

**FEATURES**

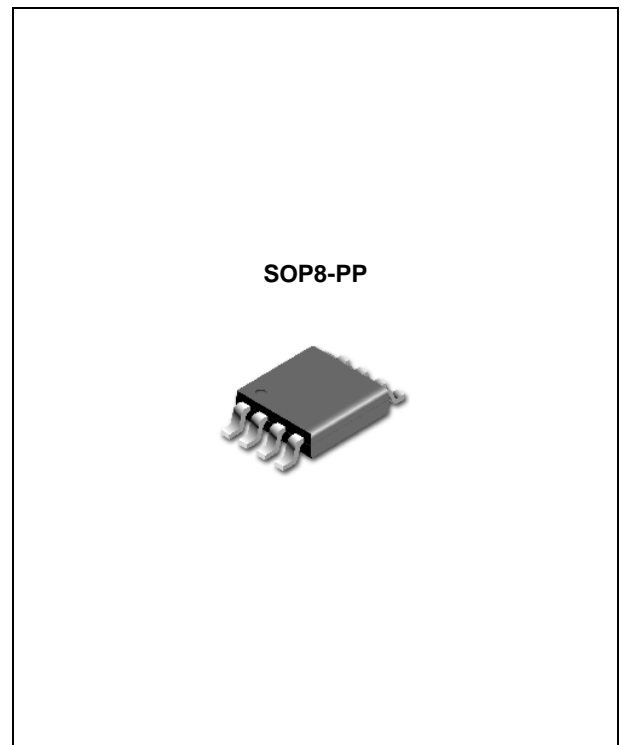
- Works with 1.1V ~ 3.6V  $V_{IN}$
- Ultra Low Dropout Voltage
- Low Quiescent Current
- Excellent Line and Load Regulation
- Guaranteed Output Current of 4.0A
- Adjustable Output Voltage Down to 0.8V
- $V_{OUT}$  Power OK Signal (A version Only)
- Programmable Soft-Start (A version Only)
- Logic Controlled 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 <sub>IN</sub>	1.3	3.6	V
Recommend Operating Bias Voltage	V <sub>BIAS</sub>	V <sub>OUT</sub> +2.1	5.5	V
Enable Input Voltage	V <sub>EN</sub>	0	5.5	V
Operating Junction Temperature Range	T <sub>JOPR</sub>	-40	125	°C
Package Thermal Resistance *	Θ <sub>JA-SOP8-PP</sub>	68		°C/W
	Θ <sub>JC-SOP8-PP</sub>	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.