NMI625

Product Highlight

- Built –in CMOS RF Tuner
- Worldwide PAL, NTSC and SECAM support
  - Supports all NTSC standard : NTSC-M, NTSC-J, NTSC-4.43
  - Supports all PAL standards : B, B1, D, D1, G, H, I, K, K1, M, N, Nc
  - Supports SECAM B, D, G, K, K1
- Worldwide FM support
  - I2C audio interface for FM
  - Analog audio interface for FM
- Fully integrated VCOs, PLL loop filter, and crystal oscillator
- Fully compliant 1-segment ISDB-T reception according to ARIB Standard STD-B31 and
- Brazil's ABNT NBR 15601

Main Features

Integrated Paripherals	/ LNA matching networks / PLL loop filter / Crystal Oscillator	/ VCOs / Baseband filters and amplifiers / Analog-digital converters
Band	/ VHF-1 / FM / VHF-III / UHF	
External Interfaces	/ SPI,TSIF,I2C for ISDB-T mode	/ I2C, I2S,BT.601,656 for Analog TV mode
Size	/ 6x6 BGA	

Performance

External Linearity	/ Up to +16dBm maximum input signal
Minimal Power consumption	/ 214.2mW in Analog TV mode / 46.8mW in Digital TV mode
Ultra-low Sensitivity	/ -105dBm(ATV NTSC) and -98dBm(ISDBT)

"The Final Choice for Mobile TV Front End"

The NMI625 is capable of demodulating ISDB-T, analog TV, and FM radio.

The NMI625 is an ISDB-T/PAL/NTSC/SECAM/FM receiver that implements the RF tuner and demodulator in the same device. NMI625 receives an input single-ended RF signal from the antenna through the VHF- I /FM, VHF- III , or UHF-band RF input.

The tuner integrates the LNAs. Mixers, VCO, PLL/loop filter, LO generation, crystal oscillator, baseband filters and amplifiers, and analog-digital converters. The tuner also includes an innovative closed loop RF gain control.

The demodulator receives a baseband input from the tuner and provides an automatic Gain control (AGC) signal to control the tuner gain. The demodulator implements the full acquisition, synchronization, and demodulation for ISDB-T, PAL, NTSC, SECAM, and FM transmission and the channel decoding as required by the ISDB specification STD-B31 and Brazil's ABNT NBR 15601.

The NMI625 communicates with the host via SPI, I2C, BT.601/656 video interface, I2S interface for audio, and the transport stream serial interface for the decoded ISDB-T signal. An analog audio put is also provided as an alternative to the I2S audio interface.

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