#### 查询ITD3020供应商

### 捷多邦,专业PCB打样工厂,24小时加急出货

## ANALOG DEVICES

# Low-IF tuner IC for dual-band DAB & FM

### ITD3020

#### **FEATURES**

- Single chip synthesized tuner for dual-band DAB and FM receiver
- Low-IF single-conversion architecture which eliminates all SAW filters
- Covers whole band-III (174 ~ 245 MHz), L-band (1450 ~ 1592 MHz) and FM (88 ~ 108 MHz)
- Operating dynamic range : -102 ~ -10 dBm

Ultra low power consumption: Band-III 100 mW

L-band 160 mW

- On-chip regulators for 2.85V single supply
- On-chip fast switching fractional-N PLL

On-chip low phase noise and wide frequency range VCO

- On-chip bandwidth-adjustable low pass filter
- Integrated IF variable gain amplifier for direct connection to digital demodulators
- Noise/Linearity optimization through internal RF RSSI and AGC loop
- Adjustable take-over point

Ideal for mobile DAB receiver, FM application

I<sup>2</sup>C serial bus interface

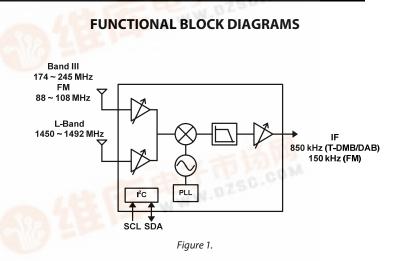
Small 40-QFN package ( $6 \times 6 \text{ mm}^2$ )

**Minimal external components** 

Fully compatible with dual-band DAB and FM

### **GENERAL DESCRIPTION**

The ITD3020 is a highly integrated CMOS single chip low-IF single-conversion tuner IC for dual-band DAB (Digital audio broadcasting) and FM. It supports Eureka-147 DAB standard along with analog FM. It includes 2 LNAs, 2 RF PGAs, 2 image-rejection down-conversion mixers, a bandwidth adjustable low pass filter, an IF variable gain amplifier, a VCO and a fractional-N PLL, etc. On-chip low phase noise VCO along with high resolution fractional-N frequency synthesizer make in-band phase noise lower than that of any other conventional tuners. The ITD3020 also includes several regulators, which make it possible to use single 2.85 V power supply.



### **APPLICATIONS**

Dual-band DAB Mobile Phone FM radio application Low Power PDA, Mobile Phone

The ITD3020 exhibits ultra low power consumption such as 100 mW. Using small leadless 6 mm  $\times$  6 mm 40-LD QFN package, the ITD3020 is the best solution for highly integrated multituner system and portable application where low power consumption is critical. It has an industry standard I<sup>2</sup>C serial bus interface. Primary application of the ITD3020 is dual-band DAB/FM mobile phones and the portable DAB/FM receiver.

### **PRODUCT HIGHLIGHTS**

- 1. Single chip synthesized tuner for dual-band DAB and FM receiver
- 2. Low-IF single-conversion architecture which eliminates all SAW filters
- 3. Ultra low power consumption: 100mW

Rev.2.5PDF Information furnished by Analog Devices is believed to be accurate and reliable. However, no responsibility is assumed by Analog Devices for its use, nor for any infringements of patents or other rights of third parties that may result from its use. Specifications subject to change without notice. No license is granted by implication or otherwise under any patent or patent rights of Analog Devices. Trademarks and

One Technology Way, P.O. Box 9106, Norwood, MA 02062-9106, U.S.A. Tel: 781.329.4700 www.analog.com