

# **LINEAR BUILDING BLOCK – QUAD LOW POWER COMPARATOR AND VOLTAGE REFERENCE WITH SHUTDOWN**

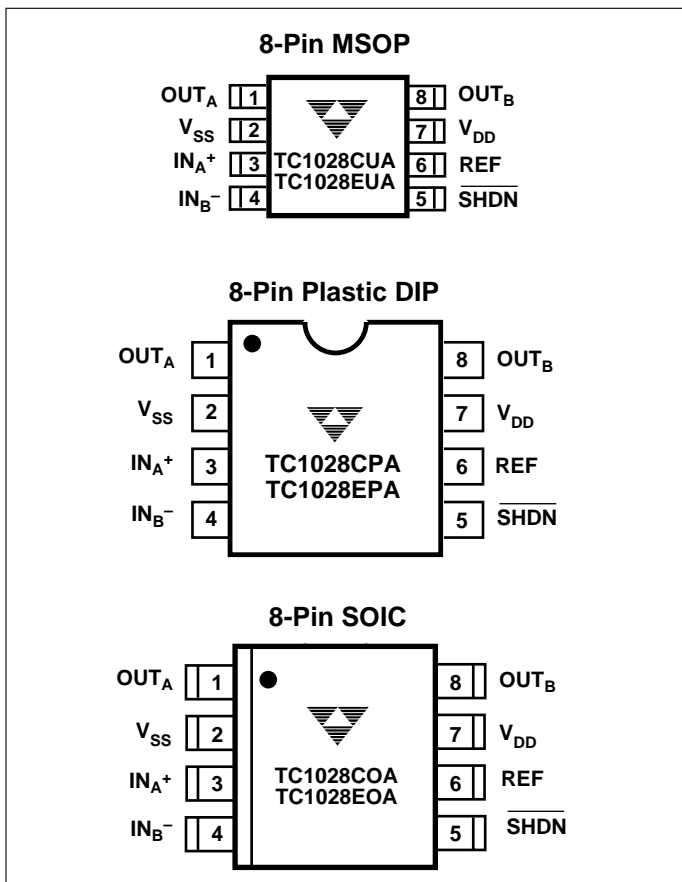
## **FEATURES**

- Combines Two Comparators and a Voltage Reference into a Single Package
- Optimized for Single Supply Operation
- Small Package .....8-Pin MSOP (Occupies Half the Space of an 8-Pin SOIC)
- Ultra Low Input Bias Current ..... Less than 100pA
- Low Quiescent Current ..... 10μA Max

## **APPLICATIONS**

- Power Supply Circuits
- Embedded Systems
- Instrumentation
- Portable Equipment
- Consumer Products
- Replacements for Discrete Components

## **PIN CONFIGURATIONS**



## **GENERAL DESCRIPTION**

The TC1028 is a mixed-function device combining two general purpose, complimentary output comparators and a voltage reference in a single 8-pin package.

This increased integration allows the user to replace two packages, saving space, lowering supply current, and increasing system performance. The TC1028 operates down to V<sub>DD</sub> = 1.8V and requires only 10μA of supply current. A Shutdown input (SHDN) disables the comparators, placing their outputs in a high-impedance state. The reference stays active in Shutdown Mode. Standby power consumption is typically 1μA.

The TC1028 is designed specifically for operation from a single supply, however, operation from dual supplies is also possible, and the power supply current drain is independent of the magnitude of the power supply voltage.

Packaged in an 8-pin MSOP or 8-pin DIP, the TC1028 is ideal for applications requiring low power level detection.

## **ORDERING INFORMATION**

Part No.	Package	Temp. Range
TC1028COA	8-Pin SOIC	– 40°C to +85°C
TC1028CPA	8-Pin Plastic DIP	0°C to +70°C
TC1028CUA	8-Pin MSOP	0°C to +70°C
TC1028EOA	8-Pin SOIC	– 40°C to +85°C
TC1028EPA	8-Pin Plastic DIP	– 40°C to +85°C
TC1028EUA	8-Pin MSOP	– 40°C to +85°C
<b>TC43EV</b>	<b>Evaluation Kit for Linear Building Block Family</b>	

## **FUNCTIONAL BLOCK DIAGRAM**

