NMI325/326

Product Highlight

- 65nm One-Seg Tuner & Demodulator integrated SoC
- Class leading RF & Doppler performance (250Hz for QPSK R1/2)
- Small size of 6x6 BGA & 4x4 BGA
- Low power consumption less than 50mW
- Compliant to both of Japan and Latin America ISDB-T specifications.
- Includes device drivers & market-proven ISDB-T middleware support
- Peripheral components including LNA/matching networks, VCO, PLL/loop filter, Crystal oscillator baseband filters and VGA
- MRC diversity supports
- Pin-for-Pin compatible with NMI receivers for other Mobile TV standards
- Bundled market-proven ISDB-T middleware

Main Features

Integrated Peripherals	/ Wideband LNA and matching networks / VCO / Crystal Oscillator / PLL Loop Filter / General purpose DAC & ADC
Band	/ UHF support
External Interfaces	/ SPI, I2C,TSIF
Others	/ Emergency Alarm Broadcasting Flag available through dedicated pin / ACI & CCI (Adjacent & co-channel interference) digital filtering / Dual automatic and programmable AGC for RF and IF gain / TMCC (Transmission and Multiplexing Configuration Control) decoding and error checking
Implementation	/ SOC, 65nm technology, Vcc I/O plus1.2 V core

Performance

Fully compliant One-segment ISDB-T reception according to ARIB standard STD-B29	
Superior Noise figure	/ 3.0dB typical
Minimal Power consumption	/ Less than 50mW
Extremely Low Noise	/ Up to +13dBm maximum input signal
Ultra-low Sensitivity	/ -100dBm for QPSK mode rate ½ (13-segment power)
High Doppler performance	/ 250Hz for QPSK R1/2 / 210Hz for QPSK R2/3

"The Final Choice for Mobile TV Front End"

ISDB-T Single IC RF Tuner/Demodulator with Class-leading Performance

The NMI325 is a System-on-Chip (SoC) Integrated Circuit (IC) that implements the Integrated Services Digital Broadcasting for Terrestrial Television Broadcasting (ISDB-T) specifications of the Association of Radio Industries and Businesses (ARIB) Standard STD-B29 and Brazil Standard NBR 15604.
The NMI325 is a SoC that implements the RF tuner, demodulator, decoder/de-interleaver, and peripherals on a single die which achieves small package size and ultra low power consumption along with class-leading performance.
It features-sensitivity of -99.5dBm, and excellent linearity of over +10dBm maximum input signal. As a fully integrated receiver solution which supports 1-segment ISDB-T reception, NMI325 provides easy system integration and rapid time to market by combining near total integration of all needed hardware elements with commercially proven ISDB-T middleware software.

Powered by Pre-Integrated Mobile TV Middleware

NMI325 provides the ISDB-T middleware which is compliant to Japan and Latin America ISDB-T systems specifications. This middleware is commercially proven and integrates program recording. Demux, EPG, and EWS to a sample GUI application.
By selecting NMI325, handset developers do not need to consume precious engineering resources investigating, selecting and integrating third party middleware and application software.

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