

ABRIDGED DATA SHEET

MAX2175 RF to Bits Automotive Radio Tuner Evaluation Kit

Evaluates: MAX2175

General Description

The MAX2175 evaluation kit (EV kit) is used to evaluate the performance of the MAX2175 RF to Bits® automotive radio tuner. It supports the use of two tuners, enabling evaluation of diversity applications, dual-tuner FM functionality with a single antenna, and cascaded VHF loop-through and tuner operation. The outputs of the two tuners can be I²S master only or I²S master/slave, supporting evaluation of a broad range of baseband connection schemes.

Easy access to the baseband output port of each tuner is provided through a 0.1in header. This enables convenient interfacing of the tuners to common data-capture systems such as FPGAs and logic analyzers. The board also includes a custom baseband DSP interface that can be used to interface the I²S and I²C ports to specific DSP platforms.

All RF ports are accessible through SMA connectors. Typical filters are included on the EV kit to enable evaluation of performance in a realistic environment. A common FM path, connecting both tuners to a single source, is provided to enable evaluation of dual-tuner FM functionality.

The EV kit is configured to use an external I²C-to-USB interface. This enables control of the tuner through the MAX2175's graphical user interface (GUI) software, which provides extensive access to the device's features. The I²C signals are also routed to the DSP connector and 0.1in header to enable configuration of the tuner by a baseband DSP using the MAX2175 driver, if desired.

A single 3.3V power source is required to operate the EV kit, which can be provided by an external bench supply. Alternatively, the DSP interface connector can also provide the required power.

RF to Bits is a registered trademark and registered service mark of Maxim Integrated Products, Inc.

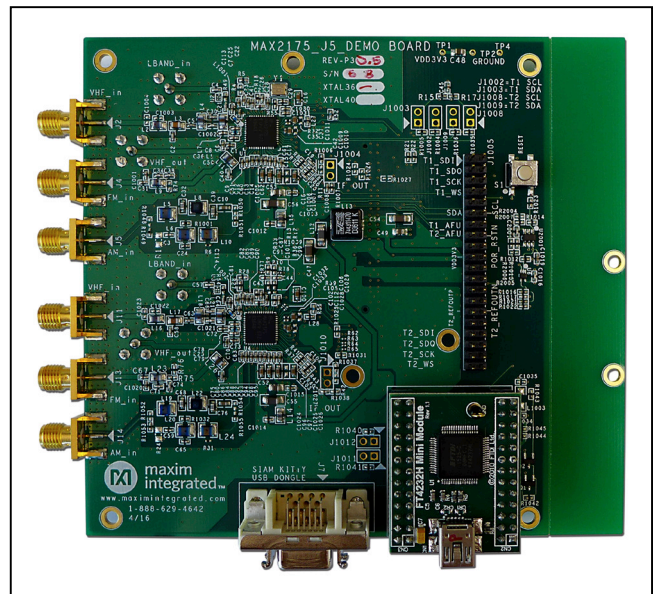
MATLAB is a registered trademark of The MathWorks Inc.

Benefits and Features

- Enables Evaluation of All Signal Paths and Receive Modes
- Dual Tuners for Evaluation of Dual-Tuner-Specific Features
- Custom DSP Interface for Connection to DSP Evaluation Platforms
- Logic Analyzer Interface Simplifies Connectivity
- MATLAB® Deserializer Function Simplifies Evaluation
- USB Register Control of Tuner Using the MAX2175 GUI
- Input Filters for All Bands Create Realistic Test Environment
- Proven PCB Layout
- Fully Assembled and Tested

Ordering Information appears at end of data sheet.

MAX2175 EV Kit Board



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Ordering Information

PART	TYPE	DSP EVALUATION PLATFORM	DSP INTERFACE
MAX2175R1EVKIT#	EV Kit	Renesas Salvator-X	80 Pins
MAX2175J1EVKIT#	EV Kit	TI Jacinto Evaluation Module	120 Pins

#Denotes RoHS compliant.