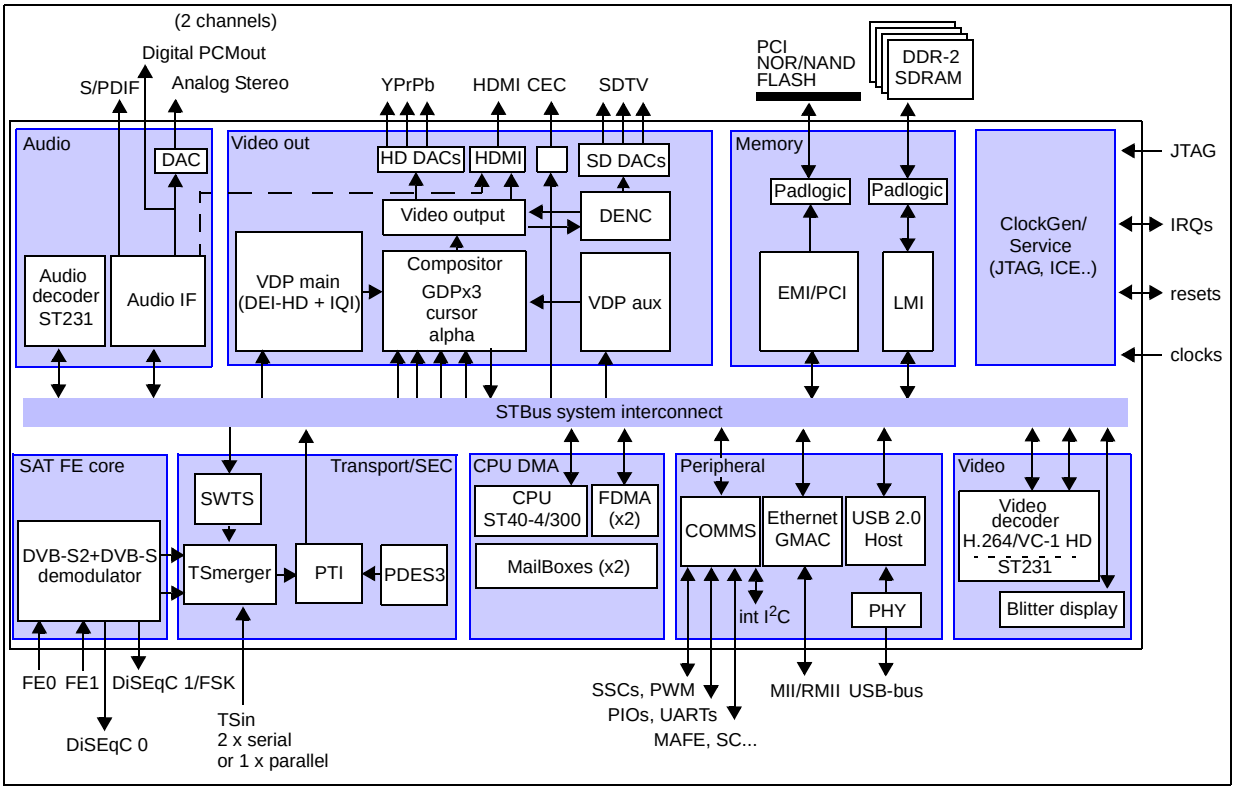
STi7111

Low-cost HDTV satellite set-top box decoder for Microsoft VC-1, H.264 and MPEG-2

Data Brief

Features

- Microsoft VC-1, MPEG-2 and H.264 support
- ST40-300 CPU running at 450 MHz, high performance for Linux, Windows CE and OS21 based systems
- DVB-S2 and DVB-S front-end integrated demodulators with a fully featured HD advanced decoder system-on-chip (SoC)
- Flexible ST231 based advanced video decoder
- ST231 audio decoder at 450 MHz supporting WMA9, AC3, DD+, AAC, AAC+ with SPDIF output
- HD and SD simultaneous display, 2 video, 3 graphics planes and background color with high quality filtering
- HDMI/HCDP output plus HD or standard definition (SD) component and composite output
- Unified DDR2 32-bit interface operating at up to 400MHz
- Programmable transport interface (PTI) and transport stream (TS) merger with up to 2 digital external TS inputs, 2 internal inputs from internal demodulators and one TS from memory for network client
- USB 2.0 to support network interface and feature enhancement
- External memory interface (EMI) with Nand-Flash, Nor-Flash, PCI, peripherals support
- 10/100 Mbit/s Ethernet MAC with media independent interface (MII) and reduced MII (RMII)
- Advanced security, SVP compliant, WM DRM compliant
- Dual smartcard, 4 x UART, 3 x synchronous serial controllers (SSC), soft modem and DAA interface, IR blaster and receiver, UHF Rx digital input
- DiSEqC 2.0 and FSK modem supported
- 4 x 4 matrix key front panel switch scanner FSM with key de-bounce
- 27 x 27mm package, 65nm technology



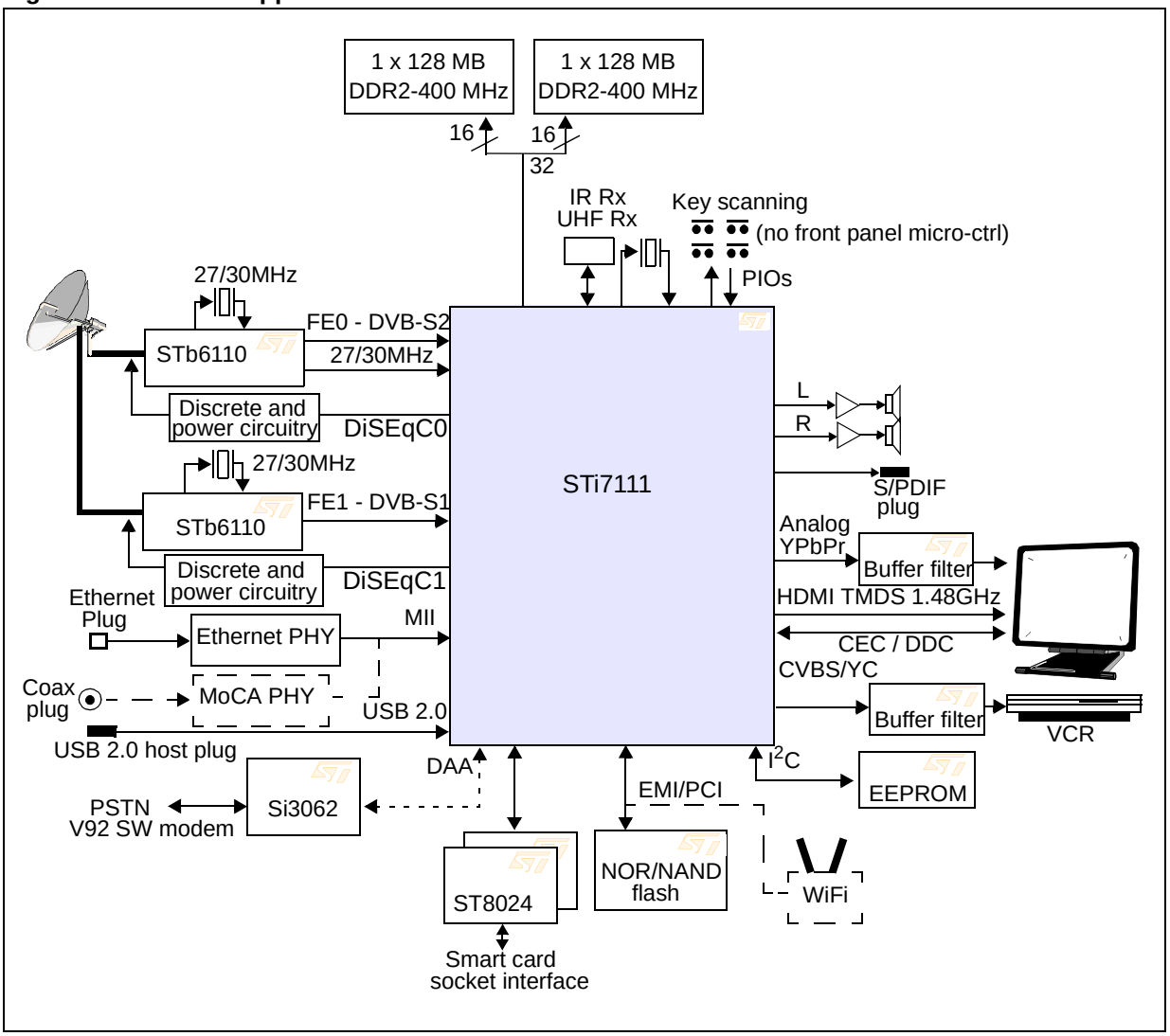
For further information contact your local STMicroelectronics sales office. www.st.com

1 Description

The STi7111 is an HD set-top box / full back-end processor for satellite set-top boxes, compliant with ATSC, SMPTE VC-1, DVB-S2, DIRECTV, DCII and ARIB BS4 specifications. It provides very high performance for low-cost HD systems. With enhanced performance compared to the STi7109, it includes both VC-1 and H.264 video decoders for new, low bitrate applications.

The main platform target for the STi7111 is the DVB-S2 zapper. Optionally the device can be used in a client box through IP over Ethernet, Multimedia over Coax Alliance (MoCA) or WiFi.

Figure 1. STi7111 applications



2 Revision history

Table 1. Document revision history

Date	Revision	Changes
19-Dec-2007	1	Initial release.

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