

Product Support

Supported Compilers

1601 - Release 11

Supported / Compatible Compilers for MATLAB 5.3

For information on other releases, please select from the choices below:

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Microsoft Windows

MATLAB 5.3 (Release 11)

Simulink 3.0 (Release 11)

Notes for the MATLAB 5.3 Microsoft Windows Table

The compilation of MATLAB 5.x MEX-files is driven by an

| Microsoft Windows | | | MATLAB | MATLAB | MATLAB C/C++ | MATLAB C/C++ |
|------------------------|-------------------|-------|--------|--------|--------------|--------------|
| Compiler | Version | Notes | 5.3 | 2.0 | 2.0 | 1.0 |
| Microsoft Visual C/C++ | 6.0 | 2 | x | x | x | x |
| | 5.0 | 2 | x | x | x | x |
| | 4.2 | | x | x | x | x |
| Borland C++ Builder | 3.0 (Borland 5.3) | | x | x | x | x |
| Borland C++ | 5.2 | | x | x | x | x |
| | 5.0 | | x | x | x | x |
| Digital Visual Fortran | 6.0 | 1 | x | | | |
| | 5.0 | | x | | | |
| Watcom C/C++ | 11.0 | | x | x | x | x |
| | 10.6 | | x | x | x | x |

options file that contains all compiler specific information.

Technically, any ANSI C compiler (capable of creating 32-bit DLLs on the PC) should be able to create a valid MEX-file. Currently,

| Microsoft Windows | | | Simulink | Stateflow | Real-Time Workshop | Real-Time Windows Target | xPC |
|------------------------|-------------------|-------|----------|-----------|--------------------|--------------------------|-----|
| Compiler | Version | Notes | 3.0 | 2.0 | 3.0 | 1.0 | 1.0 |
| Microsoft Visual C/C++ | 6.0 | 2 | x | x | x | x | x |
| | 5.0 | 2 | x | x | x | x | x |
| | 4.2 | | x | | x | | |
| Borland C++ Builder | 3.0 (Borland 5.3) | | x | x | x | | |
| Borland C++ | 5.2 | | x | x | x | | |
| | 5.0 | | x | x | x | | |
| Digital Visual Fortran | 6.0 | 1 | x | | | | |
| | 5.0 | | x | | | | |
| Watcom C/C++ | 11.0 | | x | x | x | x | x |
| | 10.6 | | x | x | x | x | x |

The MathWorks provides options files for the compilers listed above. These are the compilers that are officially supported. Other C compilers may be used, however, we do not have any information on how to create options files for compilers other than those supported.

1. Digital Visual Fortran 6.0:

- Digital Visual Fortran 6.0 was not available until after MATLAB 5.3 development was completed. To use Digital Visual Fortran 6.0 with MATLAB 5.3, extract the following files from the [example_files.zip](#) files:

-DF60_install_notes.txt

-df60engmatopts.bat

-df60opts.bat

- Follow the instructions in the file DF60_install_notes.txt for further information

2. Microsoft Visual C 5.0 and 6.0

- For DOS (4GW) Real-Time Windows Target 1.0, only Watcom 10.6 and 11.0 are supported. Visual C support was added for RTWT version 1.5, which was shipped with the R11.1 upgrade.

- MATLAB Add-ins for Visual Studio available for Microsoft Visual C 5.0 and 6.0 only.

Additional notes for Simulink, Real-Time Workshop, and Stateflow:

- For Ada Simulation Target and Ada Multitasking Real-Time Target, GNAT Ada 3.11B is supported.
- For Tornado (VxWorks) Real-Time Target, only GNU C version 1.0.1 is supported. Contact Wind River Systems for more information about Tornado: <http://www.windriver.com/>
- Stateflow 2.0 bundles the LCC -win32 version 2.4.1 compiler. However, we only support the LCC distribution shipped with MATLAB and Stateflow, since this has been customized for our products. Stateflow versions before 2.0 require one of the compilers listed in the table above.
- There are two examples for Fortran S-functions in \$MATLAB/simulink/src:
 - simomex.f
 - vdpmex.f

simulink.f is the gateway routine.

\$MATLAB represents the root directory where MATLAB is installed.

Additional notes for MATLAB Compiler and C/C++ Math Library:

- The MATLAB Compiler, MATLAB C Math Library, and MATLAB C++ Math Library allow you to convert your M-files into either MEX-files (only the MATLAB Compiler is necessary) or stand-alone C or C++ code. For further information on these products, please refer to the Products section on the MathWorks Web page:
 - <http://www.mathworks.com/products/>
- To create stand-alone external applications with the MATLAB C Math Library, you must install a supported 32-bit ANSI C compiler that creates Win32 executables or Windows NT console applications.
- The MATLAB Compiler 2.0 and C/C++ Math Libraries 2.0 are available for MATLAB 5.3. You cannot use the MATLAB Compiler 2.0 and C/C++ Math Libraries 2.0 with MATLAB 5.0, 5.1, or 5.2.

- A patch to MATLAB Compiler 1.2 is also bundled with MATLAB Compiler 2.0. The version of the patched MATLAB Compiler 1.2 is 1.2.1. MATLAB Compiler 1.2.1 can only be used with MATLAB 5.3.