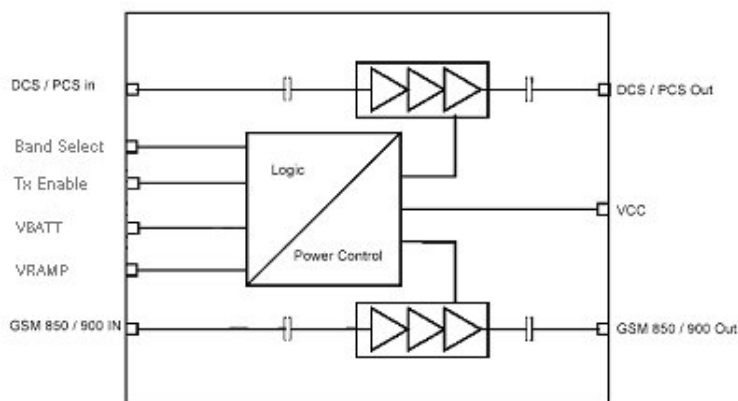


Quad-Band GSM/EDGE Polar Power Amplifier Module

Functional Block Diagram



Product Description

The TQM7M5002 is an extremely small (7x7mm), GSM/EDGE PAM for handset applications. This module has been optimized for excellent EDGE efficiency and Pout in a Polar Loop environment at EDGE class E2+ operation while maintaining high GSM/GPRS efficiency. The TQM7M5002 is fan-out compatible with TriQuint's TQM7M5001 to simplify the design-in process when switching from EDGE Linear to EDGE Polar and is also fan-out compatible with the TQM7M4006 GSM PAM.

High reliability is assured by utilizing TriQuint's 3rd generation InGaP HBT technology and by TriQuint's proven module design techniques.

Electrical Specifications

Parameter	850 Band			900 Band			DCS Band			PCS Band		
	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max
GSM Pout	34.5	35		34.5	35		32	33		32	33	
Efficiency	43	51		50	56		42	50		45	53	
Pin	0	3	6	0	3	6	0	3	6	0	3	6
EDGE Pout		29			29			28			28	
Efficiency	19	23		20	24		22	25		26	29	
ACPR (400KHz)			-58			-58			-58			-58
Pin	0	3	6	0	3	6	0	3	6	0	3	6

Features

- GSM/EDGE Multi-Mode Capability
- Optimized for Operation with Major Chipset Vendors
- > 50dB Typical Dynamic Range
- GPRS Class 12
- Fan-out Compatible with TQM7M5001 7x7mm GSM/GPRS/EDGE Linear PAM
- Fan-out Compatible with TQM7M4006 5x5mm GSM PAM
- Internally Matched Input and Output

Applications

- GSM/EDGE handsets
- GSM/EDGE wireless cards and data links

Package Style

Package Size: LGA 7 x 7 x 1.1 mm
Top View

