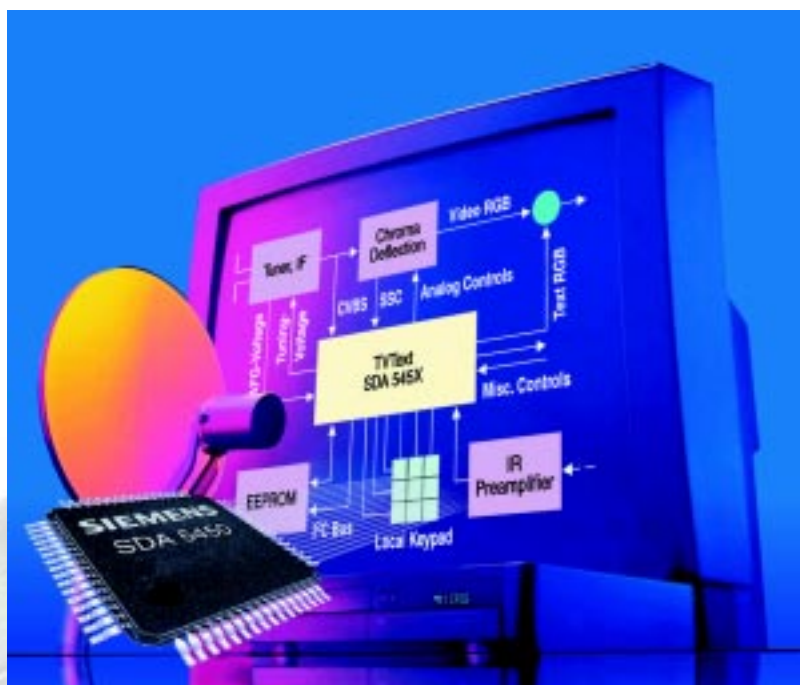


Product Brief

TVText Plus

SDA 545X

Video Text Controller



Potential Application

The TVText Plus Family offers a flexible and cost effective solution for low end up to mid range TV sets

Features

- 8-Bit-Microcontroller (8051-compatible) with up to 24 MHz (min. 250 ns)
- Videotext decoder and on-screen-display-generator in one chip.
- Display memory from 1 up to 10 pages
- Internal ROM from 16 Kbyte up to 64 Kbyte
- ROMless version with port to external EPROM/SRAM (max. 512 Kbyte)
- internal RAM 256 Byte + 1 Kbyte XRAM (10-page-versions only)
- 4-Channel-ADC (8-Bit resolution)
- 6-Channel-PWM (8-Bit resolution)
- 2-Channel-PWM (14-Bit resolution)
- 2 Timers, 1 Watchdog- Timer + 1 dedicated IR-Timer
- CLUT with 8 FG/8 BG out of 64 colors
- 56 Characters per Line for 16:9 CRTs

Software Support

- Worldwide tested Firmware-Modules for data acquisition and infrared detection
- Display editor for easy OSD programming and font definition
- Electronic Program Guide provided by Tara Systems (Now & Next, this channel)
- Various Character Sets available

Hardware Support

- Various Emulators (supported by Kleinhenz, Dr. Krohn & Stiller, Hitex)
- Demonstration board with remote control and Demo-Software
- OTP-version for development, ramp-up and peak-production

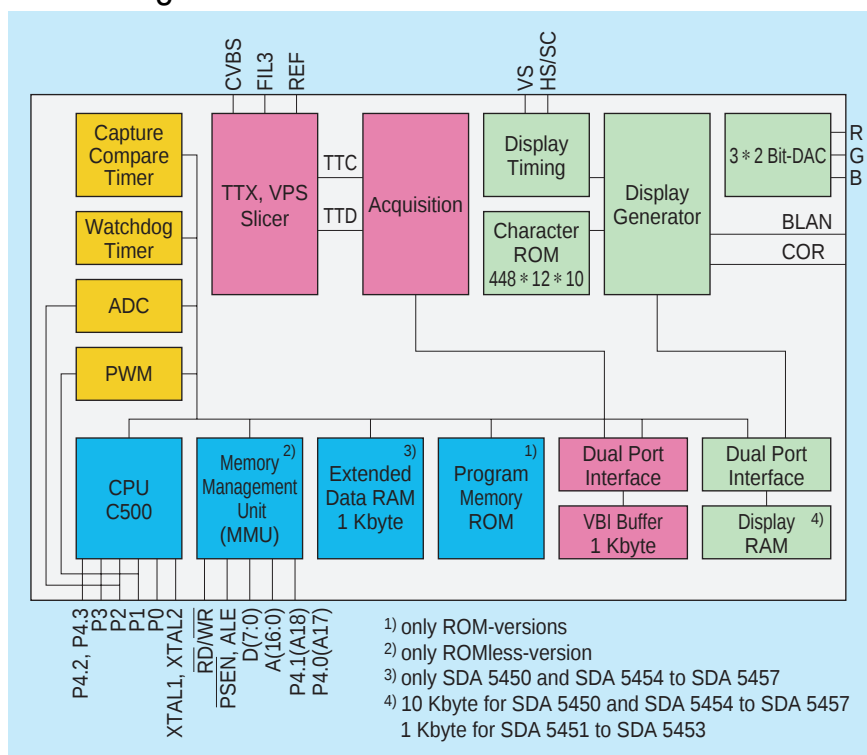
Sales Code	Internal ROM	External ROM	Number of Pages	XRAM
SDA 5450	—	512 Kb	10	1 Kb
SDA 5451	16 Kb	—	1	—
SDA 5452	24 Kb	—	1	—
SDA 5453	32 Kb	—	1	—
SDA 5454	40 Kb	—	10	1 Kb
SDA 5455	48 Kb	—	10	1 Kb
SDA 5456	56 Kb	—	10	1 Kb
SDA 5457	64 Kb	—	10	1 Kb
SDA 545X OTP	64 Kb OTP	—	10	1 Kb

Character Set - Language	Latin	Cyrillic ^{*)}	Greek	Arabic ^{*/**)}
German	X	X	X	X
English	X	X	X	X
Scandinavian	X	—	X	X
Italian	X	—	X	X
French	X	—	X	X
Spanish	X	—	X	X
Icelandic	X	—	X	X
Greek	—	—	X	—
Polish	X	X	—	—
Czechian	X	X	—	—
Romanian	X	X	—	—
Serbian	X	X	—	—
Hungarian	X	X	—	—
Russian / Byellorussian	—	X	—	—
Lettish / Lithuanian	—	X	—	—
Ukrainian	—	X	—	—
Estonian	—	X	—	—
Arabic	—	—	—	X
Farsi	—	—	—	X

Technical Highlights

- Fully 8051 compatible core
- I²C-Bus Control
- OTP with fully prog. pixel and code memory
- Packages
 - P-SDIP-52, P-MQFP-64 (ROM versions)
 - P-LCC-84, P-MQFP-80 (ROMless versions)

Block Diagram



Availability

The SDA 545X is available in mass production. Please contact your local Siemens Office for further details.

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B Brussel/Bruxelles ☎ (+32) 2-536 23 48	MAL Penang ☎ (+60) 4-644 99 75
BR São Paulo-SP ☎ (+55) 11-836 23 77/26 84	N Oslo 5 ☎ (+47) 22-63 30 00
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E Tres Cantos-Madrid ☎ (+34) 91-514 80 00	PL Warszawa ☎ (+48) 2-670 91 51
F Saint-Denis CEDEX 2 ☎ (+33) 1-4922 31 00	RC Taipei ☎ (+886) 2-2773 66 06
FIN Espoo (Helsinki) ☎ (+35) 9-5105 1	ROK Seoul 135-080 ☎ (+82) 2-527 77 00
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