

## Short Information

### TPU 3050, TPU 3051, TPU 3052

#### **Teletext Processor** (52-Pin PSDIP Plastic Package)

The TPU 3050/51/52 is a single-chip World System Teletext (WST) decoder for applications in analog and digital TV sets. Based on a 65C02 core with RAM and ROM on chip, an adaptive data slicer, a display controller, and a number of interfaces; the TPU 3050 allows acquisition and display of various teletext standards, such as WST, CAPTION, and VPS. Special versions of the TPU support regional characteristics (TPU 3051: Cyrillic/Greek characters, TPU 3052: Arabic/Hebrew characters).

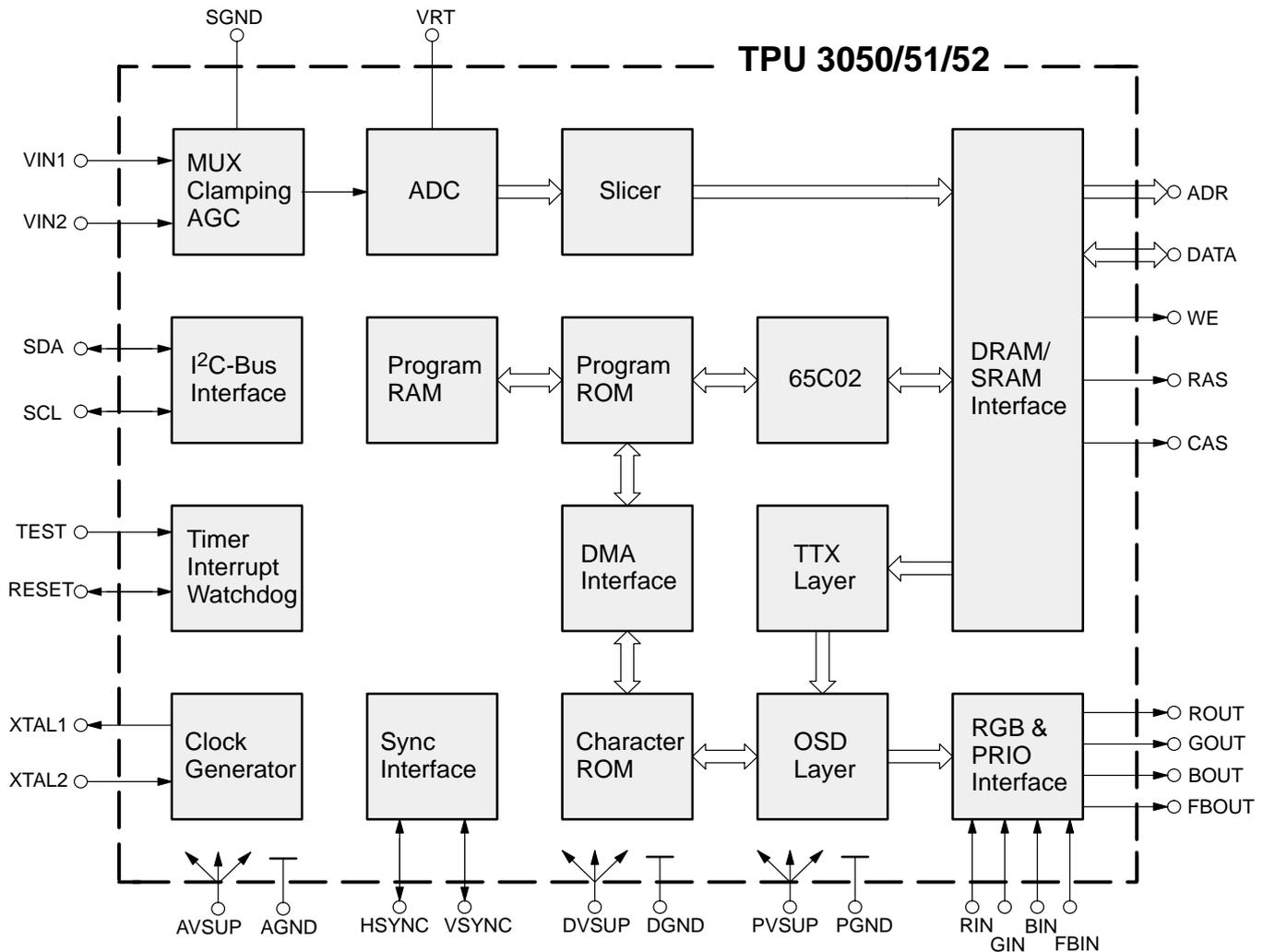
The TPU 3050/51/52 is fully software-compatible to the TPU 3040 but offers an enhanced memory interface. Both SRAM or DRAM devices can be connected, making simple text applications more cost-effective.

#### **Features:**

The TPU 3050/51/52 is an integrated circuit designed in CMOS technology. Stand-alone or in combination with the DIGIT 3000 system, the TPU 3050/51/52 offers a wide range of new and interesting features:

- single +5 V power supply
- single 20.25 MHz clock
- 2 analog composite video inputs
- clamping, AGC, and A/D-converter on chip
- on-chip sync separation
- adaptive digital data slicer
- WST, VPS, WSS, and Closed-Caption acquisition
- asynchronous acquisition and display
- 625 lines 50/100 Hz and double scan display
- 525 lines 60/120 Hz and double scan display
- WST level 2 presentation
- parallel acquisition of multiple teletext pages
- SRAM or DRAM as external page memory
- 2032 pages with 16 Mbit external DRAM
- 112 pages with 1 Mbit external SRAM
- 512 multinational characters on chip
- independent OSD layer
- I<sup>2</sup>C-bus interface
- available in 52-pin PSDIP package

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**Functional block diagram of the TPU 3050/51/52**

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