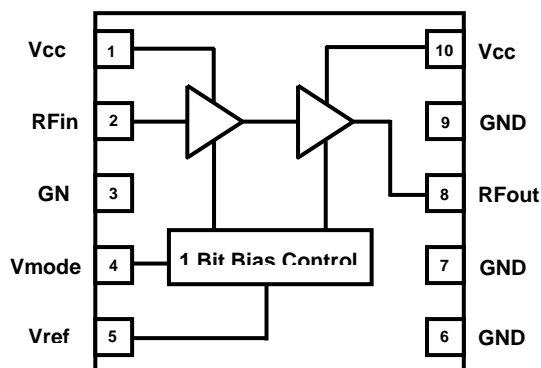


3V HBT GaAs CDMA PCS Power Amplifier Module ULTRA I

Functional Block Diagram



Product Description

The TQM763022 is a 3V, 2 stage GaAs HBT Power Amplifier Module designed for use in mobile phones. Its compact 4x4mm package makes it ideal for today's extremely small data enabled phones. Its RF performance meets the requirements for products designed to IS-95/98/CDMA2000 standards.

The TQM763022 is designed on TriQuint's advanced InGaP HBT GaAs technology offering state of the art reliability, temperature stability and ruggedness. Selectable bias mode and a shutdown mode with low leakage current, improves talk and standby time. The output match, realized within the module package, optimizes efficiency/linearity at maximum rated output power. The module is a 4x4mm land grid array with backside ground. TQM763022 is footprint compatible with industry standard 4x4mm CDMA PA modules. The PA has been specifically designed to provide ULTRA-low quiescent current to minimize the average current consumption of the handset per the CDG Curve thus extending its talk-time capability.

Electrical Specifications

Parameter	Min	Typ	Max	Units
Frequency	1850		1910	MHz
CDMA mode maximum Pout ¹		28		dBm
Gain		29		dB
CDMA ACPR		-50		dBc
CDMA ALTR		-60		dBc
Power Supply Current @ 28dBm		520		mA
Rx Band Noise		-140		dBm/Hz

Note 1: Test Conditions CDMA Mode: V_{CC1}=3.4VDC, V_{CC2}=3.4VDC, V_{REF}=2.85VDC, T_C=25°C

Data Sheet

For additional information and latest specifications, see our website: www.triquint.com

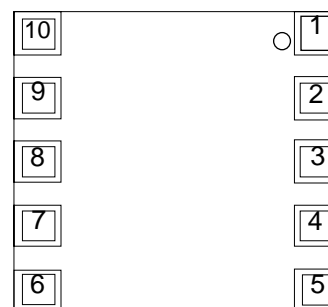
Features

- InGaP HBT Technology
- High Efficiency: 16% @ 16dBm
- ULTRA I technology: Low I_{cq} = 26mA
- Optimized for 50Ω system
- Small 10-pin, 4x4mm module
- Excellent Rx band noise performance
- Lead-free 260°C RoHS compliant
- Full ESD protection

Applications

- IS-95/CDMA2000
- Single-mode, Dual-Mode, and Tri-Mode CDMA/AMPS phones

Package Style



10-Pin Plastic Module Package ; Bottom View

