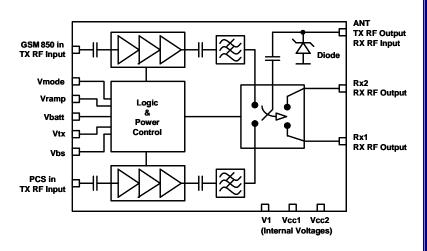


**TQM6M4028U** 

**Data Sheet** 

#### 3V Dual-Band GSM850/PCS Transmit Module

### Functional Block Diagram



## **Product Description**

The advanced dual-band Transmit Module designed for GSM850 / PCS mobile handset applications provides full RF transmit functionality in a size of only 36 mm<sup>2</sup>. The GSM850 and PCS power amplifier blocks including power control are combined with the low insertion loss dual-band pHEMT switch, Tx harmonics filtering, integrated switch decoder, two receive ports, and full ESD protection. This architecture eliminates the need for any PA-to-switch design effort for phone designers. Both Rx ports are frequency independent and allow flexible routing to the transceiver. Fabricated in high-reliability InGaP HBT / pHEMT technology, the module supports GPRS class 12 operation and provides 50 Ohms input and output impedances at all RF input and output ports. The module control inputs are CMOS compatible and has no need for an external reference voltage. With its excellent efficiency performance in both bands, the power amplifier and switch module contributes to the overall talk-time targets of next generation mobile handset designs.

# Free choice of Rx ports for band selection

PCS 38%

Features

Integrated Low Pass Tx Harmonics Filter

Integrated Power and SP4T Control

Integrated SP4T pHEMT Switch

Ultra Compact Size – 6.0x6.0x1.1mm<sup>3</sup>.

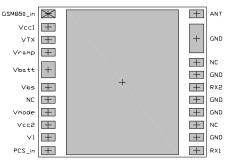
High System Efficiency – GSM850 43%,

- Positive Supply Voltage 3.0 to 5.5 V.
- 50  $\Omega$  Input and Output Impedances.
- GPRS Class 12 Compatible.
- CMOS Compatible Module Control Inputs.
- High-Reliability InGaP HBT Technology
- Ruggedness 30:1
- 260°C RoHS compliant

### **Applications**

- **GSM GPRS Handsets and Modems**
- Dual -band Class 12 Compatible

# Package Style



Preliminary Data Sheet: Subject to change without notice For additional information and latest specifications, see our website: www.triguint.com Revision D, Feb4, 2009