

TriPower™

High-Efficiency
3G / 4G Innovation



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Connecting the Digital World to the Global Network®

TriQuint
SEMICONDUCTOR

25 YEARS OF RF
INNOVATION

TriPower™ – The High-Efficiency 3G / 4G Solution

- **‘Green’ Power**
- **55% Efficiency – Market Leading**
- **Innovative & Reliable HV-HBT GaAs**
- **Enables Higher-Capacity Remote Radio Head BTS Systems**

Wireless network operators and manufacturers are faced with a dilemma: how to meet the ever-increasing demand for 3G / 4G high-speed, high-capacity connections while lowering operational costs. The TriPower™ RFIC family addresses these key concerns with breakthrough efficiency; high linearity is achieved with conventional Digital Pre-Distortion (DPD) techniques.

Operating in a systemic Doherty configuration, two innovative TriQuint TG2H214120 120 Watt devices can deliver over 60 Watts of average WCDMA power with 55% collector efficiency for reduced electrical costs and a smaller carbon footprint. For example: a city-sized area would typically be served by a wireless network with 2,000 amplifiers. In a TriPower-based system, power consumption is substantially reduced – the equivalent of adding 130 acres of CO₂-devouring trees to the ecosystem.

The name TriPower™ is derived from the technology's three primary benefits:

High Power • High Efficiency • High Linearity

Part	Technology	Band	Operating Voltage	P1dB (Watts)	Gain (dB)	P1dB Efficiency (%)
TG2H214120	HVHBT	2110-2170 MHz	28V	120	16	65
TG2H214220	HVHBT	2110-2170 MHz	28V	220	16	65



TriPower devices are designed to simplify RF connectivity. TriQuint's two new high-efficiency TriPower products, TG2H214120 (120W) and TG2H214220 (220W), are the first in a family that will grow to include more frequency bands and power levels.

CONNECT WITH TRIQUINT.

E-mail: info-tripower@tqs.com

Website: www.triquint.com/tripower

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