

## Embed 2017.2 Release Notes

### INTRODUCTION

**solidThinking Embed**, formerly known as VisSim Embedded, is a block diagram language for model-based embedded development. It supports UML State Charts integrated with dataflow block diagrams. This allows you to easily simulate and generate efficient fixed- and floating-point C code for embedded microprocessor targets. It provides a complete visual RTOS with on-chip peripheral drivers, unlimited pre-emptible tasks, simple interrupt handler creation, interrupt-based serial I/O queuing, and an interface to hand code.

**solidThinking Embed** is unique in its ability to generate highly efficient, high sample rate, low jitter target executables.



### PLATFORM SUPPORT

Platform		
OS	Version	Architecture
Windows	10/8.1/7	x86_64

### REQUIREMENTS

solidThinking Embed 2017.2 requires:

- Compiler: *Texas Instruments Code Composer Studio version 6 or version 7.*
- Code Generation Tools for MSP430 support: *TI-CGT version 4.4.x.*

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The following features and enhancements have been added for **solidThinking Embed 2017.2**:

**GENERAL: INTEGRATION**

<b>Open Vision</b>	Leveraging the OpenCV library, a collection of blocks for reading, processing and displaying images and videos have been added. Applications include, for example, detecting features on an image of tracking objects on videos or webcam live streams.
<b>Wizard</b>	DLL Wizard support of Microsoft Visual Studio versions 6 – 2017
<b>Matrix pointer</b>	This is a new signal data type for passing vector and matrix data, 3D data, and videos.
<b>WM_VSM_GET_CONNECTOR_TYPE_STR</b>	New pointer argument for the event handler function. It supplies the text string of the pointer

**CODE GENERATION**

<b>ARDUINO</b>	Added with release 2017.1 of Embed, the support for ARDUINO targets is improved with release 2017.2
<b>Texas Instrument CCS</b>	TI CCS V7 support is improved
<b>F280049 support</b>	<p>Embed has extended its target support to include the Texas Instruments F280049, a low-cost version of the F28339. The F280049 is designed for use in the following applications:</p> <ul style="list-style-type: none"> <li>• Appliances</li> <li>• Building Automation</li> <li>• Electric Vehicle and Hybrid Electric Vehicle Powertrain</li> <li>• Factory Automation</li> <li>• Grid Infrastructure</li> <li>• Industrial Transport</li> <li>• Medical, Healthcare, and Fitness</li> <li>• Motor Drives</li> <li>• Power Delivery</li> </ul>

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	<ul style="list-style-type: none"> <li>• Telecom Infrastructure</li> <li>• Test and Measurement</li> </ul>
<b>Expanded JTAG support</b>	JTAG support to include XDS100V3, XDS100, and XDS200

The following issues have been resolved for **solidThinking Embed 2017.2**:

**GENERAL: SIMULATION**

Copy paste a <code>convert</code> block can result in a crash
OML workspace tool doesn't print all the variables returned from function call
1/X block applied on complex number produces wrong result
Extra character added to the <code>const</code> block
Fix for SUGR-23020
Blurred display 2017.1 compared to 2017 build 13
Embed cannot open any vsm model after drag and drop a file of wrong type
Nyquist plot displays wrong result
<code>disp</code> command doesn't work correctly in OML workspace window
Improve error message when the license is missing
display issue with high resolution monitor
Document Analyze preference dialog
copy/paste issue (specific to compound blocks with variable local bounds)
Irresponsive debug diagram (slider issue)
Add a help button to Analyze Preferences dialog
<code>index</code> block should not be under Annotation
Dialog boxes for RealTime, UDP, CAN blocks do not have Help button
Pop up scroll menu on scroll bar: Top and Bottom selections do not work
No Icon/Info in Add/Remove Programs
In some diagrams, copy and paste the <code>convert</code> block can cause a crash

**CODE GENERATION**

Code generation routine does not generate all required code
Application crashes when compiling NLab3phaseCV6-069.vsm
Texas Instrument Code Composer Studio V7 compatibility issue
Compilation error with UART block [C2000]

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Visual Studio compiler is called when compiling some MSP430 diagrams in batch mode
Compile in batch mode doesn't close the dos prompt after compilation for MSP430 and CortexM3 and Arduino targets
Installation Script: doesn't recognize VS2017
DLL Wizard: not working with VS2017
Compile the diagram in batch model doesn't work in HIL
Arduino convert to string failure
Arduino Serial Uart doesnt work if the input is string
In Arduino, idleLoop is not working when Codegen is enabled as background thread on a compound block
Model "blinkF28377" compilation failure
Model "blinkF28055" compilation with a warning
i2c-eeepromReadWriteF28027.vsm fails to compile
Help button on TI 16 and 32 Bit Digital Motor Control blocks doesn't work
Compile error with canRxTxF283x.vsm
Update messages when Microsoft Visual Studio compiler is missing
Arduino -No Conflict message when same PWM pin and digital i/o pin is used
Example diagrams should not be placed at <install path>\cg
Application crashes when set target to CortexM3 and select interrupt