

FEATURES

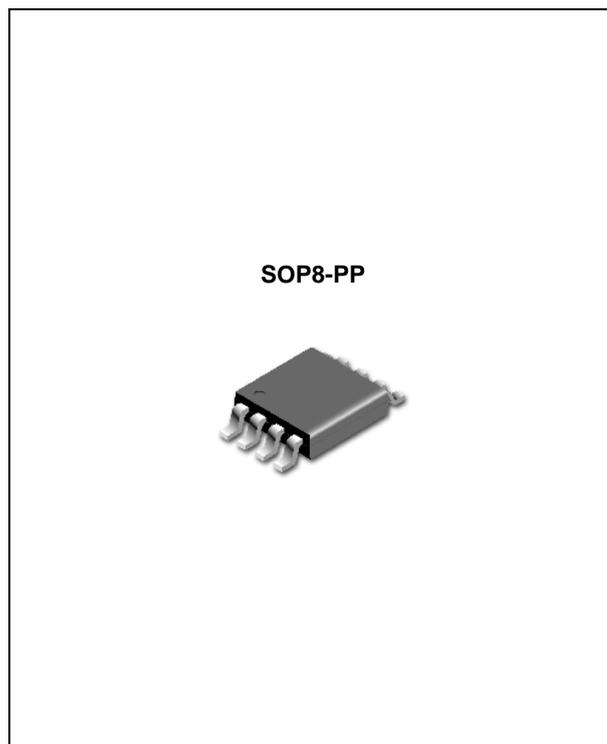
- Works with 1.1V ~ 3.6V V_{IN}
- Ultra Low Dropout Voltage
- Low Quiescent Current
- Excellent Line and Load Regulation
- Guaranteed Output Current of 4.0A
- Adjustable Output Voltage Down to 0.8V
- V_{OUT} Power OK Signal (A version Only)
- Programmable Soft-Start (A version Only)
- Logic Controlled Shutdown Option
- Over-Temperature/Over-Current Protection
- -40°C to 125°C Junction Temperature Range

APPLICATION

- Motherboards and Graphic Cards
- Microprocessor and Chipset Power Supplies
- Peripheral Cards / Low Voltage Digital ICs
- High Efficiency Linear Regulators
- SMPS Post Regulators

DESCRIPTION

The TJ2134 is a 4.0A high performance ultra low-dropout linear regulator ideal for powering core voltages of low-power microprocessors. The TJ2134 implements a dual supply configuration allowing for very low output impedance. The TJ2134 requires a bias input supply and a main input supply, allowing for ultra-low input voltages on the main supply rail. The input supply operates from 1.3V to 3.6V and the bias supply requires between 2.9V and 5.5V for proper operation. The Soft-Start reduces inrush current of the load capacitors and minimizes stress on the input power source during start-up. The TJ2134 delivers high current and ultra-low-dropout output voltage as low as 0.8V for applications where V_{OUT} is very close to V_{IN} . The TJ2134 is developed on a CMOS technology which allows low quiescent current operation independent of output current. This technology also allows the TJ2134 to operate under extremely low dropout conditions.



ORDERING INFORMATION

Device	Package
TJ2134GDP	SOP8-PP
TJ2134AGDP	SOP8-PP

OPERATING CONDITIONS

CHARACTERISTIC	SYMBOL	MIN.	MAX.	UNIT
Recommend Operating Input Voltage	V_{IN}	1.3	3.6	V
Recommend Operating Bias Voltage	V_{BIAS}	$V_{OUT}+2.1$	5.5	V
Enable Input Voltage	V_{EN}	0	5.5	V
Operating Junction Temperature Range	T_{JOPR}	-40	125	°C
Package Thermal Resistance*	$\Theta_{JA-SOP8-PP}$	68		°C/W
	$\Theta_{JC-SOP8-PP}$	15		

* Calculated from package in still air, mounted to minimum foot print 2 layer PCB without thermal via per JEDEC51 standards.

Please contact us for more information about this product.