

News Release

Contacts:

Marketing:

Abid Hussain
Summit Microelectronics, Inc.
T: 1 408 436 9890
ahussain@summitmicro.com

Media:

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

Summit Continues to Grow Award-Winning Programmable Power Manager Device Family

Precision regulation and programmable power management enables popular consumer electronics applications such as TFT/LCD displays, CCD imagers and white LED backlighting

San Jose, Calif. – March 29, 2005 – Summit Microelectronics, Inc. has announced two new devices in a growing family of award-winning Programmable Power Manager (PPM) integrated circuits (ICs). The SMB111 and SMB112 continue to expand Summit's system-level power supply offerings, delivering unparalleled flexibility and ease of implementation to system design engineers. Using Summit's PPM IC's, 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 analog power solutions.

Incorporating a level of programmability, integration and precision previously missing in power management offerings, the SMB111 and SMB112 integrate precise power delivery and power control in a single device. In addition to simplifying the power supply design, Summit's configurable technology creates a "power system platform" that allows a significant degree of hardware re-use. Original equipment and original design manufacturers (OEMs and ODMs) can reduce their development time and engineering investment and bring consumer products to market faster and more reliably.

The SMB111 four-channel and SMB112 five-channel PPM IC's are optimized for increasingly complex consumer electronics applications such as LCD/TFT TVs/monitors, digital cameras/camcorders (DSC/DCC), DVD/MP3 portable media players/recorders, global positioning (GPS) receivers, personal digital assistants (PDAs), digital set-top boxes (STB) and digital video recorders (DVRs) as well as 3G "smart" mobile phones.

"The SMB111 and SMB112, based on the award winning SMB120, further expand Summit's

Programmable Power Manager family,” stated Abid Hussain, Summit director of marketing. “These new products demonstrate Summit’s continued commitment to easing the burden on today’s power supply designers, allowing them to choose from a range of standard products to address virtually any complex power supply challenge.”

The SMB111 comprises four channels of power conversion: three pulse-width modulated (PWM) DC-DC step-down (buck) converters, and one PWM DC-DC step-up (boost) converter. The SMB112 offers five channels: two PWM DC-DC step-up (boost) converters, one PWM DC-DC step-down (buck) converter, one PWM DC-DC inverting step-up/down (buck/boost) converter, and one low-dropout (LDO) linear regulator. The PWM channels on both devices are digitally programmable for output characteristics and monitoring, including voltage output levels to +/- 0.5% accuracy. Each array of converters is well suited to powering components commonly found in digital consumer electronics such as LCD-TFT displays, LED backlighting, DSPs, Codecs, embedded CPUs, CCD imagers, motor drives and memory arrays. The outputs are easily scalable for output current due to external MOSFET switches, further enhancing the flexibility for various system requirements.

Complementing the precise power regulation is a suite of advanced power control features including static or dynamic output voltage programming 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), low/missing battery detection, AC adapter detection and RESET/HEALTHY output. The margining function can be conveniently used as an LED backlight brightness or audio-level control. The flexible control capability also enables more sophisticated power management algorithms to boost power efficiency and battery lifetime in an increasingly mobile product mix.

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.

Packaging, Pricing, and Availability

The SMB111 and SMB112 operate directly from +2.7V to +6.0V input, making it ideally suited for one-cell Li-Ion battery applications. Higher input voltages (two-cell Li-Ion or +12V) can be accommodated in many cases with simple applications configuration. The operating temperature range is +0C to +70C and packaging is the 5mm X 5mm 32-pad QFN-32 that is

lead-free and RoHS-standard compliant. Available now in production quantities, the SMB111 and SMB112 are both priced at \$2.60 each in quantities of 1,000 units.

Design Software and Programmer for Prototype Development

To speed user product development, Summit offers customers the SMB111EV and SBM112EV companion evaluation boards providing a graphic user interface (GUI) software so designers can quickly see the features and benefits and design a prototype power supply with the SMB111 or SMB112. This is a complete development tool that lets designers easily manipulate the characteristics of their systems. The SMB111EV and SMB112EV design kits includes menu-driven Microsoft Windows® graphic user interface (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 SMB111EV and SMB112EV kits automatically generate 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: “Programmable analog for a digital world”.

Summit Microelectronics supplies semiconductors that manage and provide power functions in networking/communications, storage/computing, industrial, military, and consumer products. Customers can very rapidly tailor Summit's programmable analog technology to multiple applications by programming the same part.

Founded in 1997, Summit is headquartered in San Jose, California. The Company is ISO 9001 certified.

-ends-

Summit Microelectronics
1717 Fox Drive
San Jose, CA 95131
T: 1.408.436.9890
www.summitmicro.com