



Project.: Realizer
Title: Release notes V4.30
Ref.: 0634200
Date: May 15, 2007
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Realizer Version 4.30 now available

Product:

Realizer Version 4.30

Product Description:

Actum Solutions Realizer® is an advanced CAD solution that enables you to develop code for embedded systems using an intuitive graphical interface. Rather than laboriously programming in the assembly language specific to a particular micro-controller family or cryptic C-code, you can choose from a rich set of symbols and simply “wire” them together according to the logical program flow you desire. Realizer then generates efficient assembly language code for the chosen target micro-controller, along with complete documentation of the code. This abstraction of the logical functions of the micro controller from the underlying assembly language enables you to realize your designs in hardware without deep knowledge of micro-controller programming, greatly increasing your productivity and speeding time to market for new and improved products.

Realizer is the result of seventeen years of development in close cooperation with our customers, resulting in a coding solution that supports three fundamental demands of embedded application development in a competitive, time-sensitive market environment:

- High-level, top-down approach for maximum designer productivity.
- High-quality code for optimal product functionality.
- Self-documenting for product maintainability throughout its life cycle.

Core Product Features:

Maintains a high level of abstraction throughout the design cycle

- Concentrate on what you want to do, rather than how to do it! Realizer enables you to take your understanding of product functionality, and turn it directly into code without any knowledge of assembly language. In effect, Realizer's top-down approach lets you build software as though it were hardware, simply by wiring functional symbols together in a logical flow.

Automatically generates optimal program code for your chosen micro-controller

- Realizer generates code optimized for the target micro-controller, based on years of field experience and optimization by Actum Solutions experts. You can concentrate on product functionality rather than code optimization.

Extensive library of symbols efficiently implemented in assembly language

- The functional symbols Realizer makes available to you are based on many years of experience with the target micro-controllers, along with extensive customer feedback. Each target has a rich set of thoroughly-tested symbols available, supporting rapid product development and testing.

Built-in design rule checks

- Realizer's object-oriented design makes extensive use of inheritance to support functions like automatic type checking on symbol pins (e.g., inputs and outputs), helping you avoid costly errors and speeding development.

Easy change of target controller

- You can easily re-use code, upgrade your product's functionality as new micro-controllers become available, and avoid lock-in to one supplier

Built-in symbol editor for creation of new symbols

- You can extend the functionality of Realizer libraries for your specific needs, thus increasing your productivity and speeding time to market for your products.

Self-documenting code

- Push a button, get the code, push another button, and get the documentation from the printer! Well-documented code is essential for maintaining a product throughout its life cycle. With Realizer, you can get detailed documentation of the code with a few clicks of the mouse.

Built-in simulator with performance reporting

- Realizer lets you iteratively test your design using the same schematic you used to create it. Effortlessly switch between a functional (state diagram) and pin-level (hardware) view of your design, easily apply new test conditions and step through program functions, create and use test vectors for efficient quality assurance testing.

New Features in Version 4.3

Improved Auto-Wiring and Auto-Routing

Auto-wiring and auto-routing both help clarify the program flow between symbols as you create and modify your layout during the design process, to help keep track of logical relationships. Auto-wiring keeps the program flow clear when adding new symbols. Auto-routing keeps the program flow clear when moving symbols, as is often done to modularize the schematic for greater understanding. New user-requested functions include “line hugging” and “rip-up and rebuild”.

The next illustrations show the capabilities of the router when a symbol is moved.

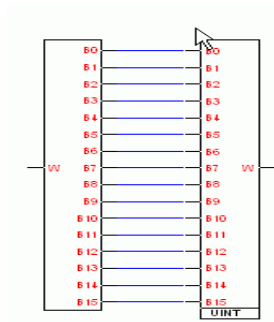


Illustration 1:
Initial situation

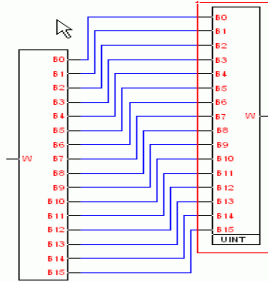


Illustration 2:
Moved up and right

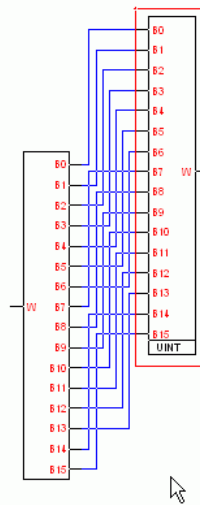


Illustration 3:
Moved closer, left

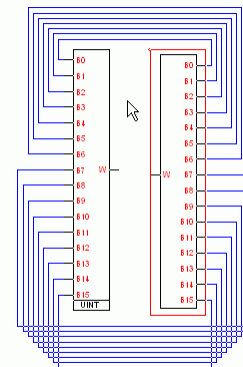


Illustration 4:
Moved to the other side

User-Created Symbols With Interrupts

Realizer Version 4.3 adds interrupt functions to user-created symbols, extending your ability to control a wide range of external devices.

For more information, please contact our sales department (sales@actum.com).

New Micro Controller Targets

Realizer Version 4.3 supports many new micro controllers, extending the range of embedded solutions available to you. For more information about the targets themselves, please visit <http://mcu.st.com> for STM targets and <http://www.microchip.com> for Microchip targets.

New targets for Realizer ST72

Target	I/O	Speed	Code memory	Data memory
ST7FLiteUS2	6	16 MHz	1K*8bit	128 byte RAM
ST7FLiteUS5	6	16 MHz	1K*8bit	128 byte RAM
ST7FLite10B	16	16 MHz	2K*8bit	256 byte RAM
ST7FLite15B	16	16 MHz	2K*8bit	256 byte RAM
ST7FLite19B	16	16 MHz	2K*8bit	256 byte RAM
ST72321BK6	24	16 MHz	32K*8bit	1Kbyte RAM
ST72321BJ6	32	16 MHz	32K*8bit	1Kbyte RAM
ST72321BJ7	32	16 MHz	48K*8bit	1.5Kbyte RAM
ST72321BJ9	32	16 MHz	60K*8bit	2Kbyte RAM
ST72321BR6	48	16 MHz	32K*8bit	1Kbyte RAM
ST72321BR7	48	16 MHz	48K*8bit	1.5Kbyte RAM
ST72321BR9	48	16 MHz	60K*8bit	2Kbyte RAM
ST72324BK2	24	16 MHz	8K*8bit	384 byte RAM
ST72324BK4	24	16 MHz	16K*8bit	512 byte RAM
ST72324BK6	24	16 MHz	32K*8bit	1Kbyte RAM
ST72324BJ2	32	16 MHz	8K*8bit	384 byte RAM
ST72324BJ4	32	16 MHz	16K*8bit	512 byte RAM
ST72324BJ6	32	16 MHz	32K*8bit	1Kbyte RAM
ST72324LK2	24	16 MHz	8K*8bit	384 byte RAM
ST72324LK4	24	16 MHz	16K*8bit	512 byte RAM
ST72324LK6	24	16 MHz	32K*8bit	1Kbyte RAM
ST72324LJ2	32	16 MHz	8K*8bit	384 byte RAM
ST72324LJ4	32	16 MHz	16K*8bit	512 byte RAM
ST72324LJ6	32	16 MHz	32K*8bit	1Kbyte RAM
ST72325K4	24	16 MHz	16K*8bit	512 byte RAM
ST72325K6	24	16 MHz	32K*8bit	1Kbyte RAM
ST72325S4	32	16 MHz	16K*8bit	512 byte RAM
ST72325S6	32	16 MHz	32K*8bit	1Kbyte RAM
ST72325C6	32	16 MHz	32K*8bit	1Kbyte RAM
ST72325C7	32	16 MHz	48K*8bit	1.5Kbyte RAM
ST72325C9	32	16 MHz	60K*8bit	2Kbyte RAM

Target	I/O	Speed	Code memory	Data memory
ST72325J4	36	16 MHz	16K*8bit	512 byte RAM
ST72325J6	36	16 MHz	32K*8bit	1Kbyte RAM
ST72325J7	36	16 MHz	48K*8bit	1.5Kbyte RAM
ST72325J9	36	16 MHz	60K*8bit	2Kbyte RAM
ST72325R6	48	16 MHz	32K*8bit	1Kbyte RAM
ST72325R7	48	16 MHz	48K*8bit	1.5Kbyte RAM
ST72325R9	48	16 MHz	60K*8bit	2Kbyte RAM
ST72340K2	24	16 MHz	8K*8bit	512 byte RAM, 256 byte EEPROM
ST72340K4	24	16 MHz	16K*8bit	1Kbyte RAM, 256 byte EEPROM
ST72340S2	32	16 MHz	8K*8bit	512 byte RAM, 256 byte EEPROM
ST72340S4	32	16 MHz	16K*8bit	1Kbyte RAM, 256 byte EEPROM
ST72344K2	24	16 MHz	8K*8bit	512 byte RAM, 256 byte EEPROM
ST72344K4	24	16 MHz	16K*8bit	1Kbyte RAM, 256 byte EEPROM
ST72344S2	32	16 MHz	8K*8bit	512 byte RAM, 256 byte EEPROM
ST72344S4	32	16 MHz	16K*8bit	1Kbyte RAM, 256 byte EEPROM
ST72345C4	34	16 MHz	16K*8bit	1Kbyte RAM, 256 byte EEPROM
ST72361K6	24	16 MHz	32K*8bit	1.5Kbyte RAM
ST72361K7	24	16 MHz	48K*8bit	2Kbyte RAM
ST72361K9	24	16 MHz	60K*8bit	2Kbyte RAM
ST72361J6	34	16 MHz	32K*8bit	1.5Kbyte RAM
ST72361J7	34	16 MHz	48K*8bit	2Kbyte RAM
ST72361J9	34	16 MHz	60K*8bit	2Kbyte RAM
ST72361R6	48	16 MHz	32K*8bit	1.5Kbyte RAM
ST72361R7	48	16 MHz	48K*8bit	2Kbyte RAM
ST72361R9	48	16 MHz	60K*8bit	2Kbyte RAM
ST72561K6	24	16 MHz	32K*8bit	1.5Kbyte RAM
ST72561K7	24	16 MHz	48K*8bit	2Kbyte RAM
ST72561K9	24	16 MHz	60K*8bit	2Kbyte RAM
ST72561J6	34	16 MHz	32K*8bit	1.5Kbyte RAM
ST72561J7	34	16 MHz	48K*8bit	2Kbyte RAM
ST72561J9	34	16 MHz	60K*8bit	2Kbyte RAM
ST72561R6	48	16 MHz	32K*8bit	1.5Kbyte RAM
ST72561R7	48	16 MHz	48K*8bit	2Kbyte RAM
ST72561R9	48	16 MHz	60K*8bit	2Kbyte RAM

New targets for Realizer PIC12B

Target	I/O	Speed	Code memory	Data memory
PIC10F220	4	8 MHz	256*12bit	16 byte RAM
PIC10F222	4	8 MHz	512*12bit	23 byte RAM
PIC12F510	6	40 MHz	1k*12bit	38 byte RAM
PIC16F506	12	40 MHz	1k*12bit	67 byte RAM

New targets for Realizer PIC14B

Target	I/O	Speed	Code memory	Data memory
PIC16F631	18	20 MHz	1k*14bit	64 byte RAM / 128 byte EEPROM
PIC16F677	18	20 MHz	2k*14bit	128 byte RAM / 256 byte EEPROM
PIC16F685	18	20 MHz	4k*14bit	256 byte RAM / 256 byte EEPROM
PIC16F687	18	20 MHz	2k*14bit	128 byte RAM / 256 byte EEPROM
PIC16F689	18	20 MHz	4k*14bit	256 byte RAM / 256 byte EEPROM
PIC16F690	18	20 MHz	4k*14bit	256 byte RAM / 256 byte EEPROM
PIC16F785	18	20 MHz	2k*14bit	128 byte RAM / 256 byte EEPROM

Pricing

Realizer's Gold:	€	1590.00
Realizer Silver:	€	890.00
Realizer Bronze:		Free download for evaluation purposes, limited to 15 symbols per design.

Upgrades

Existing customers may update their Realizer versions for a special price, depending on their version. For more information please visit our totally renewed web site: www.actum.com.

New web site

Our web site is totally renewed. It is now based on a modern content management system (CMS). Changes can now be made by more employees and new files can be made available with just a few mouse clicks. This means that we can react faster to our customers and customers can find the latest information on the site quickly.

About Actum Solutions

Headquartered in Heerhugowaard in the Netherlands, Actum Solutions is a software development company that provides tools to enable embedded application developers to quickly develop optimized code without the need to become assembly language experts. These solutions extend the reach of developers to a wider range of micro-controller families than otherwise possible, enhancing their productivity and delivering a much faster time to market in an increasingly competitive world.

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