EMBED™
solidThinking®

2017.1 Embed Release Notes

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INTRODUCTION

solidThinking Embed, formerly known as VisSim Embedded, is a block diagram language for model-based embedded development. With **solidThinking Embed**, you can generate production-quality C code that can be automatically compiled and linked to run on Texas Instruments C2000, ARM Cortex M3, and MSP430 microprocessor controllers or host PC. The generated code is both compact and highly optimized, which is essential for low-cost microprocessors and high-speed sampling rates. Additionally, **solidThinking Embed** 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. It supports UML State Charts integrated with dataflow block diagrams. Together, this allows you to easily simulate and generate efficient fixed- and floating-point C code for embedded microprocessor targets.

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 2017.1 requires:

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

The following features and enhancements have been added for **solidThinking Embed** 2017.1:

GENERAL: INTEGRATION

User Interface	- Simplified start-up menu - CTRL+mouse-wheel for zooming in and out of block diagrams
Plotting	- Plot speed-up for high data point counts - Plot smoothing for vector updates, such as monitor buffer plotting - Polar plot x-axis radius values are always positive
Wizard	DLL Wizard support of Microsoft Visual Studio versions 6 - 2017

CODE GENERATION

ARDUINO	New target support for ARDUINO UNO board
Texas Instrument CCS	TI CCS V7 support is added
Batch Mode	Target can now be specified for batch mode compilation

The following issues have been resolved for **solidThinking Embed 2017.1**:

GENERAL: SIMULATION

dialog Table - incorrect results
Corrupted saved file with NAN and INF on plots
Geometric markers on small data sets
Plot block: Blinking plots when displaying vector data

Plot Block Fixed Bounds Not Working
Inverse Clarke Transform produces wrong result
System Start time when changed to 1. It cannot be reset back to zero
Error in the GPIO selection for the 28055 SCI-B
Save Changes to Model Prompt when no changes are made
Change on the Boolean doesnt reflect the changes on the file
Plots issue

CODE GENERATION

Fail to compile F28377 targets
msp430LCD.vsm generates an error during compilation
Missing support for SPI channels 1-3
GPIO/PWM code generation not working as expected on F2812 target
Codegen of large ARM core diagram hung on attempt to boot C28 core
Compile fails on F28377x Hi Res ePWM
Uniflash support documentation
ADCtestF28075.vsm fails to compile
Compileation error when AdcCircBuf1-F28027.vsm
DRV8312EVM-pmsm-28M35H52.vsm fails to compile with CCS 6.2.0
TI DMC 16 bit - Resolver Decoder block
Error in the GPIO selection for the 28055 SCI-B
Layout issues in CodeGen dialog