

Features

- Single-Supply Operation from +2.5V ~ +5.5V
- Rail-to-Rail Output
- -3dB Bandwidth($G=+1$): 250MHz (Typ.)
- Low Input Bias Current: 1pA (Typ.)
- Quiescent Current: 2.8mA/Amplifier (Typ.)
- Operating Temperature: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- Small Package:
CBM8051 Available in SOT23-5 and SC70-5 Packages
CBM8052 Available in SOP-8 and MSOP-8 Packages
CBM8054 Available in SOP-14 and TSSOP-14 Packages
CBM8051N Available in SOT23-6 and SC70-6 Packages
CBM8052N Available in MSOP-10

Packages

Application

- Imaging
- Photodiode Preamplifier
- DVD/CD
- Filters
- Professional Video and Cameras
- Hand Sets
- Base Stations
- to-D Driver

Description

The CBM8051/1N(single), CBM8052/2N(dual), CBM8054(quad) are rail-to-rail output voltage feedback amplifiers offering ease of use and low cost. They have bandwidth and slew rate typically found in current feedback amplifiers. All have a wide input common-mode voltage range and output voltage swing, making them easy to use on single supplies as low as 2.5V. Despite being low cost, the CBM8051 series provide excellent overall performance. They offer wide bandwidth to 250MHz ($G = +1$) along with 0.1dB flatness out to 52MHz ($G = +2$) and offer a typical low power of 2.8mA/amplifier.

The CBM8051 series is low distortion and fast settling make it ideal for buffering high speed A/D or D/A converters. The CBM8051/2N has a power-down disable feature that reduces the supply current to 50 μA . These features make the CBM8051/2N ideal for portable and battery-powered applications where size and power are critical. All are specified over the extended -40°C to $+125^{\circ}\text{C}$ temperature range.

