SMS2270

**Advanced MDTV Multi-Standard Receiver
with ISDB-T Full-Seg and n-way Full MRC Diversity**

Mobile, Portable PC, Set-Top Box, HDTV & Automotive Applications

The SMS2270 is a new member of Siano's single-die, multi-standard MDTV receiver chips and the first one to support ISDB-T Full-Seg (13-Seg) on top of 1-Seg and 3-Seg, providing a complete solution together with DVB-T, T-DMB, DAB and DAB+.

The SMS2270 provides a single-package, cost-optimized solution for ISDB-T Full-Seg by integrating Siano's cutting-edge third generation multi-standard technology together with an SRAM die. Siano's SMS2270 provides single-die implementation of Siano's RF and demodulator while achieving new outstanding deep in-door and mobility performances.

The SMS2270 achieves new mobility records due to enhanced, dedicated mobility engine. It provides best–in-class sensitivity, flat across the entire spectrum of the various supported bands, as well as best-in-class immunity to tough multi-path field conditions. The SMS2270 provides optional support for FM radio, mass storage and multiple (n-way) MRC diversity for varied standards.

Siano's SMS2270 enables TV reception in a variety of devices for both in-door and out-door soutions, such as set-top boxes or HDTV, mobile phones, cellular data-cards, notebooks, navigation devices, UMPCs, MIDs, PDAs, portable video and media players as well as optimal TV reception in automotive entertainment devices. The SMS2270's integrative and system oriented design approach enables integrating several MDTV standards' functionality to portable and handheld devices at a reduced system cost and fast time to market.

The SMS2270 is complimented by Siano's Host-API software package that includes drivers and libraries for popular host processors and operating systems.

The input to the SMS2270 is the broadcasted RF signal received by the antenna. The output is a demodulated, selected channel stream. This data is fed into an application processor that is capable of video and audio decompression and rendering.

Highlights

- Single-die, multi-standard MDTV receiver chip with ISDB-T Full-Seg
- No need for additional memory
- Multiple (n-way) MRC diversity, up to 4 separate antennas supported on system level
- Mass storage support
- FM stereo support
- Superior mobility and extremely high sensitivity
- Superior immunity to tough multi-path field conditions
- Popular interfaces

Typical Applications

- Set-top boxes & HDTV
- Mobile phones
- Cellular data cards
- PMPs, PNDs & portable computers
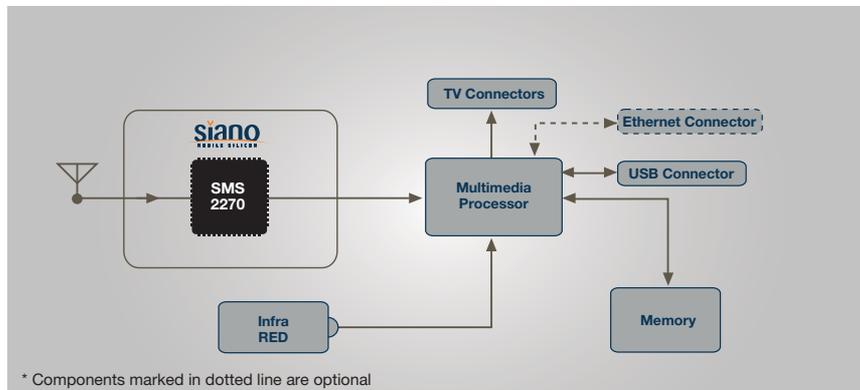- Automotive

Target Markets

- Global

siano
MOBILE SILICON

enabling **TV EVERYWHERE**

+ = **TV EVERYWHERE**

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Key Features

- No external active components
- Superior mobility algorithms
- Recording (PVR) – including dual frequency (in MRC system)
- USB compliant
- RoHS compliant

- Complete MDTV receiver solution:
  - Device drivers
  - Middleware for popular host processors

- Certified USB device drivers:
  - Microsoft Windows XP (WHQL)
  - Microsoft Windows Vista (WHQL)
  - Microsoft Windows 7 (WHQL)
  - Linux
- 9mm x 9mm x 0.9mm
  116 pin BGA, 0.8mm pitch

* Components marked in dotted line are optional

Integration of SMS2270 into a Set Top Box

Supported Standards

- DVB-T
- T-DMB, DAB/DAB+
- ISDB-T
  - Full-Seg
  - 1-Seg & 3-Seg
  - sb & mm
- FM Radio

Supported Bands

- Low VHF/VHF (64 -240 MHz)
  UHF (470-862 MHz)

Supported Interfaces

- USB 2.0 High Speed (HS)
- 2xSPI (Master/Slave)
- SDIO (Slave)
- Parallel Bus (Slave)
- Serial/parallel Transport Stream (TS)
- General Serial (I^2C-like) Control

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