# Dual, 300mA Low-Dropout Linear Regulators

#### **Features**

- Two Low-Dropout-Voltage Regulators
- Pin-Programmable Output Voltages
- 300mA Output Current for Each LDO
- Independent Enable Control
- Dropout Voltage is 90mV@ 100mA Load
- Over-Temperature Protection and Short-Circuit Protection
- Max. Supply Current in Shutdown Mode < 1µA
- Small Ceramic Output Capacitors

#### **Applications**

- Notebook Computers
- **■** Cellular Phones
- PDAs
- Digital still Camera and Video Recorders
- Hand-Held Devices
- Bar Code Scanners

### **Output-Voltage Programming**

P1	P2	VOUT1	VOUT2
OPEN	OPEN	3.00	1.80
OPEN	GND	3.30	3.00
OPEN	VIN	1.50	1.50
GND	OPEN	2.85	1.85
GND	GND	2.85	1.80
GND	VIN	2.80	3.30
VIN	OPEN	1.20	1.30
VIN	GND	2.80	2.80
VIN	VIN	2.80	2.85

#### **General Description**

The G9052 is a dual, low supply current, low dropout linear regulator that comes in a space saving TDFN2X2-8 package. The supply current at no-load is  $100\mu A$ . In the shutdown mode, the maximum supply current is less than  $1\mu A$ . The over-current protection limit is set at 430mA typical. An over-temperature protection circuit is built-in in the G9052 to prevent thermal overload. These power saving features make the G9052 ideal for use in the battery-powered applications such as notebook computers, cellular phones, and PDA's.

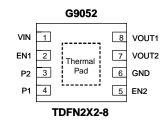
The G9052 have two logic inputs that select one of nine preset output-voltage combinations, eliminating external 1% resistors. The G9052 configures output voltages at VOUT1 and VOUT2 based on the state of P1 and P2 at power-on. Subsequent changes to P1 and P2 do not change the output voltages unless the supply power is cycled, or all EN inputs are simultaneously driven low to shut down the device. These devices feature a shutdown function and are offered in active low with auto discharge. The G9052 comes in a space saving TDFN2X2-8 package.

### **Ordering Information**

ORDER	MARKING	TEMP.	PACKAGE
NUMBER		RANGE	(Pb free)
G9052RC1U	9052	-40°C to +85°C	TDFN2X2-8

Note: RC: TDFN2X2-8 1: Bonding Code U: Tape & Reel

### **Pin Configuration**



Note: Recommend connecting the Thermal Pad to the GND for excellent power dissipation.

## **Typical Application Circuit**

