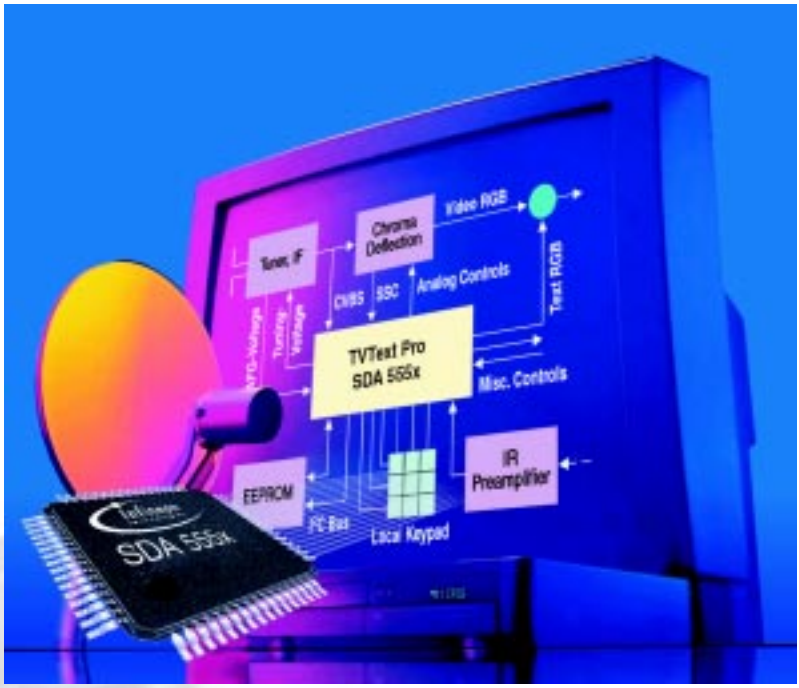
Product Brief
TVText Pro
SDA 555x



The latest innovation of Infineon Technologies TVText-family, the SDA 555x-series, offers a maximum feature set at a minimum price.

Potential Applications

With it´s integrated 8051-based µC incl. all necessary peripherals, Level 1.5 Teletext decoder and a powerful display generator on board, TVText Pro offers the perfect basis for a wide range of TV-sets:

- Lowend OSD-only or simple Teletext
- Midrange TOP/FLOF-Teletext
- Highend with up to 100 pages of Teletext and EPG

Hardware Features

- 8-Bit microcontroller core (8051 compatible) clocked at 33 MHz (min. 360 ns)
- Up to 128 KB internal ROM
- Up to 1 MB external ROM/RAM
- Up to 16 KB internal XRAM
- Single external 6 MHz crystal for all internal clock systems
- Simultaneous reception of TTX, VPS/PDC and WSS (16:9)
- New digital slicer with automatic distortion detection and compensation for high-quality VBI-line acquisition even under bad signal conditions
- 0.25 µm CMOS technology for high performance and low power dissipation (2.5/3.3 V)
- various power save modi (down to < 5 mA possible)
- Two 16-Bit timers, one watchdog- and one IR control timer
- PWM unit (two channels 14 Bit, six channels 8 Bit)
- ADC (four channels 8 Bit)
- UART interface

Display Features

- Single character set for all west-/east-european and arabic/farsi based languages
- Programmable screen size (25 rows x 33...64 columns)
- Flexible character matrix (12x9...16 pixel)
- CLUT with up to 64 out of 4096 colors
- Up to 256 Dynamically Redefinable Characters (up to 1024 DRCs in enhanced mode)
- Up to 16 colors per character
- Parallel attributes
- Smooth scrolling hardware cursor (pixel by pixel shiftable)
- Support of progressive scan and 100 Hz
- Free programmable pixel clock from 10 up to 32 MHz (independent from CPU clock)

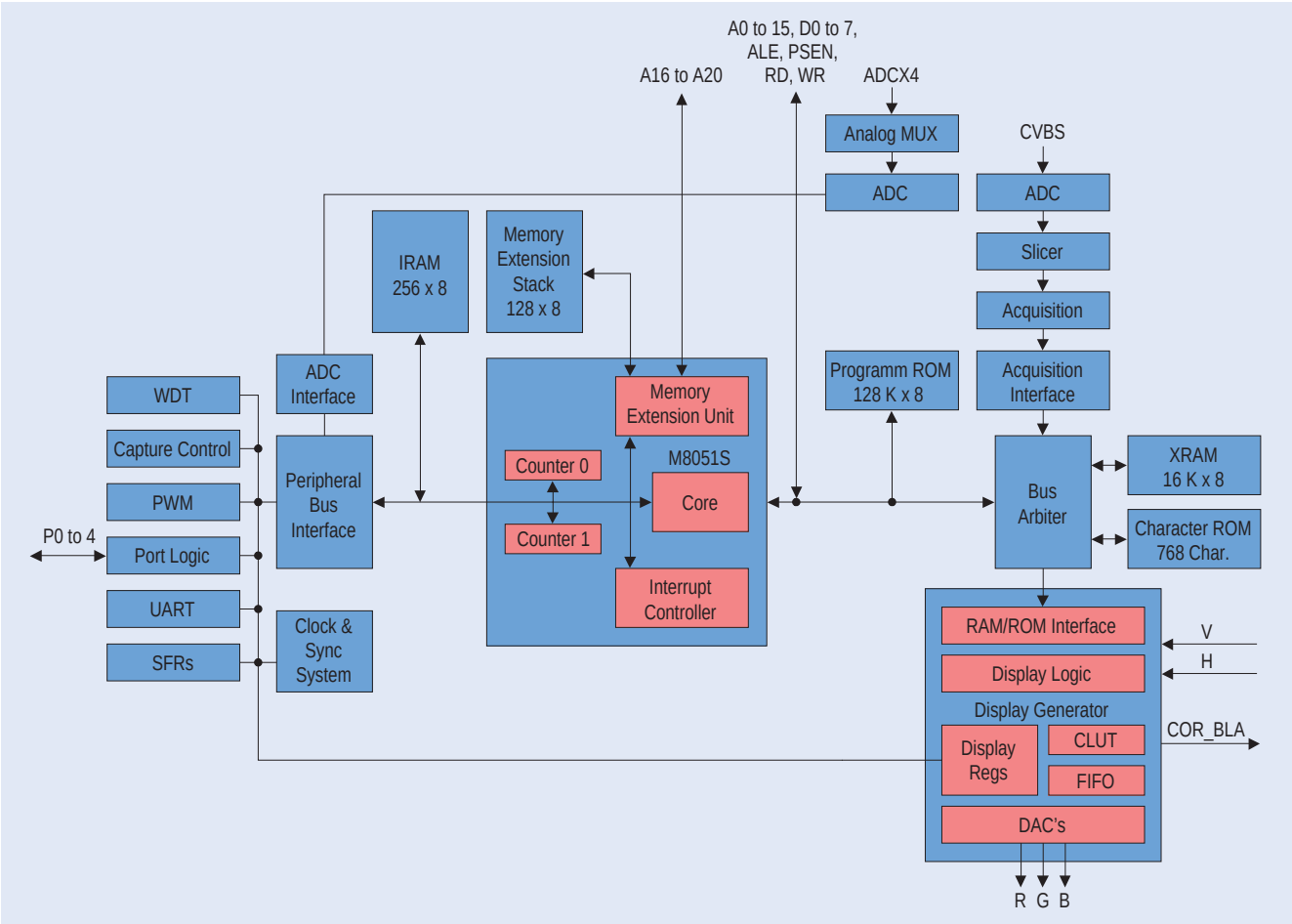
Development Support and Tools

- Worldwide tested Firmware-modules for data acquisition and IR-detection
- Improved Display Editor (TEDIPRO) for fast and easy OSD- and font development
- EPG firmware-package available (by TARA Systems)
- Demo Board with Demo-SW
- various emulators supported (Hitex, Kleinhenz)
- Flash version for development, ramp up and small series

Packages

- P-SDIP-52, P-MQFP-64 (ROM-versions)
- P-MQFP-100, P-LCC-84 (ROMless versions)

Block Diagram SDA 555x



Sales Code	Internal ROM	External ROM	Number of TTX-Pages	XRAM
SDA 5550/M	–	< 1 Mb	10	1 Kb
SDA 5521	32 Kb	–	–	–
SDA 5522	64 Kb	–	–	–
SDA 5551	32 Kb	–	1	–
SDA 5552	64 Kb	–	1	–
SDA 5553	64 Kb	–	10	1 Kb
SDA 5554	96 Kb	–	10	1 Kb
SDA 5555	128 Kb	–	10	1 Kb
SDA 555xFL	128 Flash	–	10	1 Kb

Availability

The SDA 555x is available in samples now and will be ready for mass production from beginning of year 2000 onwards. Please contact your local Infineon Office for further details.

TEDIPRO for Fast & Easy OSD-Development

How to reach us:
http://www.infineon.com

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