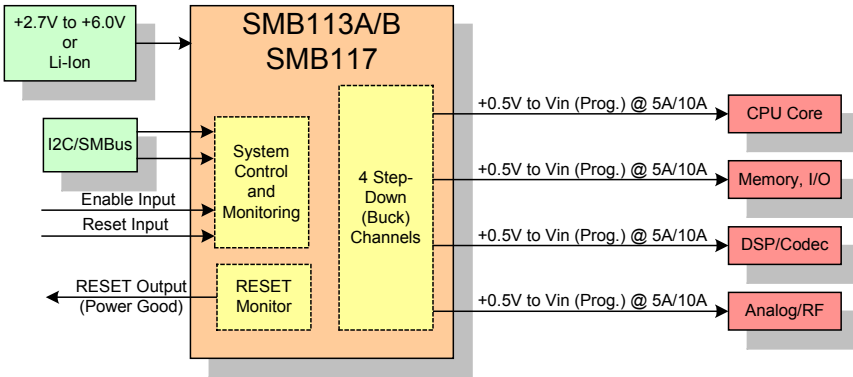


# SMB113A/B/117 – Four-channel Programmable Power Managers for High-power Applications

**SMB113A/B (5A) & SMB117 (10A) Combine High-performance and High-power DC/DC Regulation with Advanced Power System Control**



## Features

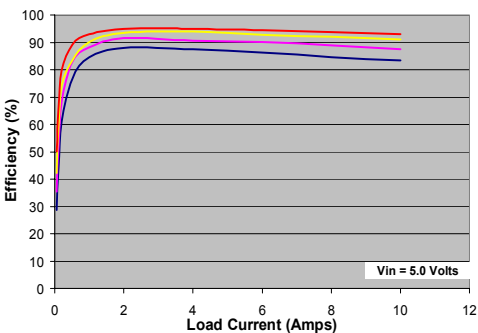
- Input Voltage Range: +2.7V to +6.0V \*
- Output Current Capability:
  - SMB117: 10A
  - SMB113A/B: 5A
- $\pm 1.5\%$  Output Voltage Accuracy
- Up to 95% Voltage Conversion Efficiency
- Switching Frequency:
  - SMB117: 400kHz
  - SMB113A: 800kHz
  - SMB113B: 1MHz
- Integrated RESET Monitor
- Push-button Enable Input
- 0% to 100% Duty Cycle
- Factory-adjustable Dead Time
- I<sup>2</sup>C Serial Interface
- Dynamic Output Voltage Management
- Individual Channel Shutdown Control
- Programmable Sequencing
- Programmable Slew Rate Control
- UV/OV Monitors with RESET Control
- Current Limiting and Thermal Protection
- EEPROM Configuration Storage
- Space-saving 5x5 QFN-32 Package

## Applications

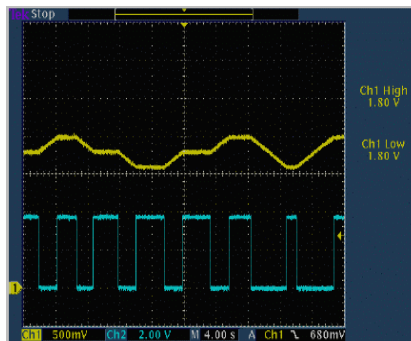
- Set-top Boxes
- Car & Marine Navigation Systems
- HD & LCD/TFT TVs
- Portable Media Players
- Printers & Other Office Equipment
- DDR Memory Applications
- RAID Cards & DSL/Cable Modems
- Computing

\* For higher input voltages – contact factory

SMB117 Efficiency



Efficiency



Dynamic Output Voltage



Sequencing

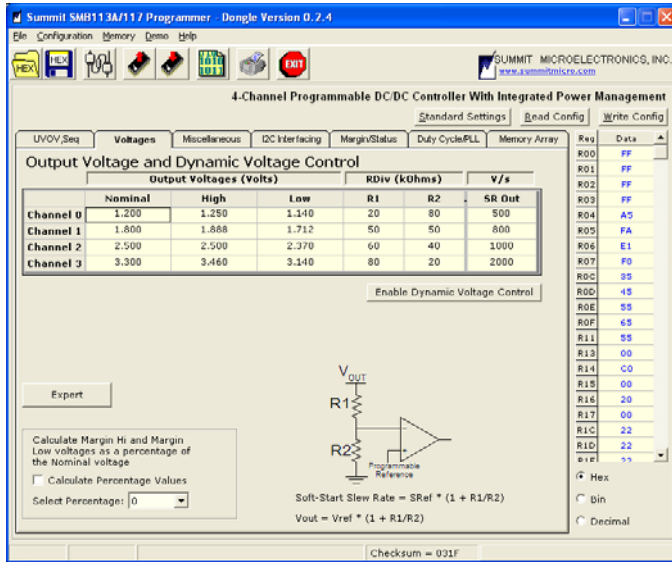
**SUMMIT**  
MICROELECTRONICS, Inc.

"Programmable Power for a Digital World"

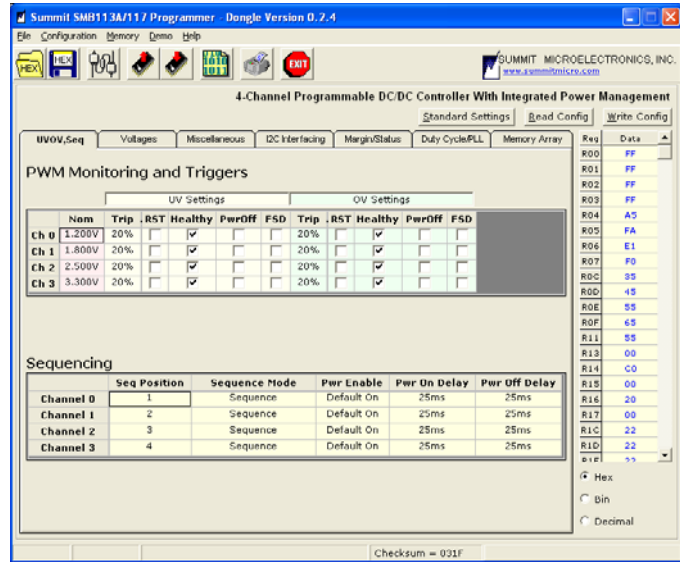
# SMB113A/B/117 – Four-channel Programmable Power Managers for High-power Applications

*GUI allows easy programming of all functions and parameters in a real-time environment*

## Output Voltage Selection



## Power Monitoring & Sequencing



Products are shipped pre-configured for the application, as defined during the design/development stage, and can be re-configured in the event of system changes.

## Complete Programmable Power Manager Offering

Output Channels	SMB135	SMB138	SMB122	SMB120	SMB118	SMB110	SMB111	SMB112	SMB113A	SMB113B	SMB117
Total # of Outputs	1	1	9	9	7	5	4	5	4	4	4
Step-down (Buck)			3 to 4	4	3 to 4	2	3	1	4	4	4
Step-up (Boost)			2 to 4	3	1 to 2	1	1	2			
Inverter (Buck-Boost)			0 to 1	1		1		1			
Linear Battery Charger			1		1						
Switching Battery Charger	1	1									
LDO			1	1	1	1		1			
Frequency (kHz)	1250	3000	1000	800	1000	800	800	800	800	1000	400
Package Size (mm)	1.3 x 2.1	2 x 3	9 x 9	9 x 9	7 x 7	5 x 5	5 x 5	5 x 5	5 x 5	5 x 5	5 x 5
Package Type	CSP-15	CSP-20	QFN-64	QFN-64	QFN-48	QFN-32	QFN-32	QFN-32	QFN-32	QFN-32	QFN-32