



SPV7100

INTEGRATED LCD TV PROCESSOR

PRODUCT OVERVIEW

The SPV7100 enables mainstream full HD LCD TV affordable for its high integration to save BOM cost with the best performance. It is embedded a 32-bit RISC CPU, high-speed video ADCs with PLL, a HDMI 1.2Rx, a 3D video decoder, an audio decoder & post-processor, and LVDS transmitter. Besides, SPV7100 performs good video quality with its built-in 3D comb filter and 3D MADI.

Meanwhile, the video and audio decoder inside SPV7100 conform to worldwide analog TV broadcasting standards. Combined with Sunplus' other powerful companion chips, the SPV7100 can apply to different kinds of TV applications such as pure ATV, DVB-T DTV with recording function, DTMB DTV with recording function, ISDB DTV, multimedia TV and DVD combo TV.

FEATURES

- Complete hardware and software production reference designs for worldwide TV systems
- Integrated HDMI 1.2 compliant receiver with HDCP
- Integrated field-proven 3D video decoder to provide clean & crisp image
- Field-proven multi-standard TV sound decoder with audio post processing
- High-quality 3D motion-adaptive de-interlacing for clear reproduction of 480i, 576i, and 1080i video
- Advanced scaling with moiré cancellation
- 3D motion-adaptive noise reduction
- Well-performance dynamic contrast algorithm
- Optimized picture setting for mainstream full HD and WXGA LCD TVs
- Embedded 32-bit RISC CPU & bitmap OSD engine for smooth operation and OSD display
- Embedded VBI data decoder which can support Teletext 1.5, WSS, VPS, closed-caption and V-chip
- LQFP 256 package for easy implementation on 2 Layers PCB

BENEFITS

- One scalable and compatible platform (software and pin-out) for full HD and WXGA LCD TVs
- Ready for mass production total system solutions for LCD TV, DVB-T DTV with recording function, DTMB DTV with recording function, ISDB DTV, multimedia TV and DVD combo TV

SUNPLUS INTEGRATED LCD TV PROCESSOR: SPV7100

APPLICATIONS

- Integrated DVB-T digital TV with optional multimedia support and recording function **(with SPHE1003)**
- Integrated DTMB digital TV with optional multimedia support and recording function **(with SPHE1002+SPHE6630)**
- Integrated multimedia HD-ready LCD TV for Latin American, Pan-Pacific, Middle Eastern, and Indian Market **(with SPHE8104D)**

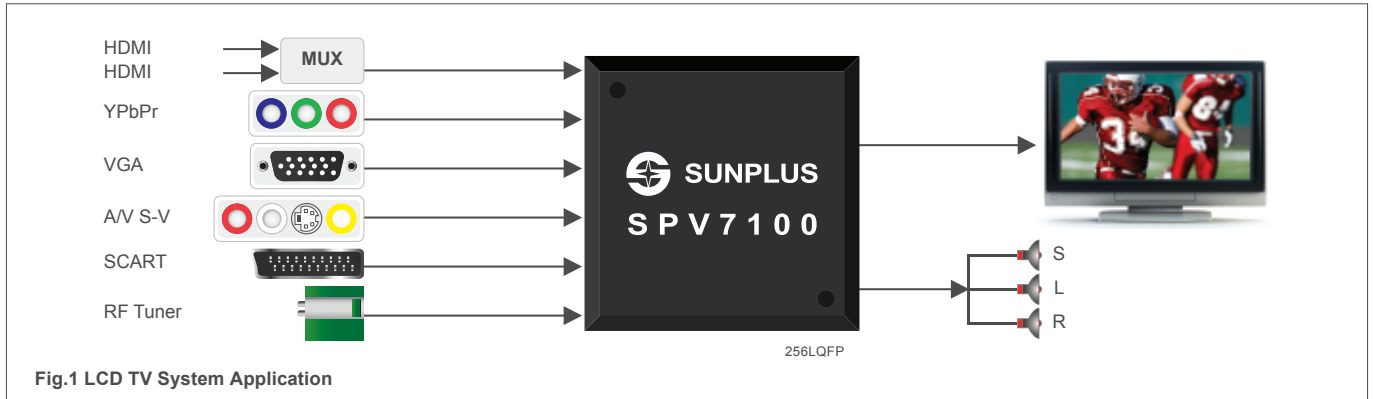


Fig.1 LCD TV System Application

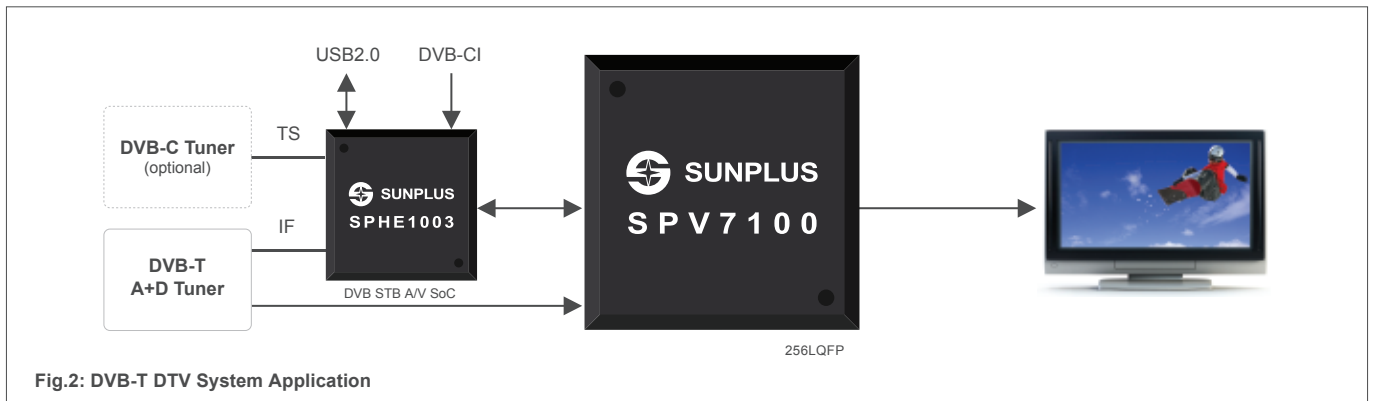
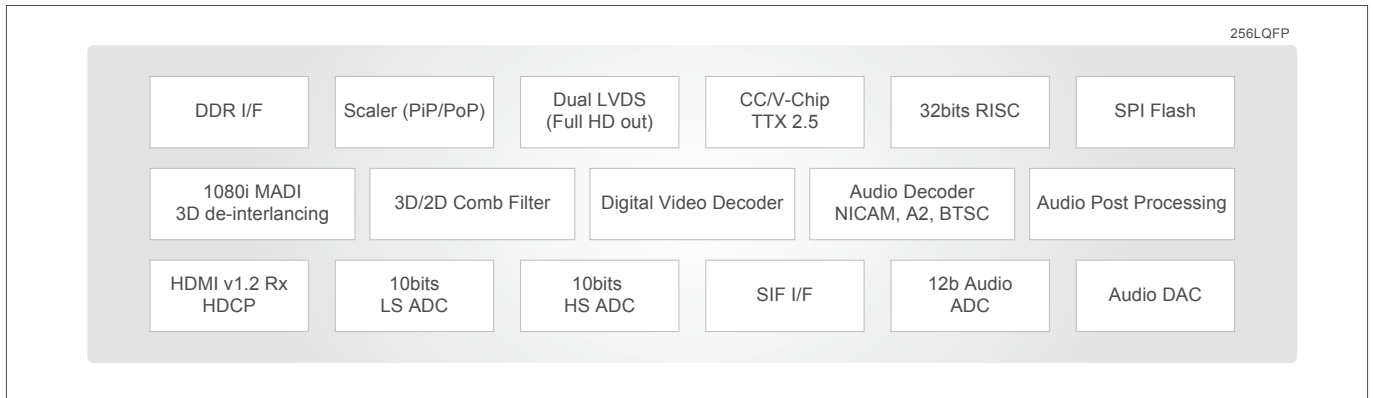


Fig.2: DVB-T DTV System Application

BLOCK DIAGRAM



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