# **I** Global Mixed-mode Technology Inc.

# **Quadruple Rail-to-Rail Operational Amplifiers**

### Features

- Wide Supply Operation Range +4.5V to +20V
- Beyond the Rails Input Capability
- Rail-to-Rail Output Swing
- Low Supply Current, 3mA Per Amplifier (Typical)
- Low Input Offset Voltage 2mV (Typical)
- Internal Frequency Compensated for Unit Gain Stable
- Wide Bandwidth (unit gain) 30MHz
- High Slew Rate = 150V/µs
- Large DC Voltage Gain 80dB (Typical)
- ±180mA Output Short Current
- Embedded Over-Temperature Protection
- TSSOP-14 & TSSOP-14 (FD) package available

# Applications

- Portable Equipment
- TFT Vcom/Gamma buffers
- Battery-Powered Equipment
- ASIC Input or Output Amplifier
- Low Power/Low Voltage Applications

#### **General Description**

The G1564 is the quadruple rail-to-rail input/output operation amplifiers with the low power, high voltage swing. Operating on supplies ranging from 4.5V to 20V, while current consuming only 3mA / per amplifier, the G1564 is with high unit-gain bandwidth of 30MHz. The G1564 also provides common mode input ability beyond the supply rails, as well as rail-to-rail output capability. This enables this amplifier to offer maximum dynamic range at any supply voltage.

G1564

The G1564 also features fast slewing and settling times, as well as a high output drive capability of 65mA (sink and source). These features make these amplifiers ideal for high speed filtering and signal conditioning application. Other applications include battery power, TFT Vcom /Gamma buffers, portable devices, and anywhere low power consumption is important.

There is with over temperature protection embedded to avoid the unexpected damages. The G1564 is available in TSSOP-14 & TSSOP-14 (FD) package.

#### **Ordering Information**

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G1564D21U	G1564	-40°C~ +85°C	TSSOP-14
G1564FA1U	G1564	-40°C~ +85°C	TSSOP-14 (FD)

Note: D2:TSSOP-14 FA :TSSOP-14 (FD)

- 1: Bonding Code
- U: Tape & Reel

# **Pin Configuration**

