

## LK45165EVB

### *Advance Information*

## **Low-Voltage Universal Programmable Dual PLL Demo Board**

The LK45165EVB is a demo board for the 1.8 V, 60 MHz Universal Dual PLL (MC145165). This demo board implements the front-end receiver of a 45/48 MHz base set cordless phone per the Chinese standard. It contains four main parts: MCU, adjustable voltage regulator, FM-IF receiver, and UDPLL. Also, the demo board supports demonstrating reception of additional RF signals encompassing standard cordless phone frequencies of other countries. This is accomplished with proper DIP switch settings and by modifying a capacitor value on the demo board.

### **LK45165EVB Features**

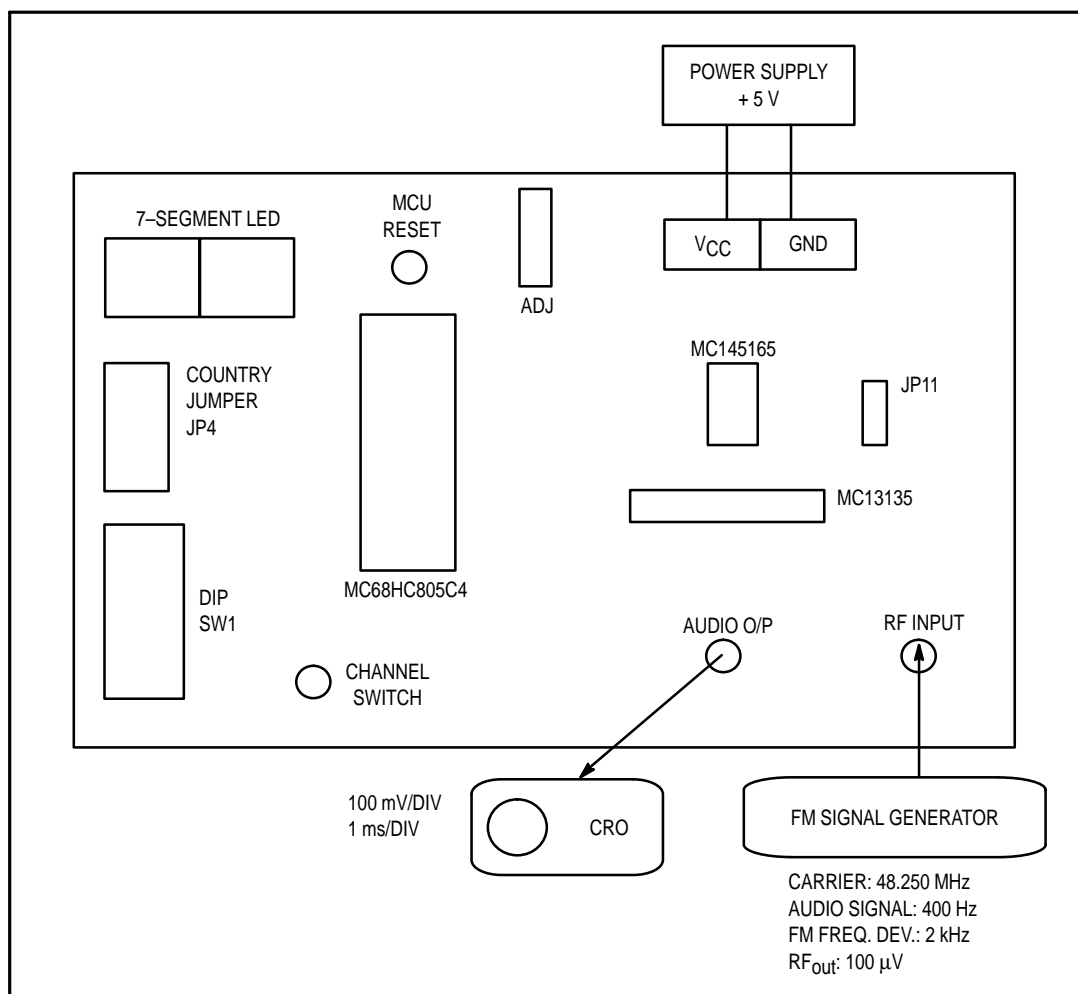
- Front-End Receiver for 45/48 MHz Base Set CT-0 per the Chinese Standard
- Controllable Voltage Regulator to Supply 1.8 to 3.6 V to On-Board Low-Voltage UDPLL MC145165 and FM-IF Receiver MC13135
- Configurable to One of Eight Different Countries' CT-0 Standard by Proper DIP Switch Setting. The Configurable Country Standards are France, Spain, New Zealand, Australia, United Kingdom, United States, Korea, and China.
- Eight-Position DIP Switch to Program the On-Board MC145165 for Different Programming Schemes and Different MC145165 Configurations
- Provides MC145165 TEST and NORMAL Mode of Operation
- Two 7-Segment LED Displays Included for Channel Number Indication
- Single 5.0 V Power Supply

### **MC145165 Features**


- Dual Phase Detectors with Programmable Receive, Transmit, Reference, and Auxiliary Reference Dividers
- 1.8 to 3.6 V Operating Voltage Range
- 200 mV p-p Input Sensitivity
- 1.5 mA @ 1.8 V Operating Current
- Maximum Operation Frequency Up to 60 MHz
- 3- or 4-Pin Serial Interface to External MCU
- Standby Mode

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**Figure 1. Configuration of LK45165EVB Demo Board**

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