Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous)

Report of the Event

Title of the Event: **Workshop on Model Based Embedded System Design Using VisSIM**

Organized Date: 7th March 2013 to 8th March 2013

Summary:

The "VisSim/C-Code" add-on generates ANSI C code for the model, and generates target specific code for on-chip devices like PWM, ADC, encoder, GPIO, I2C etc. This is useful for development of embedded systems. After the behavior of the controller has been simulated, C-code can be generated, compiled and run on the target. For debugging, VisSim supports an interactive JTAG linkage, called "Hotlink", that allows interactive gain change and plotting of on-target variables. The VisSim generated code has been called efficient and readable, making it well suited for development of embedded systems.[4] VisSim's author served on the X3J11 ANSI C committee and wrote several C compilers, in addition to co-authoring a book on C.[5] This deep understanding of ANSI C, and the nature of the resulting machine code when compiled, is the key to the code generator's efficiency. VisSim can target small 16-bit fixed point systems like the Texas Instruments MSP430, using only 740 bytes flash and 64 bytes of RAM for a small closed-loop Pulse-width modulation (PWM) actuated system, as well as allowing very high control sample rates over 500 kHz on larger 32-bit floating point processors like the Texas Instruments150 MHz F28335.