

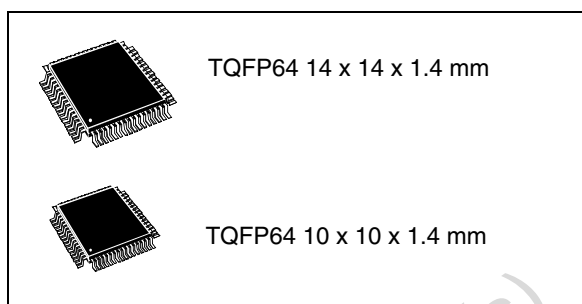


## STV2310

### Multistandard TV digital video decoder with adaptive comb filter and RGB/YCrCb input

#### Features

- Worldwide TV standards compatible
- Automatic NTSC/PAL/SECAM digital chroma decoder
- NTSC/PAL adaptive 4H/2D comb filter
- VBI data slicer for Teletext, closed caption, WSS and other systems
- Analog RGB/Fast blanking capture and insertion in YCrCb output flow (SCART legacy)
- Analog YCrCb inputs with tint control
- 10-bit, 30-MSPS ADC for Y/CVBS input
- 8-bit, 30-MSPS ADC for C and RGB/CrCb inputs
- Hue control and automatic flesh control for NTSC CVBS/YC signals
- Programmable horizontal scaling (x0.25 to x4 scaling factor) and panorama vision
- Copy-protection system compatible
- H and V synchronisation processing that is robust to non-standard sources such as VCR, and to weak and noisy signals
- 8-bit pixel output interface line-locked ITU-R BT\_656/601 or square pixel YCrCb outputs
- Single system clock for all video input formats
- Two-wire I<sup>2</sup>C bus interface up to 400 kHz
- Typical power consumption: 550 mW
- Power supply: 1.8 V and 3.3 V



#### Description

The STV2310 is a high-quality front-end video circuit for processing all analog NTSC/PAL/SECAM standards into a 4:2:2 YCrCb digital video format, as well as conventional analog RGB or YCrCb signals. The STV2310 is programmable through an I<sup>2</sup>C interface.

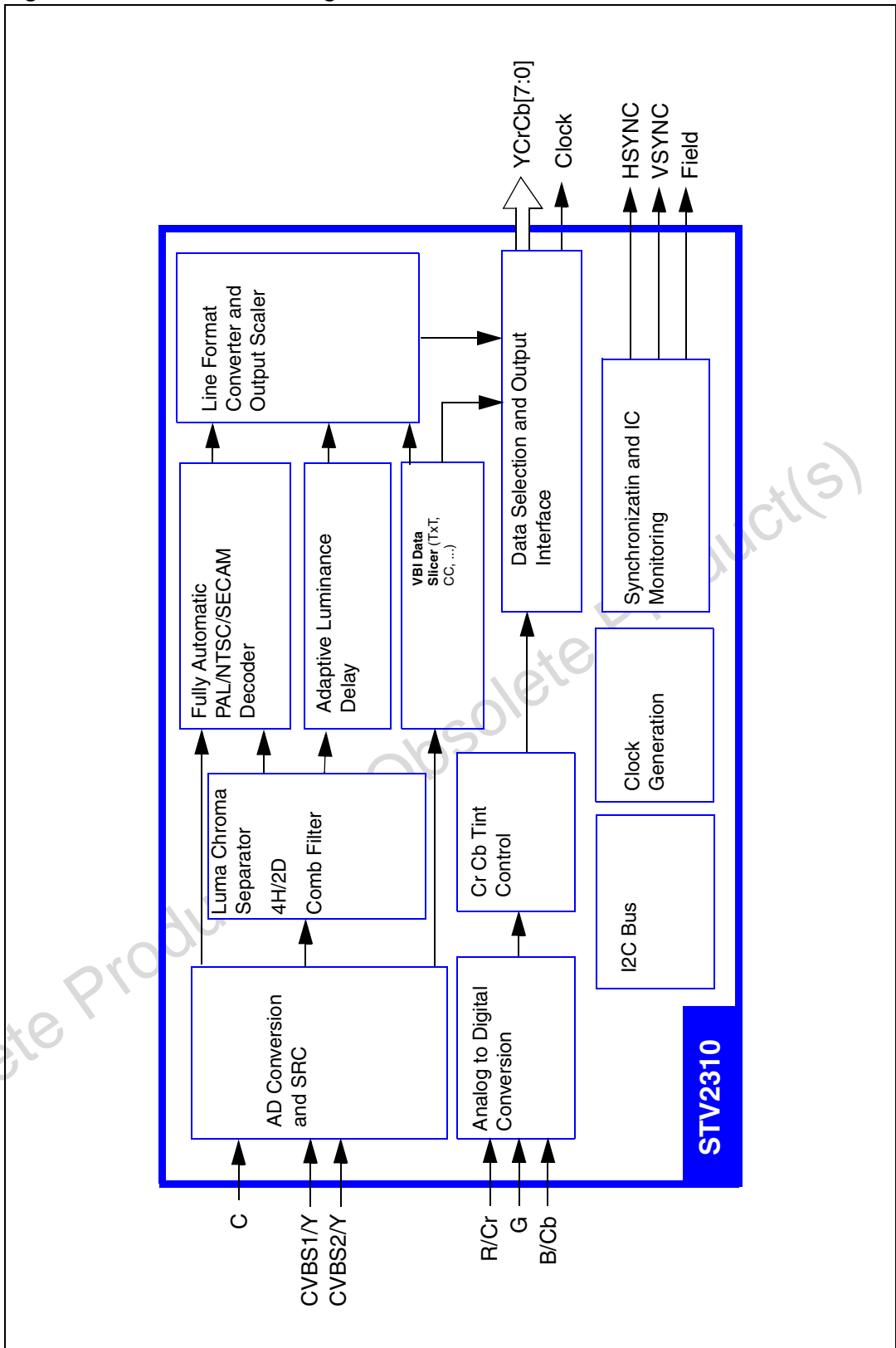
The STV2310 provides a cost-effective solution for digitized TV, LCD TV/monitors, digital TV, STB, video surveillance/security, video conferencing, video capturing devices and PC video card.

It can be used as a stand-alone chip working with third-party products, as a companion chip to the TV processor STV3500, STV3600 for digitized 100-Hz/ProScan CRT TVs, or as a companion chip to the TV processor STV3550 for LCD-TVs.

**Table 1. Device summary**

Order code	Packaging
STV2310D/DT	Tray
STV2310SD/SDT	Tray

Figure 1. STV2310 block diagram



# 1 Revision history

**Table 2. Document revision history**

Date	Revision	Changes
July 2003	1	Initial release
09-Mar-2009	2	Template updated

Obsolete Product(s) - Obsolete Product(s)

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