

**General Description**

The PMB 2332 is a low noise amplifier (LNA) up to 1.1 GHz and double balanced mixer up to 3 GHz for use in mobile communication equipment. It is fabricated using Siemens B6HF silicon bipolar process.

The amplified signal is external available for further use at output AO. The DC level at GC allows to switch the LNA gain (on/off: 20 dB).

The mixer is a general purpose up- and downconversion Gilbert cell mixer. Differential signals and symmetrical circuits are used throughout the mixer. The mixer input can be used in balanced or unbalanced configuration. The mixer outputs are high impedance open collector outputs. The adjustable mixer current allows to improve the mixer performance.

An internal bias driver generates supply voltage and temperature compensated reference voltages. The STB pin allows the mixer and bandgap part of the IC to be switched in power-down mode.

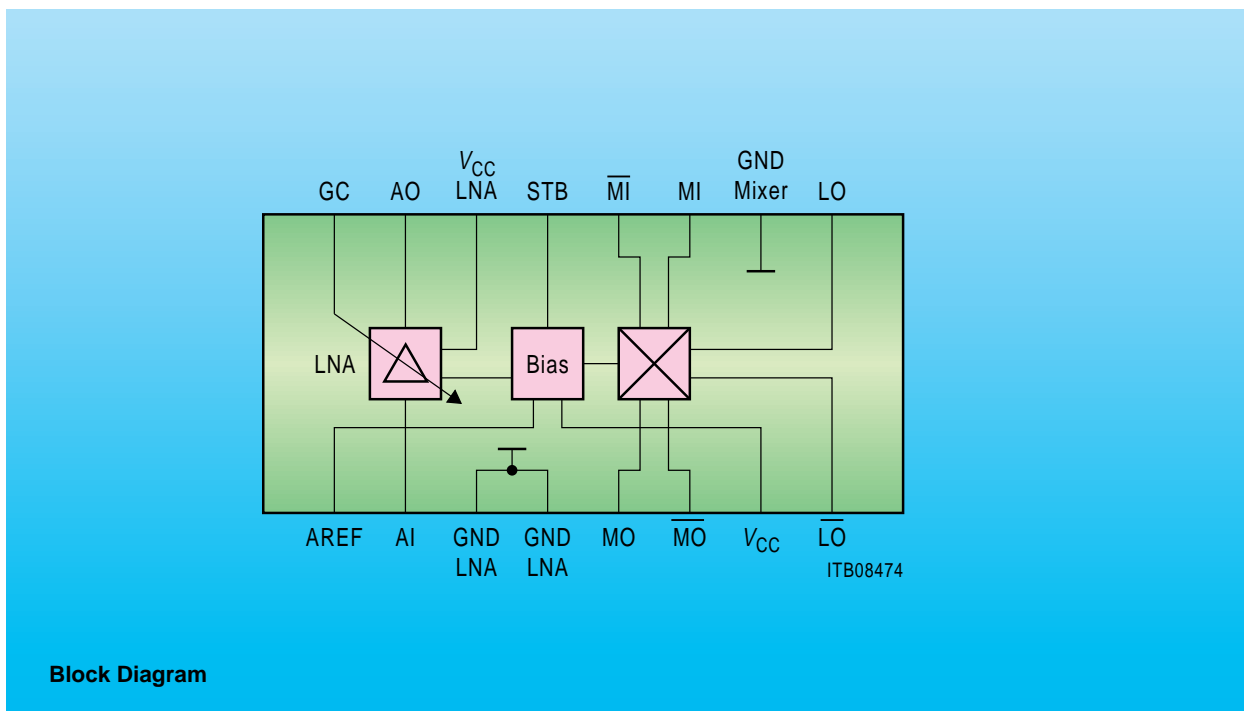
**Applications**

All analog and digital mobile communication systems as frontend-LNA and up-/ downconverter mixer.

Type	Package
PMB 2332-R	P-TSSOP-16-1 (Shrink, SMD)

**Features**

- Low operating current
- Power-down mode
- LNA frequency range up to 1.1 GHz
- Switchable LNA gain
- High LNA gain (typ. 20 dB at 900 MHz)
- Low LNA noise figure (typ. 1.5 dB at 900 MHz)
- Double balanced mixer up to 3 GHz with high gain
- Excellent intercept performance
- High isolation values
- Few external components
- Operating voltage 2.7 V to 5.5 V
- P-TSSOP-16 package
- Temperature range – 30 °C to 85 °C



**Block Diagram**