

# SIEMENS

ICs for Consumer Electronics

MEGATEXT

Software Development Tools

Edition 1997-07-01

<b>MEGATEXT® Software Development Tools</b>	
<b>Revision History:</b>	<b>Version 1997-07-01</b>
Previous Releases:	10.94 Original Version
Page	Subjects (changes since last revision)
3, 4	Update of software version numbers
4	Application Controller Software Modules
6	Example of Deditor window

MEGATEXT® is a registered trademark of Siemens AG.

## Data Classification

### Maximum Ratings

Maximum ratings are absolute ratings; exceeding only one of these values may cause irreversible damage to the integrated circuit.

### Characteristics

The listed characteristics are ensured over the operating range of the integrated circuit. Typical characteristics specify mean values expected over the production spread. If not otherwise specified, typical characteristics apply at  $T_A = 25\text{ °C}$  and the given supply voltage.

### Operating Range

In the operating range the functions given in the circuit description are fulfilled.

For detailed technical information about “**Processing Guidelines**” and “**Quality Assurance**” for ICs, see our “**Short Form Catalog**”.

### Edition 1997-07-01

This edition was realized using the software system FrameMaker®.

**Published by Siemens AG, Bereich Halbleiter, Marketing-Kommunikation,  
Balanstraße 73, 81541 München**

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Siemens AG is an approved CECC manufacturer.

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**SDM – Software Development Tools for MEGATEXT® and MEGATEXT PLUS**

With a high data rate of over 6 Mbit/s and a multitude of screen layouts and synchronization modes requiring considerable hardware and software backup, the latest multi-page acquisition teletext decoders are highly complex devices. Because of this, the user's job is becoming increasingly demanding. This involves dealing with different conversion standards such as FLOF, TOP, and higher teletext levels, and integrating the on-screen functions. In terms of hardware, MEGATEXT (SDA 5273) and MEGATEXT PLUS (SDA 5275) offer an ideal solution to this problem. Comprehensive software tools give easy access to the chip features, while application-oriented sample programs make adaptation for individual use easy.

These tools that will increase your MEGATEXT PLUS or MEGATEXT software development productivity, together with demo application boards and further development support hardware, are available through our partner company

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Mr. Alexander Wass  
Lindwurmstraße 80  
D-80337 München  
Germany

phone +49 (89) 74 71 21 13  
fax +49 (89) 74 71 21 20

Please contact TARA Systems GmbH for their full product range, including further VBI-transmitted data generation and processing tools, and up-to-date information.

For your convenience, we have included brief descriptions of the major tools in this document. Please refer to **figure 1** to get an overview about the typical data flow involved with a MEGATEXT PLUS or MEGATEXT advanced on screen display software development. The individual tool combination may vary.

**DEDITOR**

Deditor enables you to create and edit MEGATEXT and MEGATEXT PLUS display pages and can be installed in MS-Windows 3.xx and Windows 95. It supports all the display modes in the MEGATEXT and MEGATEXT PLUS hardware: character display, graphics, DRCS characters, color lookup table, and row and screen attributes. Its user-friendly range of features makes it comparable to a teletext editor. Changes made to the screen display on the PC can be viewed on a second (TV) screen connected to the hardware kit. Conversion tools enable you to use TIFF graphics. Current version is 4.22.

**SIMON for Windows**

This on-screen program allows you to read and modify individual registers in the MEGATEXT and MEGATEXT PLUS and other ICs through the M3L/I2C serial bus. Current SIMonWin version is 1.61.

**MegatextConvert**

Converts pictures and data which were produced in SDO format into compressed source code data for C compilers and assemblers. Current version is 2.31.

### **Application Controller Software Modules**

The MEGATEXT and MEGATEXT PLUS are controlled by the system microcontroller via an I2C/M3L bus interface. To meet today's and tomorrow's requirements in Consumer Electronics applications, Siemens recommends the use of the SAB C161 family of powerful and dedicated 16 bit microcontrollers in applications using MEGATEXT and MEGATEXT PLUS.

The tool packages offered by Siemens contain all the demo programs in the form of C source codes for infrared decoding, M3L drivers, TOP multi-page acquisition, menu controls and demopicture display. The modules show you applications for the MCI macrocommands implemented in MEGATEXT and MEGATEXT PLUS. They open up the world of display and acquisition features for you by providing a good start for your own development.

Besides the 16bit support, for the still widespread 8051 series controllers, these modules are also available in C and assembler source code.

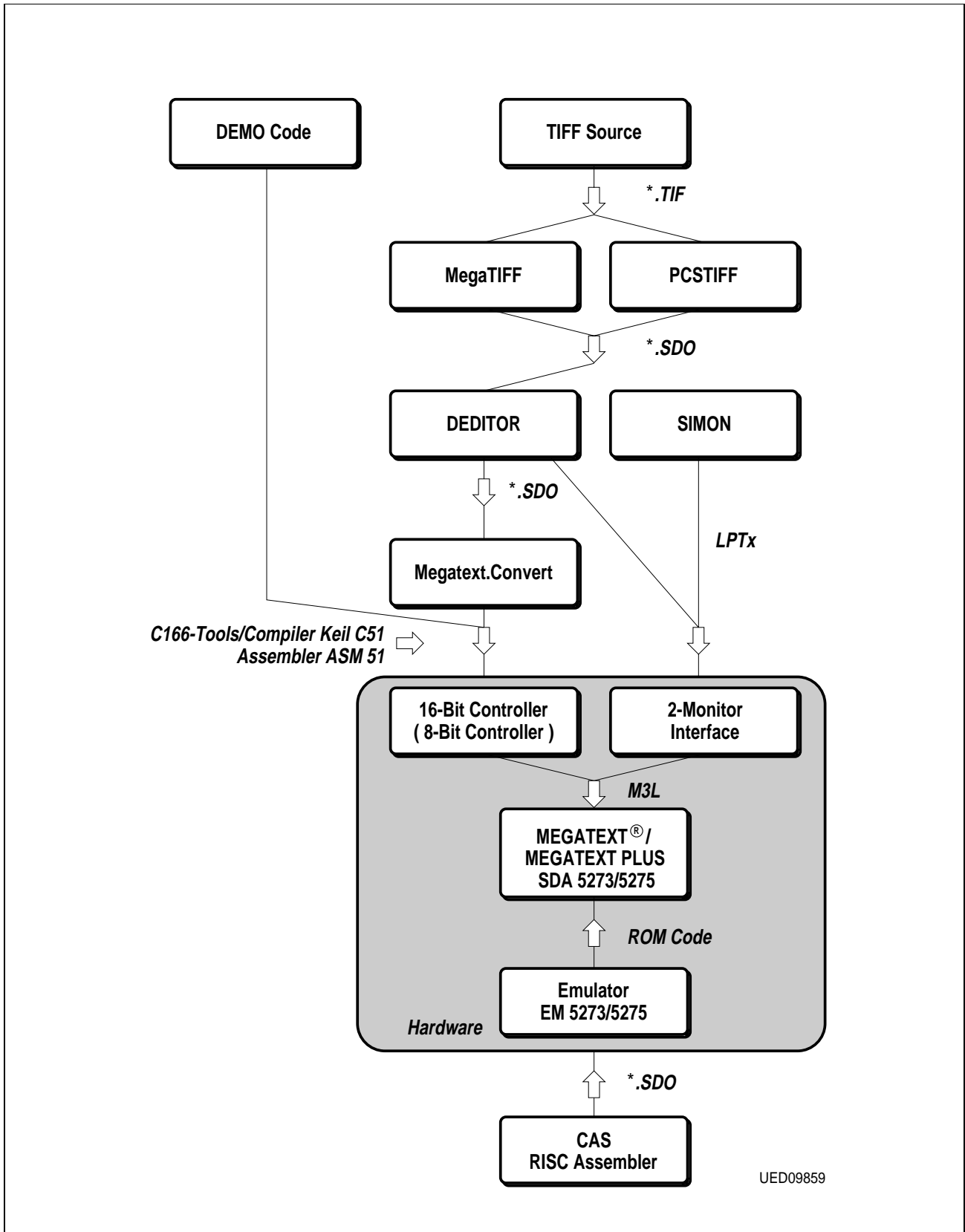
### **MegaTIFF**

Converts TIFF data into MEGATEXT and MEGATEXT PLUS graphic format and changes the resolution and colors accordingly. Current version is 2.02.

### **PCSTIFF**

Converts TIFF data into MEGATEXT and MEGATEXT PLUS character graphic format while minimizing the amount of DRCS space used. Current version is 1.19.

All the software tools use the SDO format of the MEGATEXT and MEGATEXT PLUS memory model. This is directly accessible for the user in the form of ASCII data.



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Figure 1  
MEGATEXT® Software and Hardware Tools Data Flow

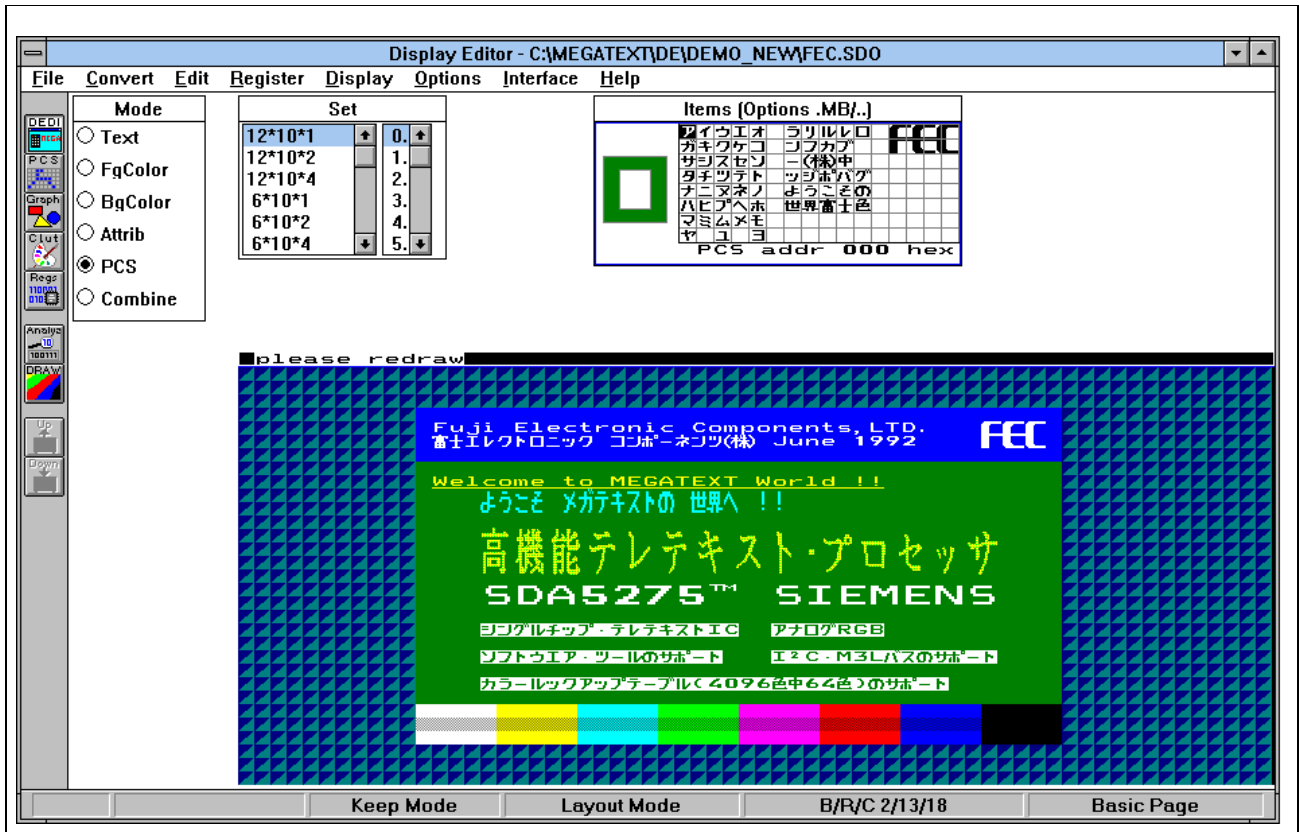
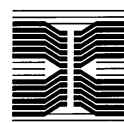


Figure 2  
 DEDITOR Main Window Design Example using Japanese Download Characters

Published by Semiconductor Group

Siemens Aktiengesellschaft



Global PartnerChip  
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Ordering No. B111-H6760-X8-X-7600  
Printed in Germany  
TS 1094.5