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Products

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 - Gateway Controllers
 - Residential Gateway Controllers
 - WLAN AP/Gateway Controllers
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 - 10M Ethernet
 - Digital Home Center
 - PHYceivers

RTL2832U

DVB-T COFDM Demodulator + USB 2.0

General Description

The RTL2832U is a high-performance DVB-T COFDM demodulator that supports a USB 2.0 interface. The RTL2832U complies with NorDig Unified 1.0.3, D-Book 5.0, and EN300 744 (ETSI Specification). It supports 2K or 8K mode with 6, 7, and 8MHz bandwidth. Modulation parameters, e.g., code rate, and guard interval, are automatically detected.

The RTL2832U supports tuners at IF (Intermediate Frequency, 36.125MHz), low-IF (4.57MHz), or Zero-IF output using a 28.8MHz crystal, and includes FMDAB/DAB+ Radio Support. Embedded with an advanced ADC (Analog-to-Digital Converter), the RTL2832U features high stability in portable reception.

The state-of-the-art RTL2832U features Realtek proprietary algorithms (patent-pending), including superior channel estimation, co-channel interface rejection, long echo channel reception, and impulse noise cancellation, and provides an ideal solution for a wide range of applications for PC-TV, such as USB dongle and MiniCard/USB, and embedded system via USB interface.

Features

- COFDM complying with Nordig Unified 1.0.3, D-book 5.0, and ETSI 300-744
- Supports multiple IF frequencies (4.57MHz or 36.167MHz) and spectrum inversion

Font Size





News

- Realtek's 4K2K UHD Smart TV SoC (RTD2995) Wins Innovative Product Award 2013
- Realtek's Low Power USB 3.0-to-Gigabit Ethernet Controller (RTL8153) Wins EDN China Innovation Award 2013

Quick Links

- Realtek PCIe GBE Family Controller Series Drivers
- Realtek PCIe FE Family Controller Series Drivers
- HD Audio Codec Driver
- Monthly Revenue Update
- M.O.P.S.

- 10/100/1000M Gigabit Ethernet
 - 1-Port
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 - Switch Controllers
 - 10/100/1000M Gigabit Ethernet
 - 3-Port
 - 5-Port
 - 8-Port
 - 16-Port
 - 24-Port
 - 10/100M Fast Ethernet + 10/100/1000M Gigabit Ethernet
 - 8-Port + 2-Port
 - 24-Port + 4-Port
 - 10/100M Fast Ethernet
 - 4-Port
 - 5-Port
 - 9-Port
 - 16-Port
 - 24-Port
 - HEAC Switch Controller
 - Wireless LAN ICs
 - WLAN NIC
 - IEEE 802.11a/b/g/n
- Includes Radio Support (FM/DAB/DAB+)
 - Includes ISDB-T(SBTVD-T) 1-Seg
 - Supports Zero-IF input
 - Single low-cost crystal for clock generation ($\pm 100\text{ppm}$)
 - Automatic transmission mode and guard interval detection
 - Impulse noise cancellation circuits
 - Automatic carrier recovery over a wide range offset ($\pm 800\text{KHz}$)
 - Superior performance with pre/post/long echo profiles
 - Embedded adjacent and co-channel interference rejection circuit
 - Delayed AGC with programmable Take-Over Point (TOP)
 - 7-bit ADC for RF signals level measurement
 - Hardware MPEG-2 PID filters
 - Infra-red port for remote control and wake-up, protocols supported are:
 - Microsoft RC6 protocol
 - NEC, Sony, SIRC, RC-5 protocol
 - Eight general purpose I/O ports
 - USB 2.0 Interface
 - Supports USB Full/High speed
 - Configurable vendor information via external EEPROM
 - Passes USB-IF certification
 - Signal 3.3V external power is required
 - 48-pin QFN (6x6 mm²) Green Package

Applications

- Portable DTV device
- USB dongle
- MiniCard

- Single-Chip
 - IEEE 802.11b/g/n
 - Single-Chip
 - IEEE 802.11n
 - MAC/BBP
 - RF ICs
 - IEEE 802.11a/b/g
 - MAC/BBP
 - RF ICs
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- WLAN AP/Gateway Controllers
- DTV Demodulators
 - DVB-T Demodulator (Terrestrial)
 - DVB-C Demodulator (Cable)
 - DTMB/CTTB Demodulator
- Computer Peripheral ICs
 - PC Audio Codecs
 - AC'97 Audio Codecs
 - 2-Channel
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 - 8-Channel
 - High Definition Audio Codecs

- 2-Channel
 - 6-Channel
 - 8-Channel
- Consumer Audio Codecs
 - AC'97 Interface
 - I2S Interface
- Card Reader Solutions
 - Card Reader Controllers
- Clock Generators
 - Solutions for Intel Chipsets
 - Solutions for SiS Chipsets
 - Solutions for VIA Chipsets
- Class-D Audio Amplifier
- PC Camera Controller
 - USB 2.0 Interface
 - USB 3.0 Interface
- Multimedia ICs
 - Display Solutions
 - LCD Monitor Controllers
 - TV Platform Solutions
 - Analog Video Decoders
 - TV Controllers
 - MPEG Decoders

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