

Broadband Receiver/Vector Demodulator

PMB 2402

General Description

The PMB 2402 is a single-chip single-conversion heterodyne receiver with phase shifting circuitry for the I/Q phase local baseband demodulation on chip. It also includes the second oscillator, a gain controlled second IF amplifier, two differential operational amplifiers for baseband filtering purposes and power-down circuitry.

The PMB 2402 is designed for digital mobile telephones according to the GSM standard and other digital systems.

Applications

- Digital wideband systems as CATV, Satellite, DBS, WLAN
- Various demodulation schemes, such as PM PSK, FSK, QAM, QPSK, GM
- Space and power saving optimization of existing discrete demodulator circuit

Type	Package
PMB 2402-S	P-DSO-28-1 (SMD)

Features

- Heterodyne receiver with demodulators
- Down mixing from 900 MHz receiver band to the base band
- Demodulation and generation of I/Q-baseband components
- Low mixer noise 10 dB (SSB)
- Input high intercept point + 2 dBm
- Integrated 0° and 90° phase shifter
- 82 dB AGC range
- On-chip second LO oscillator with external tuning circuit
- Low power consumption due to highly flexible power-down capability
- Wide input frequency range up to 1 GHz
- Wide IF range from 35 MHz to 100 MHz
- Wide output frequency range up to 13.5 MHz
- Temperature range - 25 °C to 85 °C

