

TQM6M6225

Band 2/5 Tritium DB PA-Duplexer Module™

TriQuint 
SEMICONDUCTOR

Applications

- BC0 & BC1 CDMA/EVDO handsets / data cards
- Band 2 & 5 WCDMA handsets / data cards
- Band 2 & 5 LTE handsets / data cards
- HSDPA/HSUPA/HSPA+ applications

Product Features

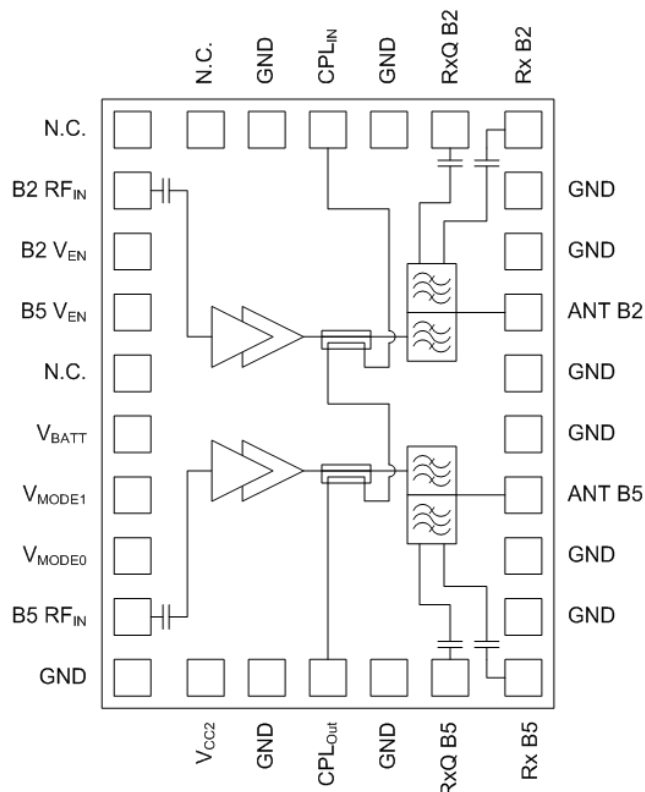
- Integrated PA, BAL Rx SAW B5 duplexer and BAW B2 duplexer, V_{REG} circuitry, and coupler
- Dual-Band coverage for Bands 2 & 5, BC0 & BC1
- Size = 6.0 mm x 4.5 mm
- Frequency Ranges
 - Band 2 Tx = 1850 MHz – 1910 MHz
 - Band 2 Rx = 1930MHz – 1990 MHz
 - Band 5 Tx = 824 MHz – 849 MHz
 - Band 5 Rx = 869 MHz – 894 MHz
- Low Quiescent Current in MPM
- High Max Power PAE
- No External Voltage Regulation Required
- APT (Advanced Power Tracking) capable

General Description

The Tritium DB family of PA-Duplexer modules integrate two PA's, duplexers, couplers, and Vreg circuits into a compact 6.0mm x 4.5mm package. The balanced Rx outputs make these modules ideal for use with the latest RF transceivers without the need of an external balun. High efficiency GaAs PA's and compact form factor provide the benefits of excellent performance, ease of design and low cost all in a single solution that minimizes required board space. The additional integration of a coupler and Vreg circuitry further minimizes the external components needed.

The TQM6M6225 is a module for Bands 2 & 5 for use with WCDMA, CDMA and LTE modulations. Because of the combination of high performance, low cost, and small size it is well suited for both mobile handset and data card applications.

Functional Block Diagram



Electrical Specifications

Parameter	Band 2	Band 5
Max P _{OUT}	26.1 dBm	25.9 dBm
ACLR (5 MHz offset)	-38 dBc	-38 dBc
ACLR (10 MHz offset)	-48 dBc	-48 dBc
Max Power Current	420 mA	400 mA
Tx Leakage at Rx port	-30 dBm	-30 dBm
Rx Noise	-181 dBm/Hz	-180 dBm/Hz
Rx insertion loss	2.2 dB	1.5 dB

Note: Typical performance for WCDMA Rel99, V_{CC2}=3.4VDC, V_{EN}=HIGH, T_C=25°C

Ordering Information

Part No.	Description
TQM6M6225	Band 2/5 Tritium DB PAD
Standard T/R size = 2,500 pieces on a 13" reel.	