



# ACTUM REALIZER<sup>®</sup> FOR THE ST62 & ST7

## SOFTWARE AIDED COMPUTER ENGINEERING TOOL FOR ST62 AND ST7 8-BIT MICROCONTROLLERS

### GRAPHIC DESIGN AND DEBUG

The ST-Realizer allows you to use the same tool for ST62 and ST7 microcontroller families. With a single click, using the powerful graphics editor and compiler, you can generate complete software applications for the ST62 and ST7. Migrating from one ST62 or ST7 family device to another is done simply by clicking on the name of the microcontroller.

### SCHEMATIC-BASED SOFTWARE DESIGN

- Industry Standard Graphic symbols
- Extensive Symbol Library
- Select and Wire on-screen to generate Application
- Built-In Self-Documentation

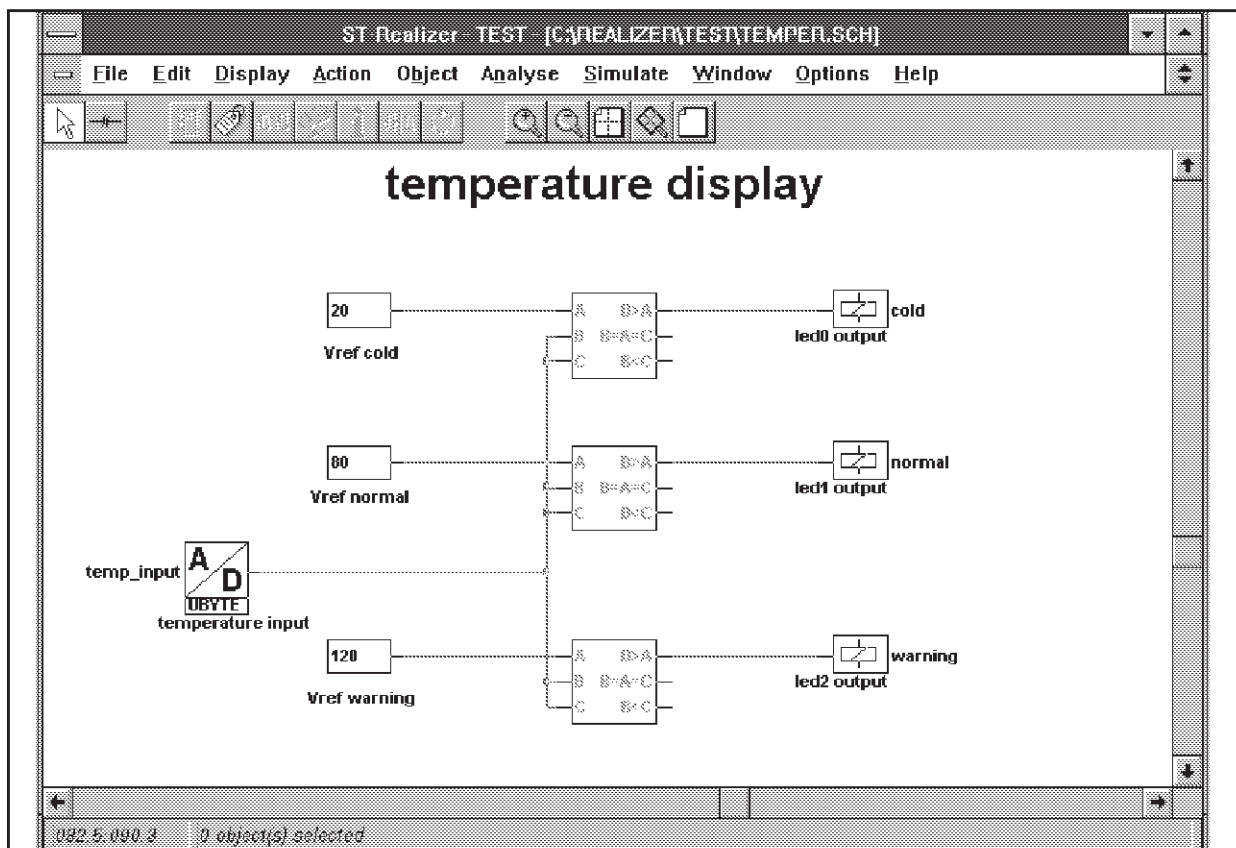
### SCHEMATIC-BASED ANALYSIS

- Single click Analyze Operation
- Path and Functional Verification
- Efficient code generation for ST62 and ST7

### SCHEMATIC-BASED SIMULATOR FOR DEBUG

- Runs on design schematic
- Stimulate and Observe On-line
- Add Virtual tools (Oscilloscope, Pulse, Time, Data Generators, logic probes)
- Uses ST62 or ST7 Code from Analyzer
- Dedicated to ST62 and ST7 Microcontrollers

Figure 1. Schematic Entry of a simple Application.



**DESCRIPTION**

The ST-Realizer is a version of The Realizer by Actum Solutions (1), The Netherlands, dedicated to the design and development of applications for the ST62 and ST7 family of microcontrollers (MCUs).

The schematic-based architecture for both design and Simulation allows engineers, without learning the MCU architecture, to create a microcontroller application, with all the benefits and flexibility that the microcontrollers provide.

**DESIGN**

Use your knowledge of the application to decide Input/Output functions, then draw and build up the application functionality graphically using the industry standard symbols from the library (or create your own). A state machine can be added if required. Draw wires between the symbols on-screen to create the application. The schematic can be printed for documentation.

**ANALYSE**

Select an ST62 or ST7 device and allocate I/O functions to actual physical I/O pins. Run the Analyzer to verify and run process analysis on the application as drawn. If errors are found, edit the schematic and re-analyze. When all is satisfactory, allow the Analyzer to generate the efficient ST62 or ST7 software code.

**DEBUG**

Use the integrated ST62 and ST7 Symbolic Schematic Simulator to stimulate and monitor the circuit functionality directly on the schematic. Add Virtual development tools to the circuit as graphical symbols and run or step through the functionality to verify that the application works as expected. If not, return to the Schematic entry environment and revise the drawing, then Analyse and Debug again until the function is as desired.

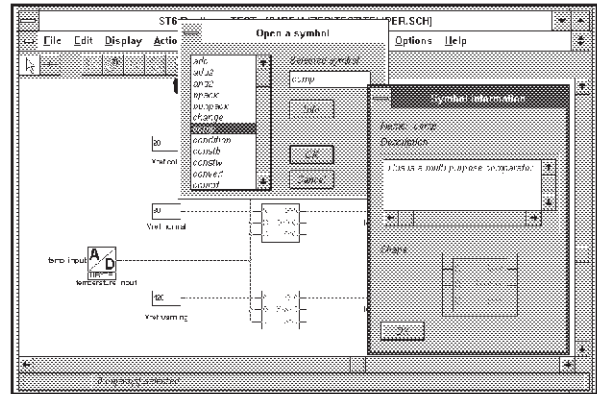
Now you can easily program EPROM or OTPST62 or OTP ST7 microcontrollers with the final generated software to build prototypes. Field trials can then be performed with confidence that the application program functionality has been assured, giving less time needed for expensive field modifications.

**EXPANSION**

The Realizer can produce a complete standalone application program, or just the main part to start-up and control the program functions designed on-screen. In this latter case, the code can be linked

with other library routines to expand on the functionality. The expanded code is then able to be debugged with the ST62 or ST7 Hardware Emulation Tools.

**Figure 2. Adding functional Blocks as Symbols**

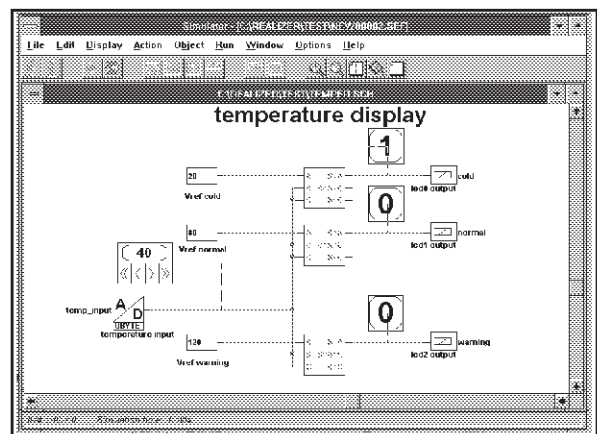


**HARDWARE/SOFTWARE REQUIREMENTS**

- A 80386 (or higher) PC with at least 2Mbytes of memory
- MS-Windows 3.0 or higher and MS-DOS 3.3 or higher
- Hard disk with 5MB of free disk space and a 3.5 floppy disk drive
- VGA monitor supported by Windows and a pointing device (e.g. a mouse)

**Note (1):** Actum Solutions:  
 PO Box 373  
 1700 HJ HEERHUGOWAARD  
 The Netherlands

**Figure 3. Testing with virtual Tools**



**ORDERING INFORMATION**

<b>Sales Type</b>	<b>Description</b>
ST-REALIZER/PC	Software Aided Computer Engineering for ST62 and ST7 8-bit Microcontroller, Microsoft Windows 3 Edition

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