



FOR IMMEDIATE RELEASE

Contact Information:

EMA Design Automation
Janet Roberts
949-443-1695
Janet@GJRoberts.com

AEi Systems
Lee Weinberg
310-216-1144
Lee@AENG.com

EMA Design Automation and AEi Systems Announce New Power IC Model Library for PSpice

Rochester, NY, August 2, 2005 – EMA Design Automation™, a full-service provider of Electronic Design Automation (EDA) solutions, and AEi Systems, a world leader in power electronics modeling and analysis, today announced the release of the Power IC Model Library™. This PSpice® library incorporates over 150 time-domain simulation models for power electronic designs and gives designers capabilities previously unavailable for these popular parts — the ability to plug in a model, representative of the actual IC, and simulate the switching performance under actual operating conditions.

An important breakthrough for power engineers

“Many EDA vendors only have access to information in the data sheets, which is not sufficient when modeling a controller or regulator,” stated Charles Hymowitz, Managing Director of AEi Systems. “The data sheets simply do not have the level of detail required, and companies who rely solely on data sheet input produce substandard and inaccurate models.”

“AEi Systems has proprietary relationships with nearly all of the top analog IC manufacturers. Those relationships give AEi access to the part characteristics needed to produce models with the accuracy our customers expect,” stated Manny Marcano, President of EMA Design Automation. “Because AEi Systems is the sole developer of many Power IC models, this library contains parts that are not available from any other EDA company. At \$995 per user, the library is a tremendous value, since single models can cost from \$2,000 to \$15,000 each to develop.”

Complex Models, Verified with Bench Data

SMPS applications today are much more demanding than ever. Today's designs require increases in power IC functionality, switching frequency, and system interaction. State space based models simply do not reveal many important nonlinear factors that influence these performance characteristics. The models in this new model library enable designers to perform high-speed, cycle-by-cycle simulations to show true large-signal performance, simulate current-mode control using the latest accurate modeling techniques, run CCM and DCM converter simulations, generate line and load step responses, and measure power stage loss and stress analysis for all major components.

The models in the Power IC Model Library are compared and verified with bench data under startup, steady state, line, and load transient conditions. Nonlinear characteristics such as propagation delay, switching speed, drive capability, maximum duty cycle/current limits, and startup phenomena are all accurately modeled. Designers can directly compare the performance of components from various vendors and analyze the effects of different implementations such as peak current mode control, hysteric current control, low voltage, and low operating current, to name just a few.

The Power IC Model Library for PSpice includes:

- Phase shift, voltage and current mode PWM controllers, switching regulators, motor controllers, power factor correction, power MOSFET drivers
- Popular parts: UC384x, UC152x, HIP2100, LT124x, UC182x, UC1846, TL431, IR2110, 57xxx, UC1854, TNY256, MIC44xx
- Nonlinear magnetic cores, transformers, opto-couplers
- Models for Texas Instruments, Intersil, ON Semiconductor, Linear Technology, National Semiconductor, International Rectifier, Micrel, Vishay, and more

The Power IC Model Library includes model netlists in PSpice syntax, schematic symbols for OrCAD Capture[®] and a set of example application circuits for many of the IC models.

More details are available at www.ema-eda.com, including a list of the components and documentation detailing the models' accuracy and performance.

About AEi Systems

AEi Systems is a world leader in SPICE modeling, worst case, failure and reliability analysis, and power systems analysis and design since 1995. AEi Systems serves nearly every significant IC and aerospace manufacturer and many of their customers. AEi Systems' headquarters are in Los Angeles, California. For more information on AEi Systems, please contact the company on 310-216-1144 or visit the company's website at <http://www.AENG.com>.

About EMA Design Automation, Inc.

EMA Design Automation, Inc. is a full-service provider of Electronic Design Automation (EDA) solutions including software tools, consulting services, product training, and technical support for the entire PCB design process. EMA was founded in 1989 and has been a Cadence® distributor since 1998. Staffed with experienced engineers, EMA offers EDA design solutions tailored to the needs of each individual customer. EMA is a privately held corporation headquartered in Rochester, New York. Visit EMA at www.ema-eda.com for more information.

#

EMA Design Automation and the EMA logo are trademarks of EMA Design Automation, Inc.
AEi Systems, the AEi Systems logo, and Power IC Model Library are trademarks of AEi Systems, LLC.
Cadence, PSpice, OrCAD, and OrCAD Capture are registered trademarks of Cadence Design Systems, Inc.
All other trademarks in this release are the property of their respective owners.