

# GDM7225 Product Brief

Mobile WiMAX 2 (IEEE 802.16m) Single-Chip with 4x4 MIMO System

## Key Benefits

- Backwards compatibility with WiMAX 16e
- WiMAX2 High speed wireless broadband—over 5x that of existing WiMAX
- Small form factor
- Optimizes mobile WiMAX implementation in mobile devices
- Minimizes external RF front-end components
- Satisfies high demands of multimedia processing

## Applications

- Mobile Handsets
- Hotspots
- USB Dongles
- Modules
- CPE
- Netbooks/ PC/Tablets

## Contact Us

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## Features

- Fully supports 16e, 16e+, 16m WiMAX standards
- 16m WiMAX
  - Up to 20 MHz 4x4 MIMO,
  - 10 + 10 MHz multi-carrier support
- Throughput: 150Mbps DL, 50 Mbps UL
- Dual Tx, 64 QAM UL
- 4 Rx & 2 Tx TDD
- 2.3-2.7GHz WiMAX bandwidth
- High performance
  - Dual 320 MHz ARM11 integration
  - 64 MB DDR integration

## GDM7225

GDM7225 is a highly integrated monolithic single-chip compliant with IEEE 802.16m standards, or WiMAX 2. This single-chip offers a 4x4 Multiple Input Multiple Output (MIMO) system, enabling high speed wireless broadband communications up to five times faster than existing WiMAX technology. GDM7225, which integrates RF, MAC and PHY into a single-chip, allows for higher data rates and provides backward compatibility with existing 16e mobile WiMAX (IEEE 802.16e) requirements.

GDM7225 is suitable for all applications ranging from mobile handsets, USB dongles, modules, hotspots, tablets, datacards, and PCs. Having backwards compatibility with existing infrastructure, GDM7225 makes the transition from WiMAX to WiMAX 2 easier and more cost-effective.

GDM7225 features a complete transceiver that supports most of the 2GHz WiMAX band, and offers the world's first 4x4 MIMO performance enabled by four independent RF receivers. With GCT's proprietary MIMO modem technology, GDM7225 enables performance at speeds higher than 150 Mbps downlink and 50 Mbps uplink. In addition, this solution supports multicarrier operation (10MHz + 10MHz) up to 20MHz bandwidth. With its advanced features and high data rate, GDM7225 is designed to serve the growing demands of the WiMAX broadband market.