

## Applications

- WCDMA/HSDPA/HSUPA/HSPA+/ LTE
- QB GMSK + EDGE
- B34, B39 TD-SCDMA, TD-LTE

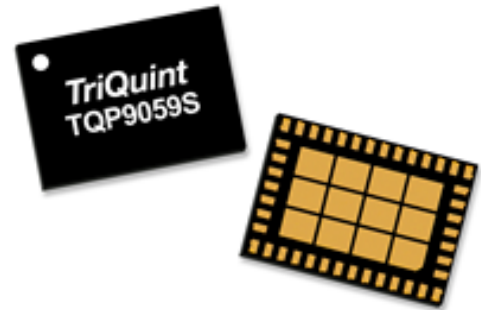
## Product Features

- ET optimized/ APT compatible
- Quad-Band Linear GSM/EDGE
- UMTS Bands 1, 2, 3, 4, 5, 8, 20, & 26
- WCDMA has 2 modes – HPM & LPM
- Input power controlled – 8PSK
- Vramp controlled output power – GMSK
- Vramp optimized bias in 8PSK for linearity and current consumption
- Integrated band distribution switches
- HBT / CuFlip® PA Technology
- 50 Ohm input and output impedance
- Lead-free 260°C/RoHS/Halogen-free

## General Description

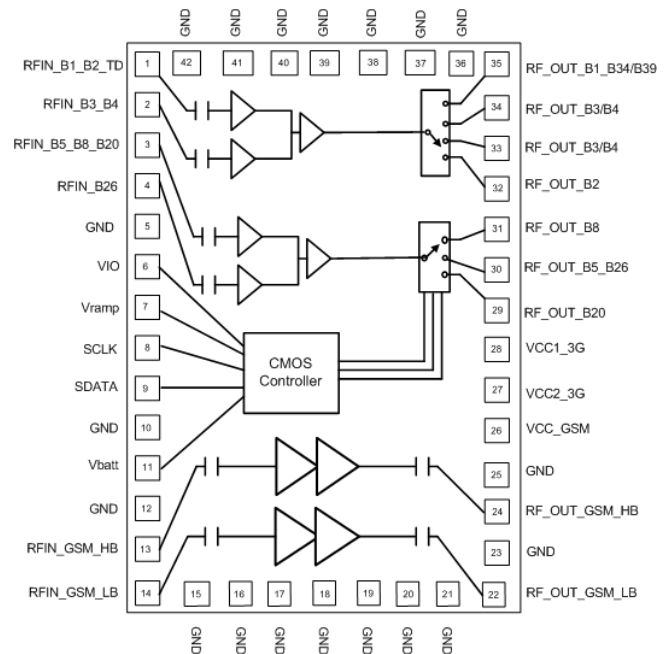
The TQP9059S is a fully matched multimode multiband Power Amplifier Module that supports Quad-band GSM/EDGE, W/CDMA & LTE Bands 1, 2, 3/4, 5, 8, 20, and 26 for both ET and APT operation. The GSM PA output power is controlled by a Vramp input from the transceiver in GMSK modes, while for 8PSK operation Vramp is used to optimize current consumption and linearity. The 2-Gain state WCDMA PA operates in LPM and HPM to maximize talk time over the entire range of operating conditions. It also includes a built-in regulator, ideal for today's extremely small data enabled phones.

The TQP9059S is designed on TriQuint's GaAs HBT technology with CuFlip® assembly offering state of the art reliability, temperature stability and ruggedness. RF performance meets the stringent linearity requirements for multi-mode operation.



42-Pin 5x7x1 mm Package

## Functional Block Diagram



## Ordering Information

| Part No. | Description  |
|----------|--|
| TQP9059S | Quad-Band EDGE + Hepta-band WCDMA Multi-Mode PA Module |

Standard T/R size = 2500 pieces on a 7" reel