

NEWS RELEASE

Contacts:

Marketing:

Abid Hussain, Summit Microelectronics, Inc.: T: 1 408 523 1000,
ahussain@summitmicro.com

Media:

Barbara Kalkis, *Maestro* Marketing & Public Relations, T: 1 408 996 9975,
kkalkis@compuserve.com

Summit Introduces Four-Channel Programmable Power Management Solutions for Consumer Applications

Higher-power output and integrated digital power control functions address increasingly complex and challenging power management requirements

San Jose, Calif. – April 23, 2007 – Summit Microelectronics has expanded its family of Programmable Power Manager (PPM) integrated circuits (ICs) with two new devices targeted at higher-power applications. The SMB113A and SMB117 continue Summit's unique approach to power supply design by enabling ease-of-use, unparalleled flexibility and high-performance. Using Summit's PPM ICs, system designers can digitally program the entire multiple output power supply and associated power management functions with a few clicks of a mouse compared to the tedious iterative hardware design of conventional, "hard-wired" analog power solutions.

The SMB113A and SMB117 combine precise power delivery and power control in a single, space-saving device. The integration of four Pulse Width Modulation (PWM) controllers and a wide range of sophisticated power management functions eliminate the need for many external components and reduce system cost and space. Summit's configurable technology enables the implementation of flexible "platform solutions" that can be easily modified for different designs without any hardware changes. Incorporating a level of programmability, integration and precision previously missing in power management offerings, the SMB113A and SMB117 can reduce development time and engineering investment and bring end-products to market faster and with reduced cost.

“With the Programmable Power Manager family of products, Summit has dramatically reduced the R&D efforts and cost of complex, multiple-output power design in consumer electronics. The SMB113A and SMB117 expand the product family and address a new range of higher power applications such as set-top boxes, HD digital televisions and SOHO networking equipment,” stated George Paparrizos, Summit marketing director.

Features

The SMB113A and SMB117 offer four identical channels of PWM DC-DC step-down (buck) converters. The PWM channels on both devices are digitally programmable for output characteristics and monitoring, including voltage output levels to +/-1.5% accuracy. The SMB113A operates at a switching frequency of 800kHz, whereas the SMB117’s switching frequency is 400kHz. Switching “dead-time” is adjustable and can be programmed at the factory for optimized performance. Furthermore, the devices’ high drive capability allows a current delivery of 10A or higher, while using a wide variety of industry-standard MOSFETs.

Complementing the precise power regulation is a suite of advanced power control features including: static and dynamic output voltage scaling and margining, independent channel sequencing/enable, and output slew rate control. Additionally, the devices provide complete power system diagnostics, including input and output monitoring for under/over-voltage (UV/OV) conditions, as well as a RESET/HEALTHY monitor that eliminates the need for external RESET ICs.

Both products operate directly from +2.7V to +6.0V input; higher input voltages (two-cell Li-Ion or +12V) can also be accommodated in many cases with simple applications configuration. The SMB113A and SMB117 are offered in both the commercial (+0C to +70C) and the industrial (–40C to +85C) temperature range.

Programming is achieved via the convenient I²C bus and configuration data is safely stored in non-volatile EEPROM memory of which 96 bytes are available for user data storage. The devices can be programmed during development and then used in a “fixed” configuration or they may be re-programmed in-system via the I²C interface.

Applications

The SMB113A and SMB117 are well suited for increasingly complex consumer and computing electronics applications such as RAID cards, ADSL/Cable modems/routers, printers, DVD/MP3 portable media players/recorders, global positioning (GPS) receivers, car/marine navigation systems, high-definition televisions (HDTV), LCD/TFT TVs/monitors, digital set-top boxes (STB) and digital video recorders (DVRs).

Pricing and Availability

The SMB113A and SMB117 are offered in a thermally-enhanced 5mm X 5mm, 32-pad QFN package that is lead-free and RoHS-standard compliant. Available now in production quantities, both products are priced at \$2.26 each for the commercial temperature range and at \$2.56 each for the industrial temperature range in quantities of 1,000 units.

Design Software and Programmer for Prototype Development

To speed user product development, Summit offers customers the SMB113A/117EV companion evaluation board and a graphical user interface (GUI) software so designers can quickly see the features and benefits and design a prototype power supply with the SMB113A or SMB117. This is a complete development tool that lets designers easily manipulate the characteristics of their systems. The SMB113A/117EV design kit includes menu-driven Microsoft Windows (R) GUI software to automate programming tasks and also includes all necessary hardware to interface to the parallel or USB port of a laptop or PC.

Once a user completes design and prototyping, the SMB113A/117EV automatically generates a HEX data file that can be transmitted to Summit for review and approval. Summit then assigns a unique customer identification code to the HEX file and programs the customer's production devices prior to final electrical test operations. This ensures that the device will operate properly in the end application. The design kit software can be downloaded today from Summit's website (www.summitmicro.com).

About Summit Microelectronics

Summit Microelectronics is the leader in flexible, highly integrated power management solutions combining precision power regulation with sophisticated digital control in a single

chip. The Company's devices are found in a variety of consumer, communications and computing applications.

Summit's unique programmable, non-volatile mixed-signal IC technology combined with a convenient GUI development environment allows for unparalleled functional and parametric flexibility in power supply design. This flexibility applied to common problems such as dynamic voltage/current control and intelligent battery charging, allows for significant system performance improvement while realizing drastic reductions in design effort.

Digital programmability enables high integration and system flexibility in a single chip - impossible with conventional "hard-wired" analog power ICs. Additionally, this integration reduces the bill-of-materials yielding the lowest total system cost and size. Summit solutions address the biggest challenges facing OEM developers today: increasing system functionality, performance and complexity accompanied by shrinking development time cycles.

-ends-

The URLs for these products are

http://www.summitmicro.com/prod_select/summary/SMB113A/SMB113A.htm

http://www.summitmicro.com/prod_select/summary/SMB117/SMB117.htm

Summit Microelectronics
757 N. Mary Avenue
Sunnyvale, CA 94085
T: 1.408.523.1000
WWW.SUMMITMICRO.COM