

Excellent Integrated System Limited

Stocking Distributor

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NXP Semiconductors ADAM20G1KIT

For any questions, you can email us directly: <u>sales@integrated-circuit.com</u>



Distributor of NXP Semiconductors: Excellent Integrated System Limited Datasheet of ADAM20G1KIT - KIT EVAL ADAM 2.1GHZ

Advanced Doherty Alignment Module: MMDS20254H

May 2013

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- The signals amplified by the carrier and peaking sub-amplifiers must be aligned in amplitude and phase for maximum Doherty performance
- Independent variation in the sub-amplifiers, present in particular in asymmetric Doherty PAs, leads to amplitude and phase imbalance, which results in:
 - Degraded DPD performance
 - Reduced efficiency
 - Low PA production yield
- Phase and amplitude control of the incident signals enables significant performance improvement of the entire PA production population



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ADAM Features

- Manufactured in cost-effective industry standard QFN 32-pin 6 mm surface mount plastic package
- · Built in SPI digital control of amplitude and phase
- · Excellent amplitude and phase performance over temperature
- · Digital adjustment precision and excellent repeatability





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ADAM Advantages

 Doherty PA yield improvement and performance optimization



- Improved DPD correction
- PA design with smaller production margins; smaller transistors can be used and hence system efficiency is increased

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- Enables consistent asymmetric Doherty PAs
- Enables Doherty bandwidth improvement
- Real-time field adjustment possible to optimize PA performance under different conditions (power backoff, supply voltage, temperature, etc.)
- Provides adjustment precision and repeatability





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ADAM Evaluation Kit



ADAM Evaluation Kit includes:

- EVB, controller, ribbon & USB cables
- Quick Start Guide with link for downloadable software



Kit available July 2013



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