

FEATURES

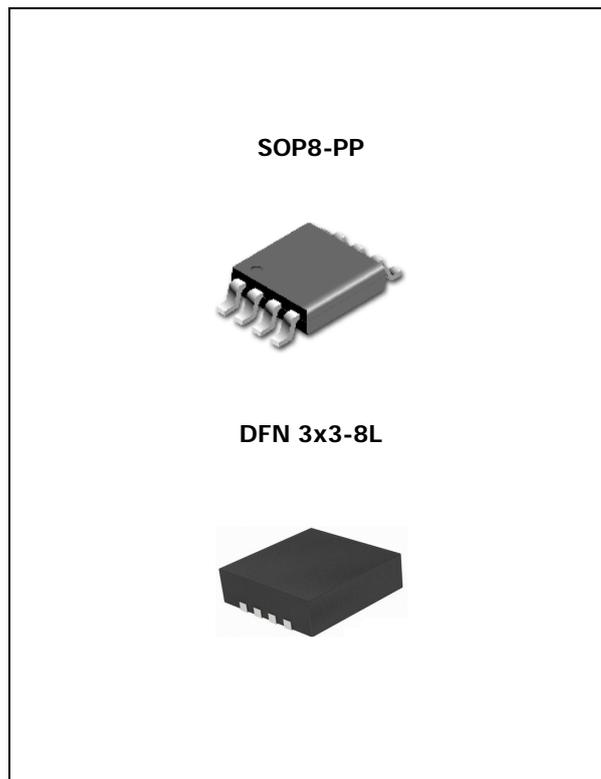
- Input Voltage Range: 1.1V to 3.6V
- Output Voltage Range: 0.6 V to 1.8 V
- Ultra Low Dropout Voltage
- Low Quiescent Current
- Excellent Line and Load Regulation
- Guaranteed Output Current of 2.0A
- V_{OUT} Power OK Signal
- Programmable Soft-Start
- Logic Controlled Shutdown Option
- Over-Temperature/Over-Current 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 TJ2132 is a 2.0A high performance ultra low-dropout linear regulator ideal for powering core voltages of low-power microprocessors. The TJ2132 implements a dual supply configuration allowing for very low output impedance. The TJ2132 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 1.1V to 3.6V and the bias supply requires between 2.7V and 5.5V for proper operation. The output voltage is adjustable from 0.6V to 1.8V using an external resistor divider. The Soft-Start reduces inrush current of the load capacitors and minimizes stress on the input power source during start-up. The TJ2132 delivers high current and ultra-low-dropout output voltage as low as 0.6V for applications where V_{OUT} is very close to V_{IN}. The TJ2132 is developed on a CMOS technology which allows low quiescent current operation independent of output current. This technology also allows the TJ2132 to operate under extremely low dropout conditions.



ORDERING INFORMATION

Device	Package
TJ2132GDP	SOP8-PP
TJ2132GQ	DFN 3x3-8L

OPERATING RATINGS

CHARACTERISTIC	SYMBOL	MIN.	MAX.	UNIT
Recommend Operating Input Voltage	V _{IN}	1.1	3.6	V
Recommend Operating Bias Voltage	V _{BIAS}	V _{OUT} +2.1	5.5	V
Recommend Enable Input Voltage	V _{EN}	0	5.5	V
Recommend Output Voltage Range	V _{OUT}	0.6	1.8	V
Operating Junction Temperature Range	T _{JOPR}	-40	125	°C
Package Thermal Resistance*	θ _{JA-SOP8-PP}	68		°C/W

* Calculated from package in still air, mounted to 2.6mm X 3.5mm(minimum foot print) 2 layer PCB without thermal vias per JESD51 standards.

Please contact us for more information about this product.