



Project.: Realizer
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Realizer Version 4.40 now available

Product:

Realizer Version 4.40

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 twenty 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

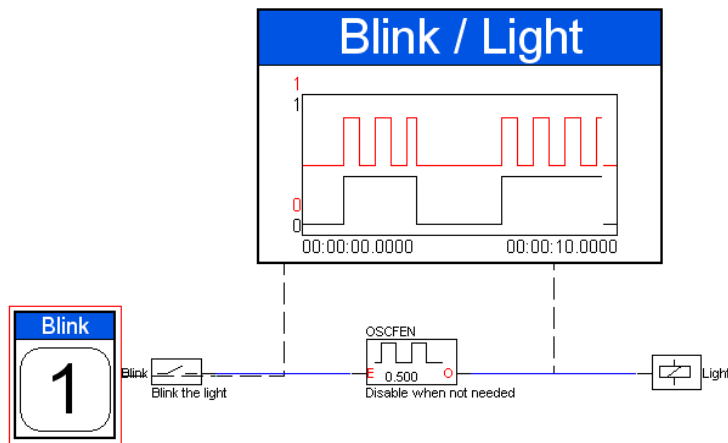
- Realizer lets you iteratively test your design using the same schematic you used to create it. Effortlessly switch between a functional (state diagram) and pin-level (hardware) view of your design, easily apply new test conditions and step through program functions, create and use test vectors for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

New Features in Version 4.4

New symbols

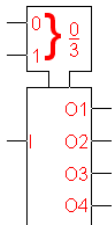
Oscillator with enable

This symbols allows you to disable the oscillator and start fresh when enabling.



It is available with a fixed time (OSCFEN) and a variable time (OSCVEN).

Demultiplexer



A demultiplexer is a symbol taking a single input signal that may carry many channels and separates those over multiple output signals.

Microchip Configuration byte

You can add the Microchip configuration bytes en ID location contents to the generated Realizer code. This simplifies the steps taken when programming a Microchip device.

Microchip macros

A new set of macro's has been written which will reduce the amount of used Flash. This change has been made possible with the help of a valued customer: Luca Colombo. The new set can be chosen in the hardware settings of the selected Microchip.

New Micro Controller Family

The STM8S range of STM is supported, for more information about the targets themselves, please

visit <http://mcu.st.com>.

The following devices are available:

Target	Code memory	Data memory	Pins
STM8S103F2	4K Flash	1Kbytes	20 pins
STM8S103F3	8K Flash	1Kbytes	20 pins
STM8S103K3	8K Flash	1Kbytes	32 pins
STM8S105K4	16K Flash	2Kbytes	32 pins
STM8S105K6	32K Flash	2Kbytes	32 pins
STM8S105S4	16K Flash	2Kbytes	44 pins
STM8S105S6	32K Flash	2Kbytes	44 pins
STM8S105C4	16K Flash	2Kbytes	48 pins
STM8S105C6	32K Flash	2Kbytes	48 pins
STM8S207K6	32K Flash	2Kbytes	32 pins
STM8S207S6	32K Flash	2Kbytes	44 pins
STM8S207S8	64K Flash	4Kbytes	44 pins
STM8S207SB	128K Flash	4Kbytes	44 pins
STM8S207C6	32K Flash	2Kbytes	48 pins
STM8S207C8	64K Flash	4Kbytes	48 pins
STM8S207CB	128K Flash	6Kbytes	48 pins
STM8S207R6	32K Flash	2Kbytes	64 pins
STM8S207R8	64K Flash	4Kbytes	64 pins
STM8S207RB	128K Flash	6Kbytes	64 pins
STM8S207M8	64K Flash	6Kbytes	80 pins
STM8S207MB	128K Flash	6Kbytes	80 pins
STM8S208S6	32K Flash	4Kbytes	44 pins
STM8S208S8	64K Flash	4Kbytes	44 pins
STM8S208SB	128K Flash	4Kbytes	44 pins
STM8S208C6	32K Flash	6Kbytes	48 pins
STM8S208C8	64K Flash	6Kbytes	48 pins
STM8S208CB	128K Flash	6Kbytes	48 pins
STM8S208R6	32K Flash	6Kbytes	64 pins
STM8S208R8	64K Flash	6Kbytes	64 pins
STM8S208RB	128K Flash	6Kbytes	64 pins
STM8S208MB	128K Flash	6Kbytes	80 pins

New Micro Controller Targets

Realizer Version 4.4 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	Code memory	Data memory	Pins
ST7FOXA0	2K Flash	128 bytes	8 pins
ST7FOXF1	4K Flash	384 bytes	20 pins
ST7FOXK1	4K Flash	384 bytes	32 pins
ST7FOXK2	8K Flash	384 bytes	32 pins
ST7FLite49M	4K Flash	384 bytes	32 pins
ST7FLite49K2	8K Flash	384 bytes	32 pins

New targets for Realizer PIC12B

Target	Code memory	Data memory	Pins
PIC12F519	1K Flash	41 bytes	8 pins

New targets for Realizer PIC14B

Target	Code memory	Data memory	Pins
PIC16F610	1K Flash	64 Bytes	14 pins
PIC16F616	2K Flash	128 Bytes	14 pins
PIC16F688	4K Flash	256 Bytes	14 pins
PIC16F722	2K Flash	128 Bytes	28 pins
PIC16F723	4K Flash	192 Bytes	28 pins
PIC16F724	4K Flash	192 Bytes	40 pins
PIC16F726	8K Flash	368 Bytes	28 pins
PIC16F727	8K Flash	368 Bytes	40 pins
PIC16F882	2K Flash	128 Bytes	28 pins
PIC16F883	4K Flash	256 Bytes	28 pins
PIC16F884	4K Flash	256 Bytes	40 pins
PIC16F886	8K Flash	368 Bytes	28 pins
PIC16F887	8K Flash	368 Bytes	40 pins

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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 web site: www.actum.com.

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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