

## ST FLI7510 iDTV 片上系统(SoC)方案

ST 公司的 FLI7510 是世界范围 H.264/MPEG 译码器+ Faroudja 视频处理 iDTV 片上系统 (SoC),包括有用于 STB 市场的 STi710x 数字/前端处理和多格式音/视频译码以及用于 TV 市场的 Faroudja 视频/后端处理器,主要用于高性能和主流 iDTV,以及多区域性 DVB/ATSC/DTMB/ISDB.本文介绍 FLI7510 主要特性,方框图以及 EU/US DTT + 有线 iDTV 应用框图.

FLI7510: Worldwide H.264/MPEG decoder + Faroudja video processing iDTV SoC The FLI7510 is a revolutionary new iDTV SoC that integrates two highly successful, marketproven subsystems: STi710x digital/front-end processing and multi-format audio/video decoding from the STB market, and Faroudja video/back-end processing from the TV market. The FLI7510 is a high-performance, state-of-the-art SoC that can power DTT/cable/satellite/IPTV iDTV designs for worldwide deployment. From the software compatibility extending from the mature STi710x STAPI layer to the extensive video processing, tuning, and tools from Faroudja Labs, the FLI7510 is the ideal solution for addressing the next generation of iDTV design requirements.

The FLI7510 is the first in a family of scalable in performance and software compatible SoCs that address mainstream and performance segments of the iDTV market.The FLI7510 implements the latest generation of Faroudja Video Optimized technologies,which allow a high degree of customization for TV OEMs. Key technology improvements in this area include 14-bit color and contrast processing, upgraded sharpness, upgraded temporal noise reduction, and new MPEG noise reduction.

The FLI7510, with high performance CPU, A/V decode, graphics engine, and extensive network interface capability, enables TVs to deliver rich applications for convenient access to multimedia content, both from within the home, as well as from the web.

FLI7510 主要特性:

- ST231 @ 450 MHz for advanced high definition video decoding (H.264/VC-1/MPEG2/...) =>Worldwide Digital Terrestrial Television (DTT) broadcast video standards compatibility
- Dual ST231 @ 450 MHz for advanced multichannel audio decoding (MPEG-1/2, MP3,WMA, Dolby® Digital/Dolby Digital+, AAC/AAC+/....) => Worldwide DTT broadcast audio standards compatibility
- Dual ST40 CPU @ 450 MHz (delivers 1700+ DMIPS) runs Linux and OS21 => One CPU fully dedicated to application and user interface
- Faroudja® video processing for Main Video => Vivid picture quality for the consumer



图 1.FLI7510 方框图

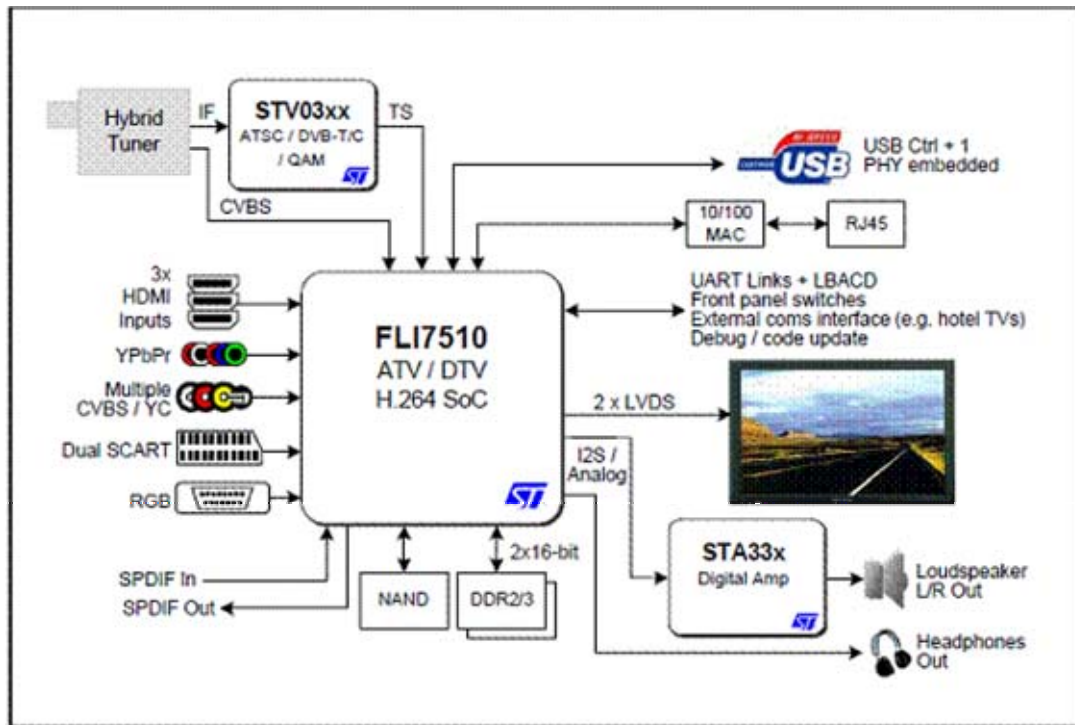


图 2.EU/US DTT + 有线 iDTV 应用框图