

DVB-T, DAB/DAB+ and FM Radio USB Dongle Reference Design



E4000

Features

Production Ready TV and Radio USB Dongle

- E4000 CMOS RF Tuner
- Realtek RTL2832U USB 2.0 Demodulator

Multiple TV and Radio Systems Supported

- DVB-T
- DAB/DAB+
- FM radio

Ultra Low Component Count

- Low Cost Passive Components for Optimal Performance
- Single Crystal Solution
- Simple PMU Design

Fast Time-to-Market

- Schematics and Gerber Files
- Full Documentation Package

Full Software Support

- WHQL Certified Drivers
- Window 7.0 Logo and WMC AQ Support
- Player Software from Arcsoft and Newsoft Technology

The Elonics DVB-T, DAB/DAB+ and FM radio USB Dongle is a complete low cost reference design targeted at high performance PC-TV digital television applications. The design surpasses NorDig 2.0, D-Book 5.0 and ETSI 300-744 requirements.

The USB dongle comes complete with a full performance evaluation, design schematics, PCB layout files, certified drivers and product documentation, reducing time-to-market and lowering development costs.

Benefits

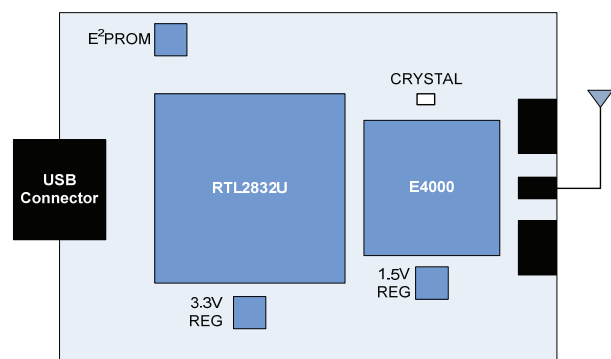
High Sensitivity* Performance Design

- -97.7dBm QPSK, C/R 1/2
- -80dBm 64 QAM, C/R 7/8

Low Power Consumption

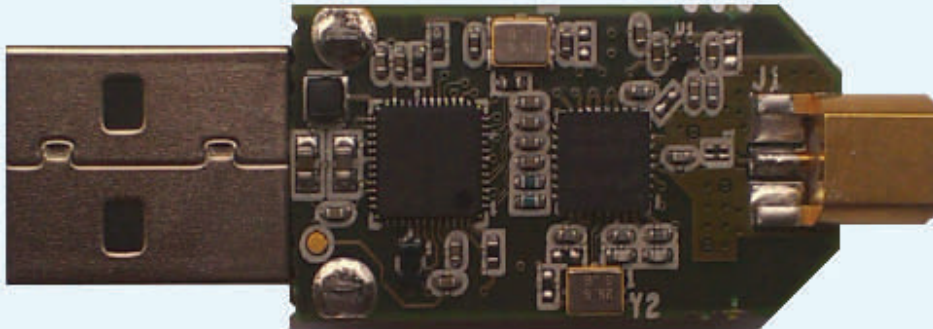
- <500mW Fully Active

*666MHz, 8k, 8MHz, GI = 1/4



Typical Applications

- PC-TV



Design Options

The design is available in a number of different form factors, and feature options.

Antenna options include the miniature MCX (shown) or IEC-169-2 type. The USB dongle comes in a number of different sizes from 31mm x 18mm including USB connector.

Evaluation and Support

Elonics supports its reference designs with extensive documentation and software GUIs for debugging. In addition, Elonics team of application engineers are always available to provide hands-on advice and resolve product introduction issues.

About Elonics

Elonics is a fabless semiconductor company specialising in the development and supply of multi-band radio frequency (RF) IC products. Founded in 2003 and based in Livingston, United Kingdom, Elonics has developed an innovative radio frequency architecture called DigitalTune™ that is the foundation for a family of re-configurable CMOS RF tuner products.

Elonics innovative technology allows manufacturers to design high performance multi-band tuners with unrivalled power consumption and low system cost. Our products are targeted at high volume consumer electronics applications that require wireless multi-media connectivity where size, performance, price and power consumption are paramount.

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