Advanced Doherty Alignment Module: MMDS20254H

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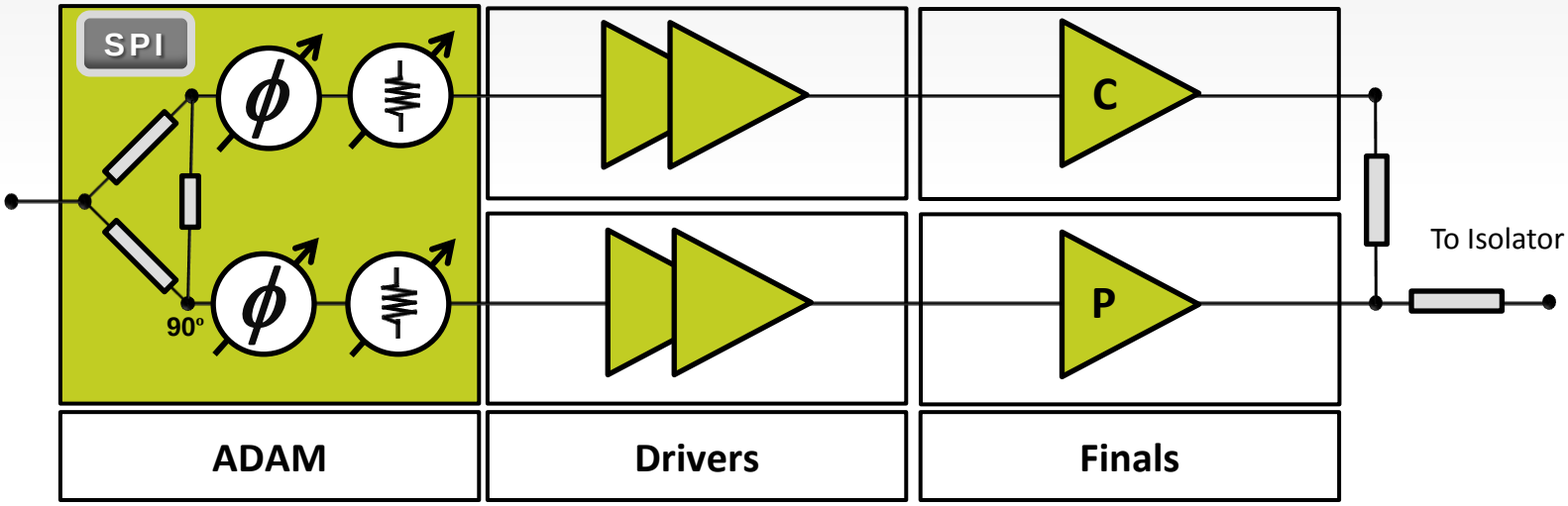
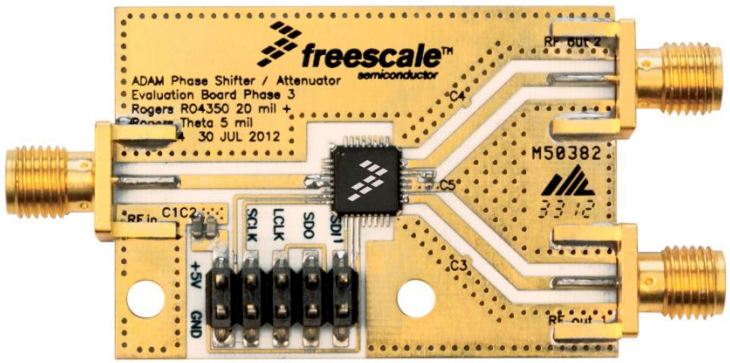
Why Doherty Alignment?

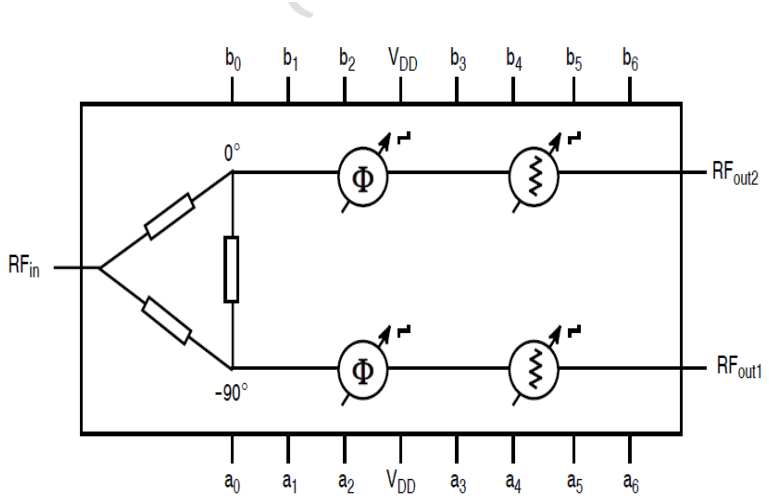


- The signals amplified by the carrier and peaking sub-amplifiers must be aligned in amplitude and phase for maximum Doherty performance
- Independent variation in the sub-amplifiers, present in particular in asymmetric Doherty PAs, leads to amplitude and phase imbalance, which results in:
  - Degraded 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

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





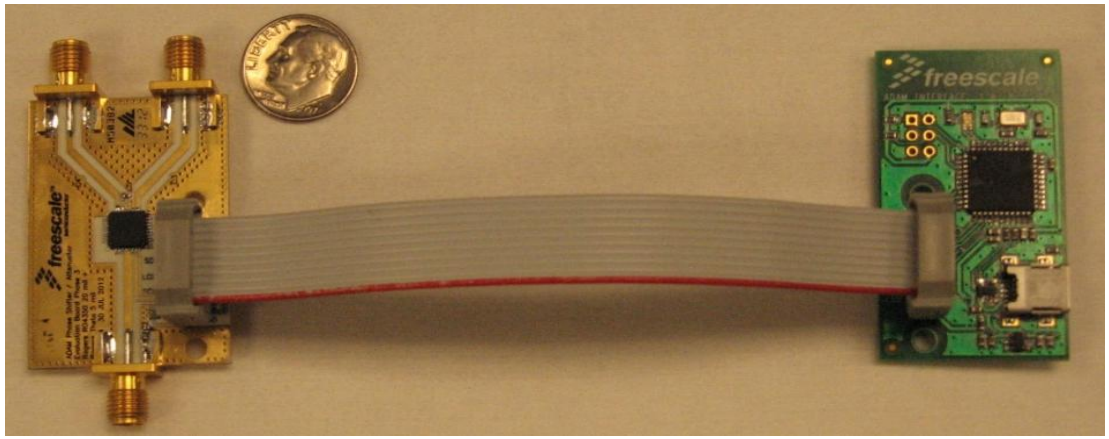
ADAM Advantages

- 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
- 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

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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