

The Specialists from DC-mmW

VIEW AS WEBPAGE



Wolfspeed's GaN on SiC Technology enables enhanced innovation, performance and efficiency for mMIMO and Macro Applications. Open RAN applicable

mMIMO, Multiple Input Multiple Output is a technology introduced into many wireless communications systems including 4G LTE to improve signal performance. Using multiple antennas, LTE MIMO is able to utilise the multiple path propagation that exists to provide improvements in signal performance.



mMIMO **Basestations**

- · GaN on SiC Products
- Focus on 2.7 GHz to 4 GHz
- Discrete and Integrated Modules
- Amplifiers for 64& & 32T systems



mMIMO Power Amplifier Example Solutions

WS1A2639 2496-2690 MHz

WS1A3640

3300-3800 MHz

WS1A3940

3700-3980 MHz



- Asymmetric Doherty Design
- Input matched to 50 Ω
- Supply Voltage: 48V
- iBW: 194 MHz
- Pavg: 38.5 dBm Psat: 47 dBm
- 2496-2690 MHz
- Lineup Eff: 48%
- Lineup Gain: 35 dB
- Pavg: 39.5 dBm
- Asymmetric Doherty Design

Design

 Input matched to 50 Ω Supply Voltage: 48V • iBW: 400 MHz

Asymmetric Doherty

Input matched to 50 Ω

- Psat: 48 dBm
- 3.4-3.8GHz RF BW
- Lineup Eff: 43%
- Lineup Gain: 28 dB
- Pavg: 39.5 dBm
- Psat: 48 dBm
 - 3.7-3.98GHz RF BW Lineup Eff: 43%
- Supply Voltage: 48V • iBW: 280 MHz
- Lineup Gain: 28 dB

Macro Remote Radio Unit (RRU), commonly referred to as a Remote Radio Head (RRH), is a transceiver on wireless base stations. These transceivers connect wireless devices with wireless networks, making it possible to send data (e.g receive/send text messages)



Macro RRU



- GaN on SiC 1.8 to 4 GHz
- LDMOS 0.7 to 2 GHz
- Doherty solutions from 20W to 80W systems



RF Power Macro RRH Product line

GaN Product Portfolio:

- 40 W to 80 W System Solutions
- 1.8 GHz to 5 GHz
- Optimised designs for cellular systems
- Optimised for DPD

LDMOS Product Portfolio:

- 40 W to 80 W System Solutions
- 50 V LDMOS for <1 GHz Doherty Transistors • 28 V LDMOS for 1.8-2.6 GHz Doherty Transistors
- 28 V LDMOS drivers, 2-stages, Discrete Transistors
- High reliability and RF consistency

Wolfspeed offer an extensive portfolio of GaN on SiC Transistors for Telecom Systems supporting all global standards and



Click here for full range of products provided

Learn more about Wolfspeed

Contact Melcom - for detailed specification, pricing & availability

Melcom Electronics Ltd | +44(0)1932 565544 | WWW.MELCOM.CO.UK

