# **Product Support**

# 1601 - Supported / Compatible Compilers for MATLAB 7.3 (R2006b)

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

- Current Release
- Previous Releases

What Is MATLAB 7.3 (R2006b) Built With?

## Supported / Compatible Compilers for MATLAB 7.3 (R2006b)

Architecture	Compiler version
Linux (32-bit)	gcc/g++ version 3.4.5
Linux (64-bit)	gcc/g++ version 3.4.5
Macintosh	Apple Computer, Inc. version gcc-3.3
Solaris	Sun One Studio 8 C++ 5.5 Patch 113817-06 2004/01/29
Windows (32-bit)	Microsoft Visual C/C++ .NET 2003 (7.1) Professional Edition
Windows (64-bit)	Microsoft Visual C/C++ 2005 (8.0) Professional Edition



# **Microsoft Windows (32-bit)**

# MATLAB 7.3 (Release 2006b) and Related Products

Microsoft Windows			MATLAB	MATLAB Compiler	MATLAB Builder for .NET	MATLAB Builder for Excel	MATLAB Builder for Java
Compiler	Version	Notes	7.3	4.5	2.1	1.2.7	1.0
Microsoft Visual C++ 2005	8.0 Prof. Ed.	1,2	X	х	х	х	
Microsoft Visual C++ .NET 2003	7.1 Prof. Ed.	1,2	X	х	х	X	
Microsoft Visual C/C++	6.0 Prof. Ed.	1,2	X	х	х	х	
Microsoft Framework SDK	2.0	2			х		
	1.1	2			х		
Lcc - Win32	2.4.1		х	х			
Borland C++ Builder	6	3	х	х			
	5	3	х	х			
Borland C/C++ Free Command Line Tools	5.5		х	х			
Intel C/C++	7.1	7	x				
Open Watcom	1.3		x				
Intel Visual Fortran	9.0	7	х				
Compaq Visual Fortran	6.6		х				
	6.1	6	x				
Sun Java Development Kit (JDK)	1.5						х
	1.4						х



# Simulink 6.5 (R2006b) and Related Products

Microsoft Windows								
			Simulink (S-Functions)	Simulink (Model Referencing)	Simulink Accelerator	Stateflow	Real-Time Workshop	xPC Target
Compiler	Version	Notes	6.5	6.5	6.5	6.5	6.5	3.1
Microsoft Visual C++ 2005	8.0 Prof Ed.	1	х	х	х	х	х	х
Microsoft Visual C++ .NET 2003	7.1 Prof. Ed.	1	х	х	х	х	Х	х
Microsoft Visual C/C++	6.0 Prof. Ed.	1	х	х	х	Х	Х	х
Lcc - Win32	2.4.1		x	х	х	х	x	
Borland C++ Builder	6	3	х		х	х	х	
	5	3	х		х	х	х	
Borland C/C++ Free Command Line Tools	5.5		х		х	х	x	
Intel C/C++	7.1	7	х		х		х	
Open Watcom	1.3		х		х	х	х	х
Intel Visual Fortran	9.0	4, 7	х		х			х
Compaq Visual Fortran	6.6	4	х		х			
	6.1	4, 6	х		х			



#### **Microsoft Windows (64-bit)**

#### MATLAB 7.3 (R2006b) and Related Products

Microsoft Window		MATLAB	MATLAB Compiler	
Compiler	Version	Notes	7.3	4.5
Microsoft Visual C++ 2005	8.0 Prof. Ed.	1, 5	х	х
Microsoft Platform SDK	14.0		х	
Intel Visual Fortran	9.0	7	х	

### Simulink 6.5 (R2006b) and Related Products

Microsoft Window	S		Simulink (S-Functions)	Simulink (Model Referencing)	Simulink Accelerator	Stateflow	Real-Time Workshop	xPC Target
Compiler	Version	Notes	6.5	6.5	6.5	6.5	6.5	Not Supported
Microsoft Visual C++ 2005	8.0 Prof. Ed.	1	х	х	x	х	х	
Intel Visual Fortran	9.0	4, 7	х		х			

## Notes for the Microsoft Windows Tables for all MATLAB 7.3 (R2006b) and Simulink 6.5 (R2006b) Related Products

- 1. The list that is generated when using the mex -setup and mbuild -setup commands refers to the Microsoft Visual C++ .NET 2003 Compiler as Microsoft Visual C/C++ 7.1, and refers to the Microsoft Visual C++ 2005 Compiler as Microsoft Visual C/C++ 8.0. Only the Professional Edition of the Microsoft Compiler (version 6.0, 7.1 or 8.0) is officially tested and supported by the MathWorks products.
- 2. In order to build .NET components, the Microsoft .NET Framework SDK 1.1 or 2.0 must be installed. These products are automatically installed by Visual Studio 2003 or 2005 respectively, and they can also be downloaded from the Microsoft website: http://msdn.microsoft.com.



In order to execute applications that use the resulting .NET components, the target machine must have the matching .NET Framework installed.

- 3. Version 6 of the Borland C++ Builder is packaged with Borland C/C++ Compiler 5.6. Version 5 of the Borland C++ Builder is packaged with Borland C/C++ Compiler 5.5.
- 4. Fortran compilers are only supported with Simulink for creating Simulink S-functions using the MATLAB MEX command. The S-functions can be used with normal and accelerated simulations.
- 5. To use Microsoft Visual Studio 2005 with MATLAB on 64-bit systems, the "X64 Compilers and Tools" must be chosen during installation of Microsoft Visual Studio 2005.
- 6. The Compaq Visual Fortran 6.1 compiler is being phased out and will not be supported in a future release.
- 7. Intel compilers depend on tools provided by Microsoft development products. The following combinations are supported by MATLAB and Simulink related products:Exception Handling

Intel Compilers on Microsoft Windows		Microsoft Visual Studio .NET 2003 Professional Edition (32-bit)	Microsoft Visual Studio 6.0 Professional Edition (32-bit)	Microsoft Platform SDK for Windows Server 2003 (64-bit)		
Compiler	Version	7.1	6.0	14.0		
Intel C++ 7.1	7.1		х			
Intel Visual Fortran 9.0	9.0	x		х		

#### **Exception Handling**

When using C++, the MATLAB Compiler relies on the availability of exception handling in the C++ language. Several of the supported compilers do not properly support C++ exception handling. Consequently, our support for exception handling is limited on those platforms.

#### **Macintosh**

### All MATLAB 7.3 (R2006b) and Simulink 6.5 (R2006b) Related Products

Macinto	esh		MATLAB	MATLAB Compiler	Simulink	Stateflow	Real-Time Workshop
Compiler	Version	Notes	7.3	4.5	6.5	6.5	6.5
gcc/g++	3.3		х	Х	х	х	х
Absoft f77/f90	8.2a	1	х		х		



# Notes for the Macintosh Table for all MATLAB 7.3 (R2006b) and Simulink 6.5 (R2006b) Related Products

1 Fortran compilers are only supported with Simulink for creating Simulink S-functions using the MATLAB MEX command. The S-functions can be used with normal and accelerated simulations.

#### **UNIX**

UNIX / Linux	UNIX / Linux							do
			MATLAB	MATLAB Compiler	MATLAB Builder for Java	Simulink	Stateflow	Real-Time Workshop
Compiler	Version	Notes	7.3	4.5	1.0	6.5	6.5	6.5
Linux (32-bit) gcc / g++	3.4.5		х	х		х	х	х
Linux (32-bit) g77	3.4.5	1	х			Х	х	
Linux (64-bit) gcc / g++	3.4.5		х	х		х	х	х
Linux (64-bit) g77	3.4.5	1	х			х	х	
Solaris cc / CC	5.5		х	х		х	х	х
Solaris gcc / g++	3.2.3	3	х			х	х	х
Solaris f90	7.1	1	х			х		
Sun Java Development Kit (JDK)	1.5	2			х			
	1.4	2			х			



### Notes for the UNIX Table for all MATLAB 7.3 (Release 2006b) and Simulink 6.5 (Release 2006b) Related Products

- 1. Fortran compilers are only supported with Simulink for creating Simulink S-functions using the MATLAB MEX command. The S-functions can be used with normal and accelerated simulations.
- 2. The Sun Java Development Kit (JDK) versions specified here apply to the following UNIX platforms: Linux (32-bit), Linux (64-bit), and Solaris.
- 3. gcc is supported on Solaris for MEX-files and Simulink S-functions, but not Engine or MAT-file programs.
- To determine what compiler you are using on UNIX machines, see Solution 1-1880F.

#### **Additional Information**

• What products do I need to buy in addition to a compiler?

## **Real-Time Windows Target**

• Real-Time Windows Target contains a built-in compiler that is shipped with the product. The compiler used is Open Watcom and Real-Time Windows Target uses this compiler exclusively.

