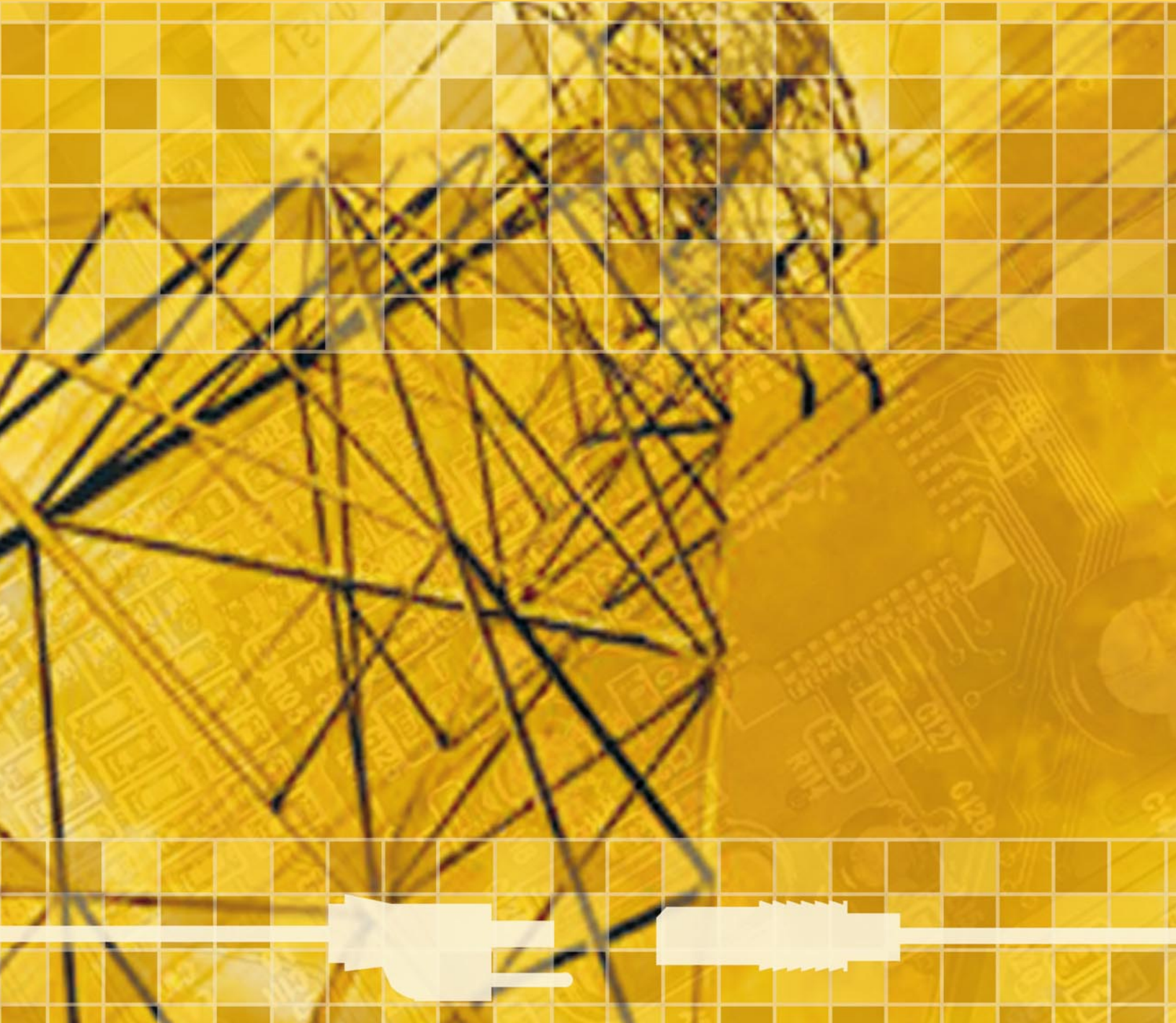


**Providing the most efficient, space saving
solutions for power conversion**

Power Management



LDO Market Coverage

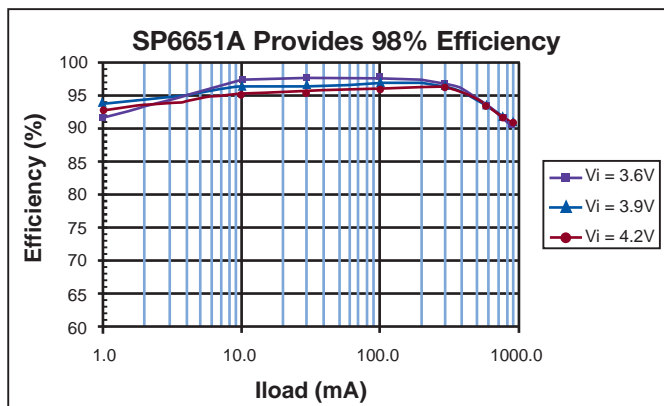
Sipex covers the voltage spectrum with their LDOs

I_O	100mA	150mA	300mA	500mA	600mA	800mA	1000mA	1500mA	3000mA	5000mA	7000mA	8000mA
V_O												
1.2V												
1.5V												
1.8V												
2.5V												
2.8V												
2.85V												
3.0V												
3.3V												
3.5V												
5.0V												

Highest Efficiency, Lowest Quiescent Current

Since portable electronics demand the longest possible battery life, efficiency is a critical parameter. A key differentiator in Sipex's Power Management product family is the high efficiency operation provided by our parts. With regulators providing up to 98% efficiency, Sipex offers industry leading performance.

Equally important in battery life is the amount of power consumed during standby time when the device is left on, but idle. A key parameter that determines standby time is quiescent current, which is the amount of power consumed by the regulator. Sipex's portable power management products operate on very low quiescent current while in use and consume as little as 1nA when in standby mode.



Design Made Easy

To facilitate circuit design, Sipex offers an interactive, internet-based design tool. This convenient application utilizes design specifications such as input requirements, output requirements and configurations to create a customized solution including a schematic with calculated component values and a BOM with on-line kitting. This new tool makes design easy for the novice designer as well as the seasoned engineer.

Our initial tool, called LED Lab™, focuses on lighting designs. This service is available from the Sipex website at www.sipex.com when you click on the "Introducing LED Lab" box.





Sipex offers a broad array of power management integrated circuits (IC) that are used in a wide variety of end applications. These ICs deliver key benefits to portable power and distributed power applications, providing excellent power efficiency, increased miniaturization and support for a variety of voltage levels.

Many of Sipex's most advanced power management ICs are offered in thermally enhanced, leadless DFN or QFN packages for the best blend of low thermal impedance and minimal circuit board area. In an effort to respect the environment and reduce the use of hazardous substances, all Sipex products have been qualified and released in lead-free versions.

Sipex power management products can be used as stand alone solutions but are designed to be used together to create a complete power management system. A standard portable application would generally require a buck regulator, a supervisory IC, charge pumps, boost regulators and several CMOS LDOs. High power applications like a computer motherboard may pair several PWM controllers, supervisory ICs, voltage references and several PNP LDOs for its power management needs.

Sipex offers state of the art solutions providing high efficiency, low quiescent current, small size and the industry's best price/performance ratio.

Product	Description	Industry	Key Applications
Low Dropout Regulator (LDO)	The simplest and lowest cost technique for stepping down DC voltage for high performance ASICs and microprocessors. An LDO provides a quiet, well regulated DC voltage supply that has excellent transient response.	Computing Portables Communications Automotive Consumer Industry	CPU Voltage Source Audio System Memory Supply Amplifier Power Power Meter White Goods (Washer, Dryer, etc) Industrial Equipment
Buck Regulator	Buck regulators are used to step down input voltage to the desired level with higher efficiency than an LDO. A buck regulator integrates power FETs into the IC, providing a monolithic power converter.	Computing Portables	DVD System Mobile Phone MP3 Player PDA
Boost Regulator	Boost regulators are used to step up input voltage, typically supplied from a battery.	Portables Consumer	Lawn Lighting Camera Flash Digital Camera
PWM Controller	The PWM controller is at the heart of high power DC/DC converters. The device is used to drive external FETs for delivering output current up to 30A.	Computing Peripherals Automotive	VGA Card Motherboard Printers Auto Lighting Power Supply
Charge Pump	Charge pump technology affords the benefits of a switching regulator without the use of an external inductor. Charge pumps can boost voltage or invert the input to a negative voltage.	Portables Peripherals	Electric Toothbrush Mobile Phone Camera Flash MR Head Bias
µP Supervisors	Microprocessor supervisors and reset circuits are used to reboot electronic equipment on a system crash or voltage perturbation.	Portable Automotive Consumer Computing	POS Terminal Electricity Meter Game Systems Motherboard White Goods (Washer, Dryer, etc)
Voltage References	A voltage reference maintains a precise voltage at its output regardless of variations in the external environment, such as voltage fluctuations, temperature changes, etc.	Computing Consumer Industry	Motherboard Power Supply VGA Card Power Meter Industrial Equipment

Low Dropout Regulators

The simplest and lowest cost technique for stepping down DC voltage for high performance ASICs and microprocessors. A low dropout regulator (LDO) provides a quiet, well regulated DC voltage supply that has excellent transient response. Sipex offers an extensive line of LDOs in a wide range of voltages and currents.

Applications

- Desktop Computers
- Peripherals
- Telecom and Datacom Equipment
- General Electronics

Key Features

- Small packages
- Low output voltage: $V_{OUT} < 2V$
- Low quiescent current: $I_Q < 30\mu A$
- Low input voltage: $V_{IN} < 3V$
- Low noise, high PSRR
- Fast turn on time $< 100\mu s$, high speed

100mA to 400mA

Part No.	I_{OUT}	V_{IN} Min	V_{IN} Max	I_Q	Acc.	V_{DROP}	Output Voltage*	Package
LP2950	100mA	2.4V	30V	150 μ A	0.5%, 1%	380mV	3.3V, 5V	3 Pin TO-92
LP2951	100mA	2.4V	30V	150 μ A	0.5%, 1%	380mV	3.3V, 5V & Adjustable	8 Pin NSOIC
SPX116	100mA	3.6V	14V	400 μ A	3%	300mV	3.3V, 3.5V	3 Pin TO-92 3 Pin SOT-89
SPX2931	100mA	4V	26V	400 μ A	2%, 3%	300mV	3.3V, 3.5V	3 Pin TO-92 3 Pin SOT-89
SP6200	100mA	2.5V	6V	28 μ A	2%	160mV	1.5V, 1.8V, 2.7V, 2.85V, 3V, 3.3V, 5V & Adjustable	5 Pin SOT-23 8 Pin DFN
SP6213	100mA	2.5V	6V	65 μ A	2.5%	250mV	1.8V, 2.5V, 2.7V, 2.85V, 3V, 3.3V, 5V	5 Pin SC-70
SPX1121	150mA	3.9V	30V	150 μ A	1%	300mV	3.3V, 5V	3 Pin TO-92 5 Pin SOT-23
SPX2930	150mA	4V	26V	400 μ A	3%	300mV	3.3V, 3.5V	3 Pin TO-92 3 Pin TO-220 3 Pin SOT-89
SPX2950	150mA	2.4V	30V	150 μ A	0.5%, 1%	300mV	3.3V, 5V	3 Pin TO-92
SPX2951	150mA	2.4V	30V	150 μ A	0.5%, 1%	300mV	3.3V, 5V & Adjustable	8 Pin NSOIC
SPX5205	150mA	2.5V	16V	70 μ A	1%	210mV	1.2V, 1.5V, 1.8V, 2V, 2.5V, 2.8V, 3V, 3.3V, 5V & Adjustable	5 Pin SOT-23
SP6201	200mA	2.5V	6V	28 μ A	2%	320mV	1.5V, 1.8V, 2.7V, 2.85V, 3V, 3.3V, 5V & Adjustable	5 Pin SOT-23 8 Pin DFN
SPX2954	250mA	2.4V	30V	150 μ A	0.5%, 1%	310mV	3.3V, 5V	3 Pin SOT-223 3 Pin TO-92 3 Pin TO-220 3 Pin TO-263 8 Pin NSOIC
New! SP6203	300mA	2.7V	6V	45 μ A	2%	180mV	2.5V, 2.7V, 2.8V, 2.85V, 3V, 3.3V & Adjustable	5 Pin SOT-23 8 Pin DFN
SPX1521	300mA	4.1V	20V	150 μ A	1%	300mV	3.3V, 5V	3 Pin SOT-223 3 Pin TO-252 3 Pin TO-220 3 Pin TO-263
SPX2920	400mA	3.9V	20V	140 μ A	1%	370mV	3.3V, 5V	3 Pin SOT-223 3 Pin TO-220 3 Pin TO-263 8 Pin NSOIC
SPX2945	400mA	4.1V	30V	100 μ A	0.5%, 1%	420mV	3.3V, 5V	3 Pin SOT-223 3 Pin TO-252 3 Pin TO-220 3 Pin TO-263 5 Pin TO-263 8 Pin NSOIC
SPX1129	400mA	4.1V	20V	150 μ A	1%	420mV	3.3V, 5V	3 Pin SOT-223 3 Pin TO-252 3 Pin TO-220 3 Pin TO-263
New! SPX2975	400mA	5.5V	42V	70 μ A	2%	250mV	5V	5 Pin TO-220 5 Pin TO-263



* Additional voltages may be available. Contact factory if not listed.

Low Dropout Regulators (cont.)



New!

500mA to 3A								
Part No.	I _{OUT}	V _{IN} Min	V _{IN} Max	I _Q	Acc.	V _{DROP}	Output Voltage*	Package
SP6205	500mA	2.7V	6V	45µA	2%	300mV	2.5V, 2.7V, 2.8V, 2.85V, 3V, 3.3V & Adjustable	5 Pin SOT-23 8 Pin DFN
SPX3819	500mA	2.5V	16V	90µA	1%	340mV	1.2V, 1.5V, 1.8V, 2.5V, 3V, 3.1V, 3.3V, 5V & Adjustable	5 Pin SOT-23 8 Pin NSOIC 8 Pin DFN
SP6231	500mA	4.4V	6V	400µA	3%	400mV	3.3V	8 Pin NSOIC 6 Pin DFN
SPX1202	600mA	4.25V	12V	5mA	1%	1.05V	2.5V, 3V, 3.3V & Adjustable	3 Pin SOT-223 3 Pin TO-252 3 Pin TO-220 3 Pin TO-263
SPX1117	800mA	2.63V	12V	5mA	1%	1.1V	1.5V, 1.8V, 2.5V, 2.8V, 2.85V, 3V, 3.3V, 5V & Adjustable	3 Pin SOT-223 3 Pin TO-252 3 Pin TO-220 3 Pin TO-263
SPX2810	1A	2.75V	7V	5mA	1%, 2%	1.1V	1.5V, 2.5V, 3V, 3.3V & Adjustable	3 Pin SOT-223 3 Pin TO-252 3 Pin TO-220 3 Pin TO-263
SPX2940	1A	3.2V	16V	12mA	3%	280mV	1.8V, 2.5V, 3.3V & 5V	3 Pin TO-220 3 Pin TO-263
SPX2941	1A	3V	16V	12mA	3%	280mV	Adjustable	5 Pin TO-220 5 Pin TO-263
SPX3940	1A	3.1V	16V	12mA	1%, 2%	280mV	1.8V, 2.5V, 3.3V & 5V	3 Pin SOT-223 3 Pin TO-220 3 Pin TO-263
SPX1583	1.5A	1.75V	5.5V	5mA	2%	400mV	1.5V, 2.5V, 2.8V, 3.3V & Adjustable	5 Pin TO-220 5 Pin TO-263
SPX2815	1.5A	2.5V	10V	4mA	1%, 2%	1.1V	2.5V, 3.3V, 5.0V & Adjustable	3 Pin TO-252 3 Pin TO-220 3 Pin TO-263
SPX29150	1.5A	2.5V	16V	12mA	1.50%	390mV	1.8V, 2.5V, 3.3V, 5V	3 Pin TO-220 3 Pin TO-263
SPX29151	1.5A	2.5V	16V	12mA	1.50%	390mV	1.8V, 2.5V, 3.3V, 5V	5 Pin TO-220 5 Pin TO-263
SPX29152	1.5A	2.5V	16V	12mA	1.50%	390mV	Adjustable	5 Pin TO-220 5 Pin TO-263
SPX29153	1.5A	2.5V	16V	12mA	1.50%	390mV	Adjustable	5 Pin TO-220 5 Pin TO-263
SPX1582	3A	1.75V	5.5V	5mA	2%	400mV	2.5V, 3.3V & Adjustable	5 Pin TO-220 5 Pin TO-263
SPX1587	3A	2.5V	10V	5mA	1%, 2%	1.1V	1.5V, 2.5V, 3.3V, 5V & Adjustable	3 Pin TO-252 3 Pin TO-220 3 Pin TO-263
SPX29300	3A	2.8V	16V	16mA	1%	550mV	1.8V, 2.5V, 3.3V, 5V	3 Pin TO-220 3 Pin TO-263
SPX29301	3A	2.8V	16V	16mA	1%	550mV	1.8V, 2.5V, 3.3V, 5V	5 Pin TO-220 5 Pin TO-263
SPX29302	3A	2.8V	16V	16mA	1%	550mV	Adjustable	5 Pin TO-220 5 Pin TO-263
SPX29302A	3A	2.8V	16V	10mA	1%	370mV	Adjustable	5 Pin TO-220 5 Pin TO-263
SPX29303	3A	2.8V	16V	16mA	1%	550mV	Adjustable	5 Pin TO-220 5 Pin TO-263

* Additional voltages may be available. Contact factory if not listed.

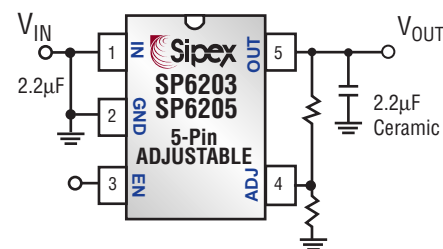
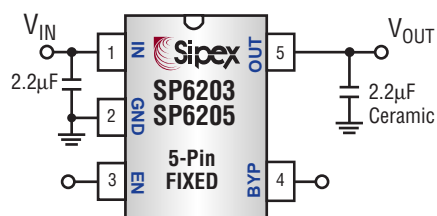
Low Drop Out Regulators (cont.)

5A to 8A								
Part No.	I _{OUT}	V _{IN} Min	V _{IN} Max	I _Q	Acc.	V _{DROP}	Output Voltage*	Package
SPX1581	5A	1.75V	5.5V	5mA	2%	400mV	2.5V, 2.8V, 3.3V & Adjustable	5 Pin TO-220 5 Pin TO-263
SPX1585	5A	2.77V	10V	5mA	1%, 2%	1.1V	1.5V, 2.5V, 3.3V, 5V & Adjustable	3 Pin TO-220 3 Pin TO-263
<i>New!</i> SPX29500	5A	2.8V	16V	20mA	1%	370mV	1.8V, 2.5V, 3.3V, 5V	3 Pin TO-220 3 Pin TO-263
<i>New!</i> SPX29501	5A	2.8V	16V	20mA	1%	370mV	1.8V, 2.5V, 3.3V, 5V	5 Pin TO-220 5 Pin TO-263
<i>New!</i> SPX29502	5A	2.8V	16V	20mA	1%	370mV	Adjustable	5 Pin TO-220 5 Pin TO-263
<i>New!</i> SPX29503	5A	2.8V	16V	20mA	1%	370mV	Adjustable	5 Pin TO-220 5 Pin TO-263
SPX1580	7A	2.07V	5.5V	5mA	2%	540mV	2.5V, 3.3V & Adjustable	5 Pin TO-220 5 Pin TO-263
SPX1584	8A	2.75V	7V	5mA	1%, 2%	1.1V	3.3V & Adjustable	3 Pin TO-220

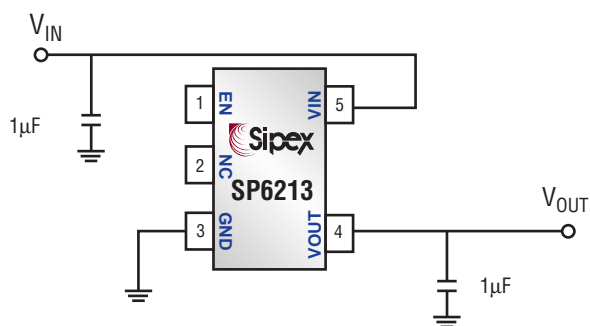
* Additional voltages may be available. Contact factory if not listed.

LDO Applications

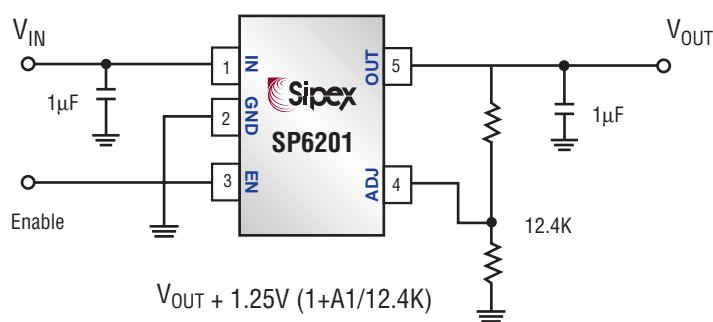
Cell Phone



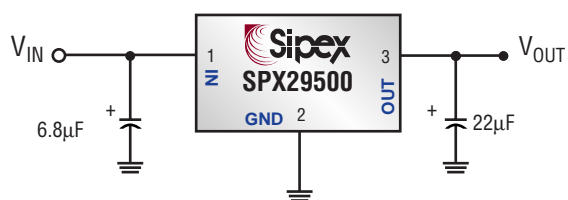
Pager



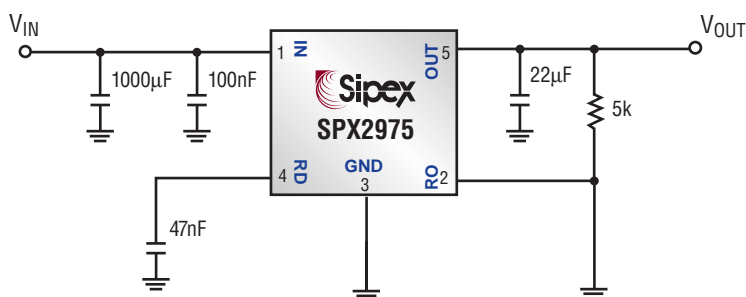
PDA



Data Communications



Automotive



Voltage References

A voltage reference maintains a precise voltage at its output regardless of variations in the external environment, such as voltage fluctuations, temperature change, etc. Sipex offers a full range of industry standard references.

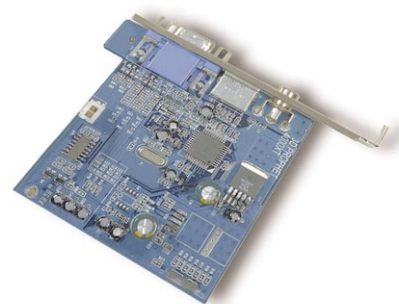
Applications

- Motherboard
- Power Supply
- Power Meter
- VGA Card
- Industrial Equipment

Key Features

- High accuracy: 0.5%
- Industry standard
- Low cost alternative

Part No.	V _{REF}	V _{IN} Max	Operating Current	Accuracy	Temp.(pp m/°C)	REF	Package
SPX385-1.2	1.235	N/A	10µA - 20mA	1%, 2%	30	N/A	3 Pin TO-92 3 Pin SOT-89 3 Pin SOT-23 8 Pin NSOIC
SPX1004-1.2	1.235	N/A	10µA - 20mA	0.3%	20	N/A	3 Pin SOT-89 3 Pin TO-92 8 Pin NSOIC
SPX1432	1.24	20V	100µA - 100mA	0.5%, 1%	46	0.3µA, 0.5µA	3 Pin SOT-23
SPX4041	1.24	N/A	100µA - 15mA	1%, 2%	27	N/A	3 Pin TO-92 3 Pin SOT-23 8 Pin NSOIC
SPX432	1.24	15V	1mA - 80mA	0.5%, 1%	92	6µA	3 Pin TO-92 3 Pin SOT-23 8 Pin NSOIC
SPX1431	2.5	36V	1mA - 150mA	0.40%	28	1.9µA	3 Pin TO-92 3 Pin SOT-89 5 Pin SOT-23 8 Pin NSOIC
SPX2431	2.5	20V	1mA - 100mA	0.5%, 1%	28	4µA	3 Pin SOT-23
SPX2431L	2.5	20V	160µA - 100mA	0.5%, 1%	28	4µA	3 Pin TO-92 5 Pin SOT-23 8 Pin NSOIC
SPX385-2.5	2.5	N/A	20µA - 20mA	1%, 2%	60	N/A	3 Pin TO-92 3 Pin SOT-89 3 Pin SOT-23 8 Pin NSOIC
SPX1004-2.5	2.5	N/A	10µA - 20mA	0.8%	60	N/A	3 Pin SOT-89 3 Pin TO-92 8 Pin NSOIC
SPX4040	2.5	N/A	160µA - 15mA	0.5%, 1%	27	N/A	3 Pin TO-92 3 Pin SOT-23 8 Pin NSOIC
SPX431A	2.5	36V	1mA - 150mA	0.5%	28	4µA	3 Pin TO-92 3 Pin SOT-89 5 Pin SOT-23 8 Pin NSOIC
SPX431B	2.5	36V	1mA - 150mA	1%	28	4µA	3 Pin TO-92 3 Pin SOT-89 5 Pin SOT-23 8 Pin NSOIC
SPX431C	2.5	36V	1mA - 150mA	2%	28	4µA	3 Pin TO-92 3 Pin SOT-89 5 Pin SOT-23 8 Pin NSOIC
SPX431L	2.5	20V	1mA - 100mA	0.5%, 1%, 2%	28	4µA	3 Pin TO-92 3 Pin SOT-89 3 Pin SOT-23 8 Pin NSOIC
SPX385-5.0	5	N/A	20µA - 20mA	1%, 2%	30	N/A	3 Pin SOT-23 3 Pin SOT-89 3 Pin TO-92 8 Pin NSOIC



Switching Power

Buck Regulators

Buck regulators are used to step down input voltage to the desired level with higher efficiency than an LDO. A buck regulator integrates power FETs into the IC, providing a monolithic power converter. Sipex's buck regulators offer the industry's highest efficiency and are an excellent alternative to linear regulators when battery life is crucial.

Applications

- Cell Phone
- Pager
- PDA/MP3
- VGA Card

Key Features

- Highest efficiency
- High frequency: up to 1.2MHz
- Low quiescent current: down to 20 μ A
- Dual mode PWM/PFM operation

Part No.	I _{OUT}	V _{IN} Min	V _{IN} Max	I _Q	Fixed Outputs	Output Range	Freq. (kHz)	Efficiency	Package
SP6655	400mA	2.7V	5.5V	20 μ A	N/A	1.0V to 5V	PFM	98%	10 Pin DFN
SP6650	600mA	2.7V	6.5V	70 μ A	3.3V	1.25V to 6V	PFM	95%	10 Pin MSOP
SP6651A	800mA	2.7V	5.5V	20 μ A	N/A	0.8V to 5V	PFM	98%	10 Pin DFN 10 Pin MSOP
New! SP6652	1A	2.7V	5.5V	50 μ A	N/A	0.75V to 5V	1.2MHz	97%	10 Pin DFN 10 Pin MSOP
New! SP6654 w/power good	800mA	2.7V	5.5V	20 μ A	N/A	0.8V to 5V	PFM	98%	10 Pin DFN 10 Pin MSOP
New! SP7652	6A	5V	28V	1.5mA	N/A	0.8V to 27V	600kHz	92%	26 Pin DFN



PWM Controllers

The PWM controller is at the heart of high power DC/DC converters. The device is used to drive external FETs for delivering output current up to 30A. With options for up to 28V input, Sipex's PWM controllers are well suited for all major market segments.

Applications

- VGA Card
- Printer/Copier/Fax Machine
- Mother Board
- Data Communications

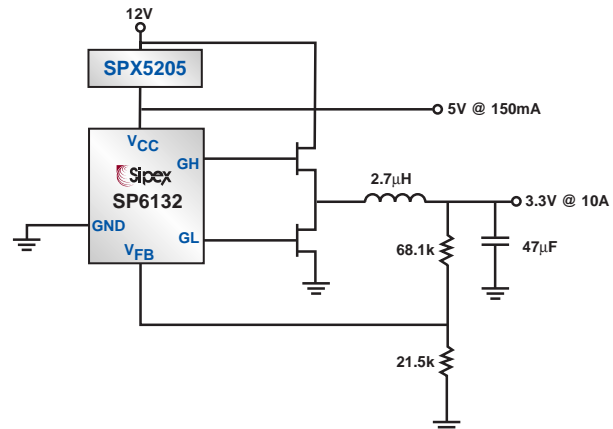
Key Features

- Low voltage output: down to 0.8V
- High frequency: up to 900kHz
- High efficiency
- Easy to use

Part No.	I _Q	V _{IN} Min	V _{IN} Max	Fixed Outputs	Output Range	Frequency (kHz)	Efficiency	Package
SP6137	1.5mA	3V	20V	N/A	0.8V to 10V	900	94%	10 Pin MSOP
New! SP6134H	1.5mA	3V	28V	N/A	0.8V to 10V	600	94%	10 Pin MSOP
SP6134	1.5mA	3V	15V	N/A	0.8V to 10V	600	94%	10 Pin MSOP
New! SP6132H	1.5mA	3V	28V	N/A	0.8V to 10V	300	95%	10 Pin MSOP
SP6132	1.5mA	3V	15V	N/A	0.8V to 10V	300	95%	10 Pin MSOP
SP6128A	500 μ A	3V	5.5V	N/A	0.8V to 5V	300	95%	14 Pin TSSOP
SP6123	500 μ A	3V	5.5V	N/A	0.8V to 5.0V	300, 500	95%	8 Pin NSOIC
SP6122	300 μ A	3V	5.5V	1.5V	1.5V to 3.3V	300, 600	90%	8 Pin NSOIC
SP6121	500 μ A	3V	5.5V	N/A	1.25V to 7.0V	500	95%	8 Pin NSOIC
SP6120B	950 μ A	3V	5.5V	N/A	1.25V to 5V	270 - 550	95%	16 Pin TSSOP
SP6120	950 μ A	3V	5.5V	N/A	1.25V to 5V	270 - 550	95%	16 Pin TSSOP



Fax/Copier/Printer Application



System Power

Boost Regulators

Boost regulators are used to step up input voltage, typically supplied from a battery. Geared primarily for portable applications, Sipex Boost Regulators offer small solution size with high efficiency.

Applications

- Cell Phone Camera Flash
- Flashlight
- Solar Landscape Lighting
- Wireless Mouse

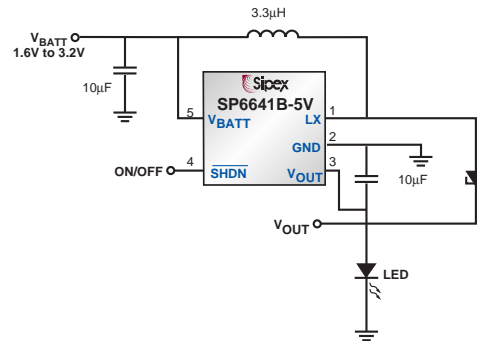
Key Features

- Highest efficiency
- Low quiescent current: down to 10 μ A
- Simple, low cost circuit

Part No.	I _{OUT}	V _{IN} Min	V _{IN} Max	V _{OUT} Max	I _Q	Fixed Outputs	Output Range	Efficiency	Package
SP4446	75mA	1V	8V	34V	20 μ A	N/A	2V to 30V	75%	5 Pin SOT-23
SP6641A	165mA	0.5V	4.5V	5V	10 μ A	3.3V, 5.0V	2V to 5.5V	87%	5 Pin SOT-23
SP6645	175mA	0.82V	3.3V	5V	80 μ A	3.3V	2V to 5.5V	88%	8 Pin MSOP
SP6690	175mA	1V	13.5V	34V	20 μ A	N/A	2V to 32V	75%	5 Pin SOT-23 5 Pin TSOT 8 Pin DFN
SP6644	175mA	0.82V	3.3V	5V	50 μ A	3.3V	2V to 5.5V	92%	8 Pin MSOP
SP6691	225mA	1V	13.5V	34V	20 μ A	N/A	2V to 34V	75%	5 Pin SOT-23 5 Pin TSOT 8 Pin DFN
SP6648	800mA	0.7V	4.5V	5V	13 μ A	3.3V	2V to 5.5V	94%	10 Pin MSOP 10 Pin DFN
SP6641B	500mA	0.5V	4.5V	5V	10 μ A	3.3V, 5.0V	2V to 5.5V	87%	5 Pin SOT-23



Flashlight Application



Charge Pumps

Sipex's charge pump technology affords the benefits of a switching regulator, such as improved efficiency, without the size and expense of an external inductor. Charge pumps can boost voltage or invert the input to a negative voltage to drive white LEDs for backlighting LCD displays.

Applications

- Mobile Phone
- LCD Backlight
- Cell Phone Camera Flash
- Keypad Illumination
- Voltage Inversion

Key Features

- No inductor required
- High frequency: up to 1.2MHz
- High efficiency
- High lument capacity

Part No.	I _Q	V _{IN} Min	V _{IN} Max	Output Current	Output Range	Frequency (kHz)	Efficiency	Package
<i>New!</i> SP682	60 μ A	2.4V	5.5V	15mA	-5V to -11V	12	99%	8 Pin MSOP 8 Pin NSOIC 8 Pin PDIP
SP6828	20 μ A	1.15V	4.2V	25mA	-1.15V to -4.2V	12	99.90%	5 Pin SOT-23
SP6829	40 μ A	1.15V	4.2V	25mA	-1.15V to -4.2V	35	99.90%	5 Pin SOT-23
SP6830	70 μ A	1.15V	5.3V	25mA	-1.15V to -5.0V	35	99.90%	6 Pin SOT-23
SP6831	200 μ A	1.15V	5.3V	25mA	-1.15V to -5.0V	120	99.90%	6 Pin SOT-23
SP6832	700 μ A	1.15V	5.3V	25mA	-1.15V to -5.0V	500	99.90%	5 Pin SOT-23
SP6680	100 μ A	2.7V	6.3V	60mA	+5.1V to 6.3V	262.144	96%	10 Pin MSOP
SP6682	3mA	2.7V	5.5V	200mA	+0.3V to +5.5V	600	75%	10 Pin MSOP 10 Pin DFN
<i>New!</i> SP6683	900 μ A	2.7V	5.5V	300mA	+0.3V to +5.5V	1200	87%	10 Pin DFN
SP6660	400 μ A	1.5V	4.25V	200mA	-1.5V to -4.25V or +3V to 8.5V	80	93%	8 Pin MSOP 8 Pin NSOIC 8 Pin PDIP
SP6661	3mA	1.5V	5.3V	200mA	-1.2V to -5V	900	92%	8 Pin MSOP 8 Pin NSOIC

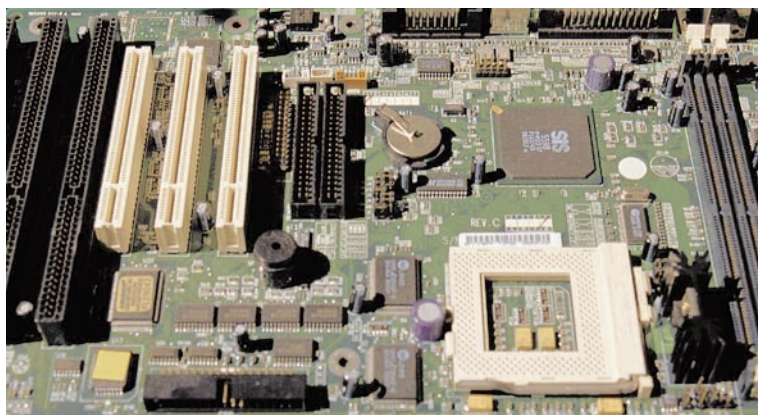
3V μ P Supervisors

Applications

- Motherboard
- System Card
- VGA Card
- Mobile Phone, PDA

Key Features

- Low quiescent current: down to 10 μ A
- Detection rising and falling V_{CC}
- Accurate trip point



Part No.	I_Q	V_{IN} Max	V_{IN} Min	Reset Threshold	Reset Active	Reset Acc.	Package
SP690R	40 μ A	1V	5.5V	2.625V	low	75mV	8 Pin NSOIC 8 Pin PDIP
SP804R	40 μ A	1V	5.5V	2.625V	high	60mV	8 Pin NSOIC 8 Pin PDIP
SP805R	40 μ A	1V	5.5V	2.625V	high	75mV	8 Pin NSOIC 8 Pin PDIP
SP802R	40 μ A	1V	5.5V	2.625V	low	60mV	8 Pin NSOIC 8 Pin PDIP
SP706R	40 μ A	1V	5.5V	2.630V	low	75mV	8 Pin NSOIC 8 Pin PDIP 8 Pin MSOP
SP706P	40 μ A	1V	5.5V	2.630V	high	75mV	8 Pin NSOIC 8 Pin PDIP 8 Pin MSOP
SP708R	40 μ A	1V	5.5V	2.630V	low / high	75mV	8 Pin NSOIC 8 Pin PDIP 8 Pin MSOP
SP805S	40 μ A	1V	5.5V	2.925V	high	75mV	8 Pin NSOIC 8 Pin PDIP
SP690S	40 μ A	1V	5.5V	2.925V	low	75mV	8 Pin NSOIC 8 Pin PDIP
SP804S	40 μ A	1V	5.5V	2.925V	high	60mV	8 Pin NSOIC 8 Pin PDIP
SP802S	40 μ A	1V	5.5V	2.925V	low	60mV	8 Pin NSOIC 8 Pin PDIP
SP708S	40 μ A	1V	5.5V	2.930V	low / high	75mV	8 Pin NSOIC 8 Pin PDIP 8 Pin MSOP
SP706S	40 μ A	1V	5.5V	2.930V	low	75mV	8 Pin NSOIC 8 Pin PDIP 8 Pin MSOP
SP802T	40 μ A	1V	5.5V	3.075V	low	60mV	8 Pin NSOIC 8 Pin PDIP
SP804T	40 μ A	1V	5.5V	3.075V	high	60mV	8 Pin NSOIC 8 Pin PDIP
SP690T	40 μ A	1V	5.5V	3.075V	low	75mV	8 Pin NSOIC 8 Pin PDIP
SP805T	40 μ A	1V	5.5V	3.075V	high	75mV	8 Pin NSOIC 8 Pin PDIP
SP706T	40 μ A	1V	5.5V	3.080V	low	75mV	8 Pin NSOIC 8 Pin PDIP 8 Pin MSOP
SP708T	40 μ A	1V	5.5V	3.08V	low / high	75mV	8 Pin NSOIC 8 Pin PDIP 8 Pin MSOP

5V μ P Supervisors

Applications

- Automotive
- Datacom & Telecom Equipment
- Power Meter
- Industrial Equipment

Key Features

- Low quiescent current: down to 10 μ A
- Detection rising and falling V_{CC}
- Accurate trip point

Part No.	I_Q	V_{IN} Max	V_{IN} Min	Reset Threshold	Reset Active	Reset Acc	Package
<i>New!</i> SP730	45 μ A	1V	5.5V	4.375V	low / high	50mV	3 Pin SOT23
SP693A	60 μ A	0V	5.5V	4.40V	low / high	125mV	16 Pin WSOIC 16 Pin NSOIC 16 Pin PDIP
SP805M	60 μ A	0V	5.5V	4.40V	high	125mV	8 Pin NSOIC 8 Pin PDIP
SP800M	60 μ A	0V	5.5V	4.40V	low / high	50mV	16 Pin WSOIC 16 Pin NSOIC 16 Pin PDIP
SP802M	60 μ A	0V	5.5V	4.40V	low	75mV	8 Pin NSOIC 8 Pin PDIP
SP704	60 μ A	0V	5.5V	4.40V	low	125mV	8 Pin NSOIC 8 Pin PDIP
SP692A	60 μ A	0V	5.5V	4.40V	low	125mV	8 Pin NSOIC 8 Pin PDIP
SP706	60 μ A	1V	5.5V	4.40V	low	125mV	8 Pin PDIP 8 Pin NSOIC 8 Pin MSOP
SP813M	60 μ A	1V	5.5V	4.40V	high	125mV	8 Pin PDIP 8 Pin NSOIC 8 Pin MSOP
SP708	60 μ A	1V	5.5V	4.40V	low / high	125mV	8 Pin PDIP 8 Pin NSOIC 8 Pin MSOP
SP813L	60 μ A	1V	5.5V	4.65V	high	125mV	8 Pin PDIP 8 Pin NSOIC 8 Pin MSOP
SP707	60 μ A	1V	5.5V	4.65V	low / high	125mV	8 Pin PDIP 8 Pin NSOIC 8 Pin MSOP
SP690A	60 μ A	0V	5.5V	4.65V	low	125mV	8 Pin NSOIC 8 Pin PDIP
SP705	60 μ A	1V	5.5V	4.65V	low	125mV	8 Pin PDIP 8 Pin NSOIC 8 Pin MSOP
SP802L	60 μ A	0V	5.5V	4.65V	low	75mV	8 Pin NSOIC 8 Pin PDIP
SP703	60 μ A	0V	5.5V	4.65V	low	125mV	8 Pin NSOIC 8 Pin PDIP
SP805L	60 μ A	0V	5.5V	4.65V	high	125mV	8 Pin NSOIC 8 Pin PDIP
SP800L	60 μ A	0V	5.5V	4.65V	low / high	50mV	16 Pin WSOIC 16 Pin NSOIC 16 Pin PDIP
SP791	75 μ A	0V	5.5V	4.65V	low	125mV	16 Pin PDIP 16 Pin NSOIC
SP691A	60 μ A	0V	5.5V	4.65V	low / high	125mV	16 Pin WSOIC 16 Pin NSOIC 16 Pin PDIP

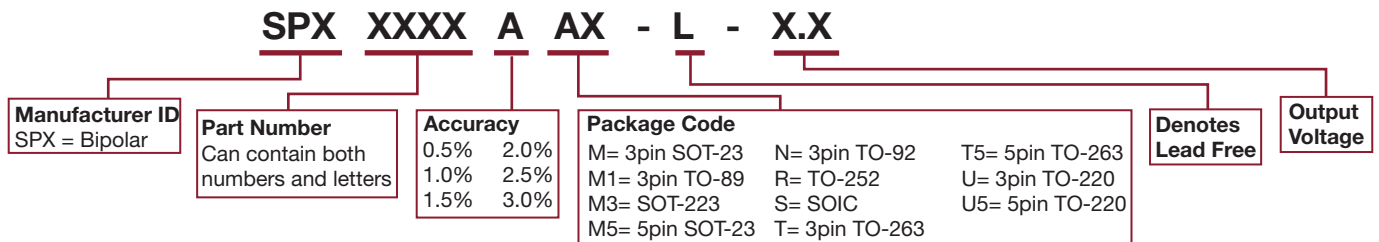
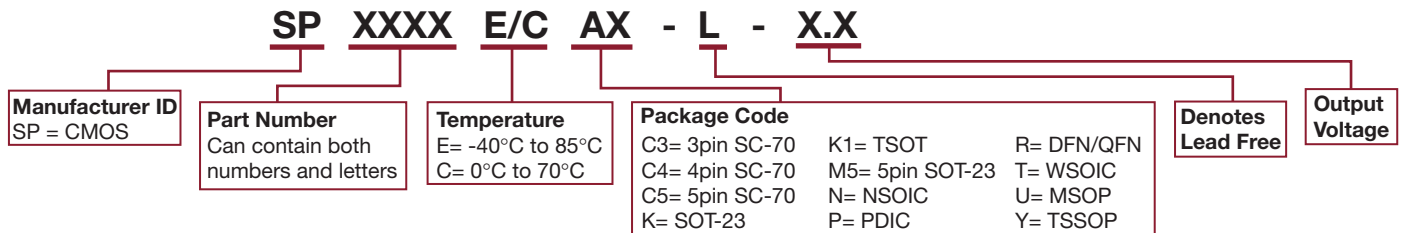


Sipex Compatibility

Sipex offers pin for pin replacements or functional equivalents for the following major manufactures in the Power Management market. A complete listing of our Power Management crosses by part number is available on our website.

	Low Drop Out Regulators	Boost Regulators	Buck Regulators	PWM Controllers	Charge Pumps	Supervisors	USB Power Switches	Voltage References
Analog Devices			Proprietary	Proprietary	✓	✓	N/A	
Intersil			Proprietary	Proprietary			N/A	N/A
Linear Technologies	✓	✓	Proprietary	Proprietary	✓	✓		✓
Maxim			Proprietary	Proprietary	✓	✓		
National Semiconductor	✓	✓	Proprietary	Proprietary			✓	✓
ST Microelectronics	✓		Proprietary	Proprietary	✓	✓		✓
Texas Instruments	✓	✓	Proprietary	Proprietary				✓
Micrel	✓		Proprietary	Proprietary			✓	
Semtech	✓		Proprietary	Proprietary	✓		N/A	✓

Power Management Part Number



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