



NXP global DTV platform TV550

More content, superb pictures and TV anytime/anywhere on a 1-chip solution

TV550 is a global DTV platform that makes high features such as H.264, HD ME/MC, CI+ and IPTV available for mainstream TVs. To enable this NXP integrated an unparalleled number of complex IP blocks in an extremely efficient 45nm SoC.

Key features

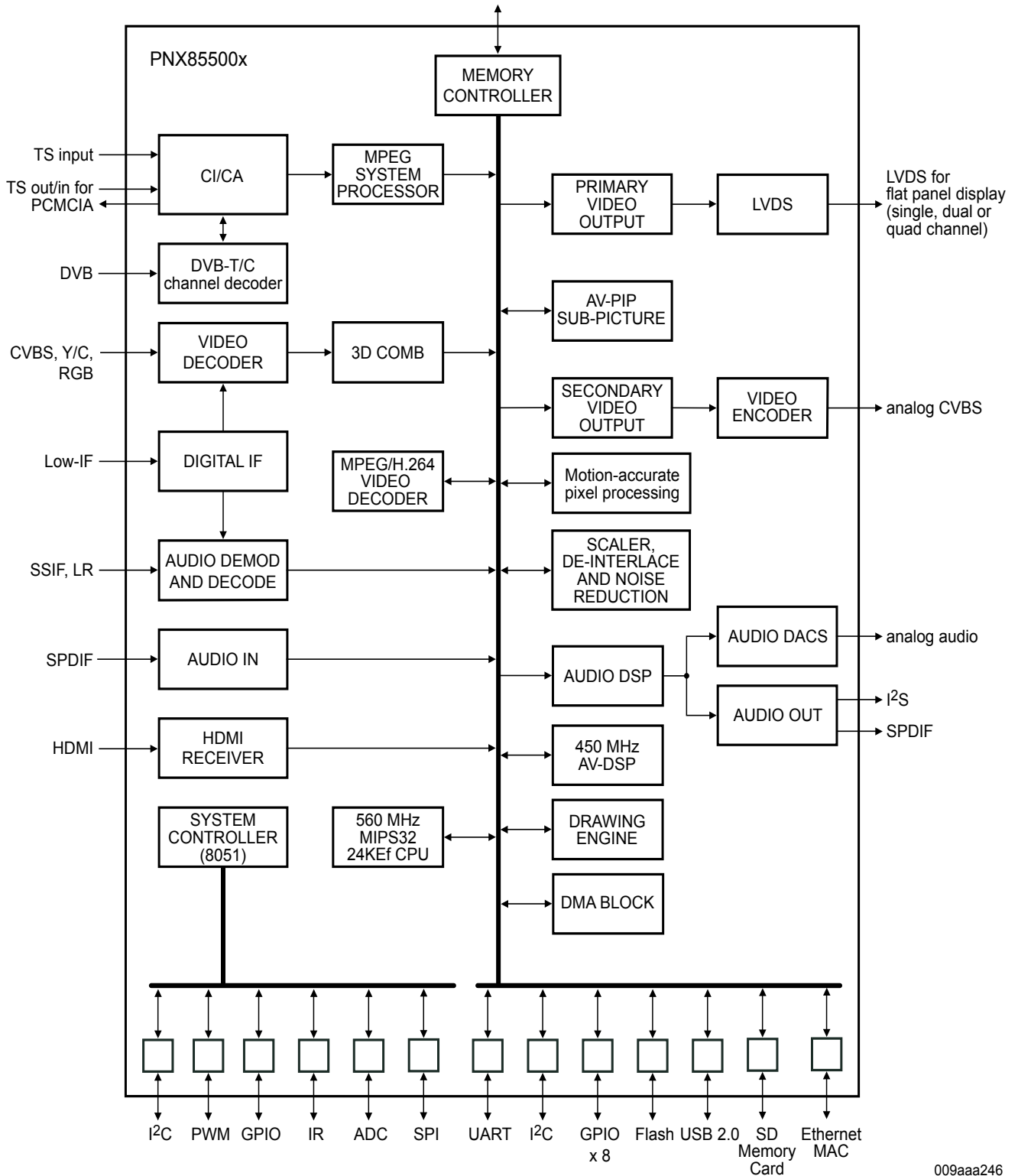
- ▶ Multi-standard digital video decoder (MPEG-2, H.264, MPEG-4)
- ▶ Integrated DVB-T/DVB-C channel decoder
- ▶ Integrated CI+
- ▶ Integrated motion accurate picture processing (MAPP2)
- ▶ High definition ME/MC
- ▶ 2D LED backlight dimming option
- ▶ Embedded HDMI HDCP keys
- ▶ Extended color gamut and color booster
- ▶ Integrated USB2.0 host controller
- ▶ Improved MPEG artefact reduction
- ▶ Security for customers own code/settings (secure flash)

Key benefits

- ▶ High-end TV features now available for mainstream TV
- ▶ Global solution allowing for one platform approach
- ▶ Superior motion sharpness technology and full motion compensated up-conversion to 1920 x 1080p @ 120Hz
- ▶ HD halo reduced movie judder compensation
- ▶ Superior picture quality
- ▶ Allows for highly cost effective TV set design

The TV550 combines front-end video processing functions, such as DVB-T channel decoding, MPEG-2/H.264 decode, analog video decode and HDMI reception, with advanced back-end video picture improvements. It also includes next generation Motion Accurate Picture Processing (MAPP2). The MAPP2 technology provides state-of-the-art motion artifact reduction with movie judder cancellation, motion sharpness and vivid color management. High flat panel screen resolutions and refresh rates are supported with formats including 1366 × 768 @ 100Hz/120Hz and 1920 × 1080 @ 100Hz/120Hz. The combination of Ethernet, CI+ and H.264 opens many possibilities for new TV experiences with IPTV or VOD. On top of that, optional support is available for 2D dimming in combination with LED backlights for optimum contrast and power savings up to 50%.

The TV550 addresses a wide range of digital television requirements for the European, North American and Asian markets. The TV550 system is available in two different versions: with the MAPP2 technology (PNX85507) for mainstream TV sets and without the MAPP2 technology (PNX85502) to provide an effective BOM for lower-end systems.



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