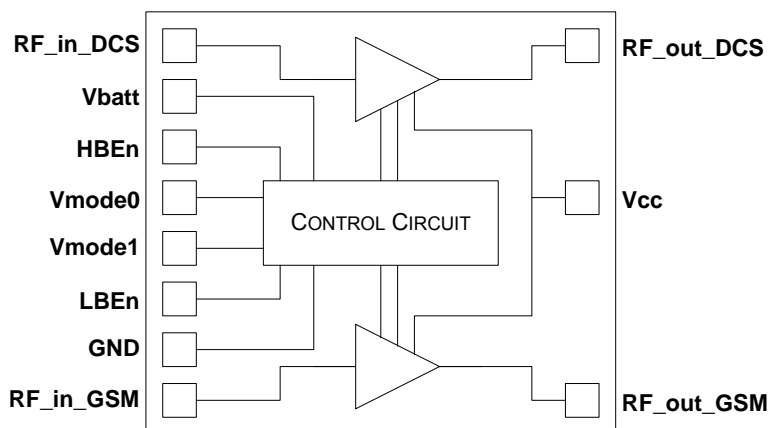


**Quad-Band GSM850/GSM900/DCS/PCS Advanced Input Power Controlled EDGE PAM**

**Functional Block Diagram**



**Product Description**

The TQM7M5013 is an input power controlled, multiple gain state, quad band, GSM/EDGE PAM designed for use with the Qualcomm QTR/RTR8600 WEDGE solutions. This highly efficient PAM significantly improves talk-time while still providing an easy to use solution in a small form factor. The PA output power is controlled by the input power coming from the transceiver in both GMSK and 8PSK modes and so does not require a V<sub>ramp</sub> input. Additionally, the small 5mm x 5mm package requires minimum board space and allows for high levels of phone integration.

**Electrical Specifications<sup>1</sup>**

Parameter	GSM850	GSM900	DCS	PCS	Units
	Typ	Typ	Typ	Typ	
GMSK HPM Pout	35.3	35	33.3	33	dBm
GMSK MPM Pout	31.8	32.2	-	-	dBm
8PSK (RMS Power)	29	29	28	28	dBm
GMSK LPM Pout	22	22	22.8	22	dBm
GMSK ULPM Pout	20.5	21	21.5	20	dBm
GMSK HPM PAE	52	55	55	52	%
GMSK MPM PAE	43	45	-	-	%
GMSK LPM PAE	27	31	25	19	%
GMSK ULPM PAE	29	32	23	16	%

Note 1: RF performance measured at standard operating conditions.

**Data Sheet**

For additional information and the latest specifications, see our website: [www.triquint.com](http://www.triquint.com)  
Revision P, August 31, 2011

**Features**

- For Quad Band GSM/EDGE
- Digital Control Interface
- Low Current at Backed-off Power Levels
- Input power controlled – GMSK and 8PSK
- LB has 4 modes – HP, MP, LP, and ULP
- HB has 3 modes – HP, LP, and ULP
- HBT/PHEMT High Efficient Technology
- High-Power Linearity
- Standard LB and HB paths
- 50Ω input and Output Impedance
- Halogen-free
- 11 Pin Package

**Applications**

- GSM/EDGE/WEDGE Handsets
- GSM/EDGE/WEDGE Wireless Cards

**Package Style**

