB demodulation
- OpenCable™, ANSI/SCTE DVS-031, ITU-T J.83 Annex B, and DOCSIS compliant 64/256 QAM demodulation
- Transport Stream or Program Stream input/output in parallel or serial format
- Pin-compatible with AU8515 ATSC/8VSB only demodulator

Bus and Interface

- Dual I2C Bus support
- EIA/CEA-909 Smart Antenna Interface (Mode A)
- GPIO support

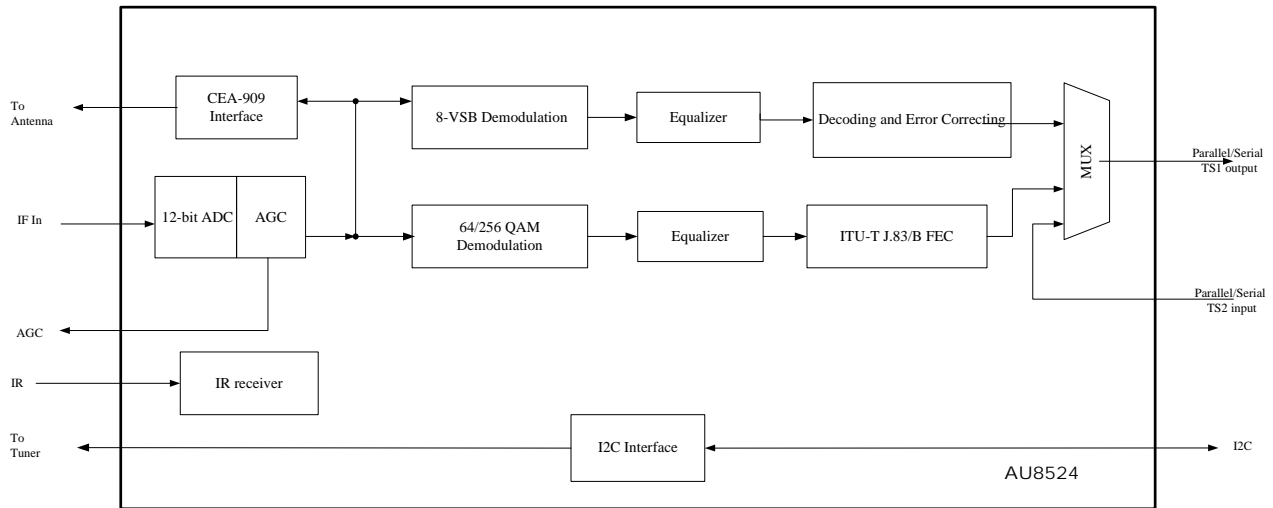
Package & Power

- 128 pin LQFP package (14 mm x 14 mm)
- Typ. Power: < 600 mW
- Low standby power: <20 mW
- Compliant to RoHS and GADSL

AU8524 Target Segments

- HDTV Sets
- Set-Top Boxes
- DVD Recorders
- PC-TV for Laptops and Desktops
- NIM Tuners

Block Diagram



Related Documents

- PB-00167 – AU8524 Product Brief (This document)
- DS-00123– AU8524 Data Sheet

Contact and Ordering Information

Microtune, Inc
 2201 10th Street
 Plano, TX 75074, USA
 Tel: +1-972-673-1600, Fax: +1-972-673-1602
 E-mail: sales@microtune.com, Web site: www.microtune.com