

Advanced STB decoder with integrated DVB-T/DVB-C demodulator

Data brief

Features

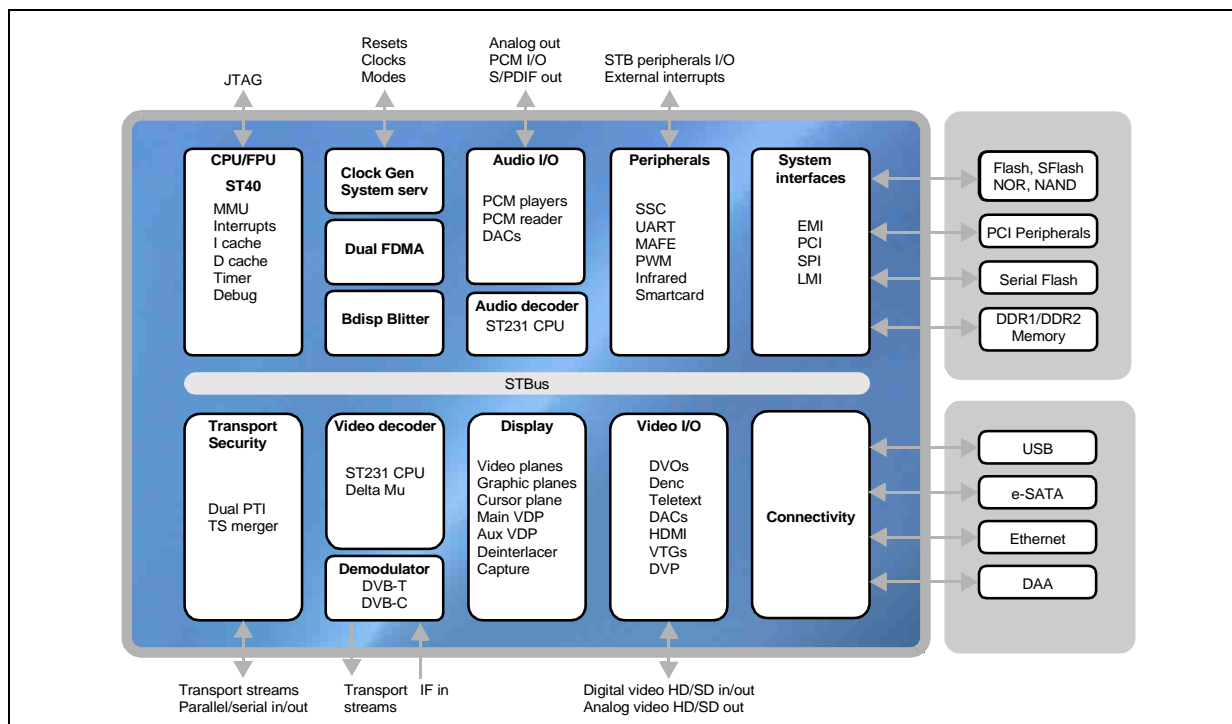
- Integrated DVB-C or DVB-T demodulator
 - User-selectable mode
 - Compatible with low to high IF tuners
 - Flexible clock management
 - ADC for RF signal strength indicator
- Advanced high-definition video decoding (H264/VC-1/MPEG2)
- Advanced standard-definition video decoding (H264/VC-1/MPEG2/AVS)
- Advanced multichannel audio decoding (MPEG 1, 2, MP3, DD/DD+, AAC/AAC+, WMA9/WMA9Pro)
- Linux, Windows CE and OS21 compatible ST40 applications CPU

- 32-bit DDR1/DDR2 compatible local memory interface
- Multi-stream, DVR capable transport stream processing
- Extensive connectivity (dual USB hosts, e-SATA, Ethernet MAC/MII/RMII and PCI)
- Advanced security and DRM support including SVP, MS-DRM and DTCP-IP

Description

The STi7167 uses state-of-the-art process technology to provide a fully-featured HD AVC, DVB-C, and DVB-T demodulator/decoder IC.

It is a highly integrated system-on-chip, suitable for STB markets across cable, terrestrial, and terrestrial/IP hybrid networks worldwide.



1 Introduction

The STi7167 is targeted at the latest Operator and CE manufacturer requirements for STBs that use advanced HD decoding (H264/VC-1/MPEG2), and which conform to DVB, ISMA, ATIS-IIF, SCTE, ATSC, ARIB, CEA, ITU, OpenCable and MSTV specifications.

The STi7167 provides a solution for operators to specify a range of low-cost, high performance HD STBs including low-cost zappers, IP clients, interactive STBs, DVR standalone and DVR server/home network-capable STBs, and with content delivery possible using broadcast or broadband networks, or both (hybrid STBs). The STi7167 keeps pace with the latest conditional access, DRM and trusted platform requirements of major operators worldwide by incorporating the latest generation of advanced security features.

The STi7167 offers current users of ST's growing family of advanced decoding ICs enhancements in performance and features, while reducing cost and time-to-market for the next generation deployments.

Features	Benefits
Combines a configurable DVB-C/DVB-T demodulator with STB decoding and display functions	This highly integrated SoC helps to reduce board area and manufacturing cost, allowing low cost and small size STBs to be designed for either DVB-C or DVB-T networks
ST40-300 applications CPU, 32K I cache, 32K D cache	Superscalar performance from a single CPU core, using standard tools and operating systems (Linux, OS21)
STMicroelectronics' DELTA video decoding system with ST231 processor	Decoding of advanced high definition standards for MPEG2, H264, VC-1 broadcast, with the performance and flexibility for web-based content decoding such as Flash, DivX, MJPEG and Real
Dual USB 2.0 hosts, e-SATA, Ethernet MAC with MII/RMII and TMII, PCI	Extensive high speed connectivity for the widest range of STB peripherals, such as Flash drives, external HDDs, home network controllers (for example MoCA, Wi-Fi), DOCSIS modem and so on
Low power process, design and architecture	Best in class, low power standby mode, to meet emerging energy standards for STBs. Dynamic configuration of power to individual sub-systems enables power-efficient active standby modes
Advanced 2D graphics and display subsystem which also supports 3D user interface effects and 1080p60 display output	Allows visually appealing user interfaces and video rich navigation to be offered to consumers, while high quality progressive output can be watched on the latest high definition displays

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
16-Jun-2009	1	Initial release.
25-Aug-2009	2	Features/benefits table added.
07-Feb-2013	3	Updated presentation.

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