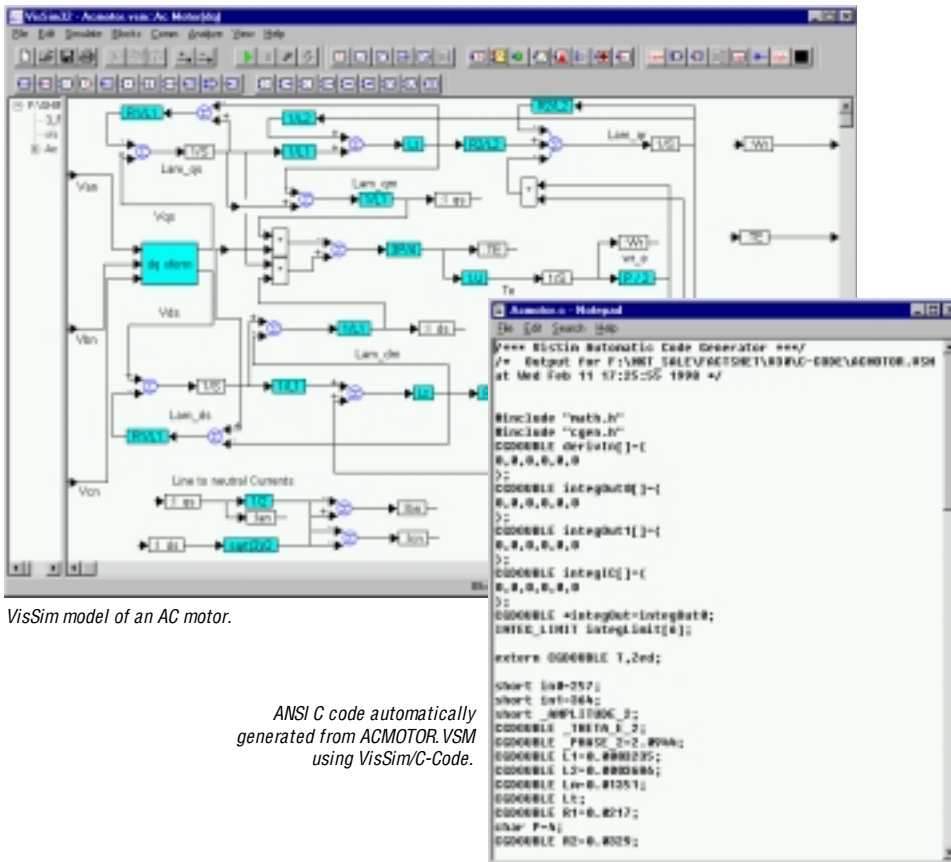


VisSim/C-Code automatically translates VisSim diagrams into highly optimized, ANSI C code that can be immediately put to use in a variety of applications — including embedded systems and communication systems — or customized to meet specific design requirements.

Optimized code: Using a technique called "constant folding," the generated code is optimized for speed by eliminating multiplications-by-one and additions-by-zero, as well as other identity operations. In addition, the number of function calls and array references are minimized to increase code efficiency. The resulting executables run up to five times faster than their block diagram counterparts, which is particularly useful for applications with high sampling rates.

Readable code: VisSim/C-Code preserves variable names from the block diagrams to make it easier to identify signals in the generated code. In addition, block names in the generated code can include complete pathnames that indicate the hierarchical level of the diagram in which they appear. Finally, all C code is formatted, including line length control, to improve readability and maintainability.

Automatic DLL generation: VisSim/C-Code can automatically generate DLLs from any portion of a block diagram. For complex, multi-level diagrams, using DLLs rather than the corresponding blocks can significantly increase simulation speed and efficiency.



VisSim model of an AC motor.

ANSI C code automatically generated from ACMOTOR.VSM using VisSim/C-Code.

Highlights

- Generates customizable ANSI C code
 - Variable name retention
 - Matrix and vector support
 - Parameterized types for redefinition to target processor capabilities
 - Maps most operators onto C code equivalents
 - Complete pathname of blocks
 - Line length control
- Automatically creates VisSim-callable DLLs
 - DLLs can clock faster or slower than simulation clock (time step)
- Targets code for embedded controllers and digital signal processing (DSP) chips
- Executables run under MS/DOS®, Windows™, or a proprietary system
- Browse facility for viewing and customizing generated code
 - Incorporate user-written C code
 - Edit existing code
 - Modify header files
- VisSim/Real-TimePRO™ support
- 32-bit Support Library allows compiled simulations to be run under MS/DOS or Windows 95/NT
- Support Library source code allows compiled control designs to be targeted for any systems (see Support Library Source Code)

Support Library Source Code

The source code for the Support Library is a separate product and can be purchased from Visual Solutions. Source code for the Support Library is required for unsupported platforms.

Licensing Terms

No royalties are owed to Visual Solutions on code generated by VisSim/C-Code or on code linked with the VisSim/C-Code Support Library.

Technical Specifications

Integration methods	2
Generated code	ANSI C
Support library code†	Object code* or source
Blocks not supported	DDE and Optimization blocks; neuralNet, display, histogram, light, meter, plot, and stripChart
Graphical output	ASCII text

* Object code is available for Win 3.1+/Win32s, Win 95, and Win NT.

† Source code for the Support Library is a separate, optional product.

System Requirements

- ANSI C compiler
- Professional VisSim 3.0
- 1 MB RAM
- 1 MB disk space
- 3½" floppy drive

Windows® 3.1, 95, NT
Compatible



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