

SC1887 – Single Chip Adaptive RF Predistortion



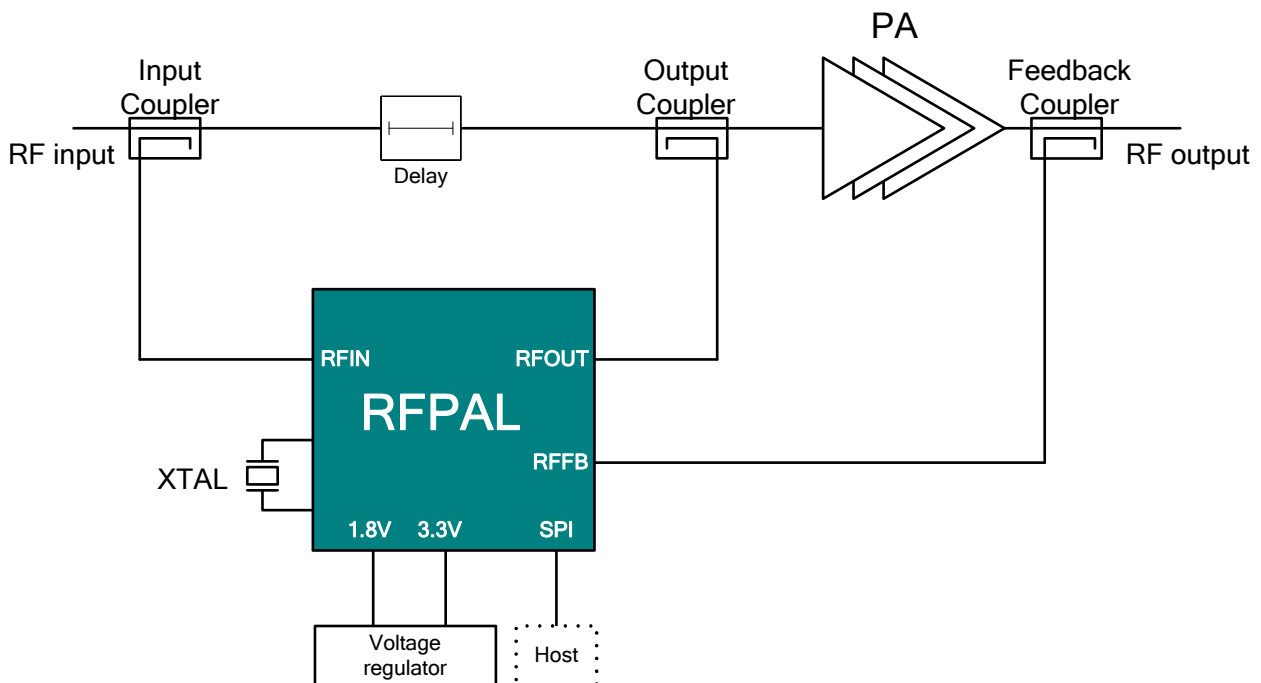
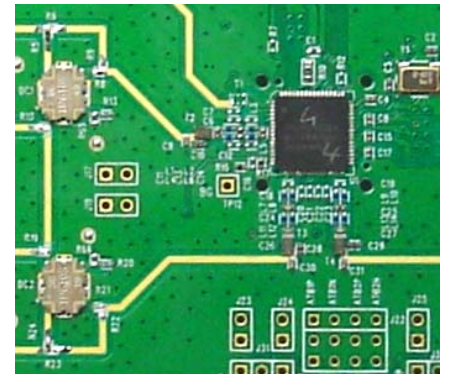
- ↪ Increase linear power amplifier efficiency by operating into compression
- ↪ Predistortion compensates for non-linearity of power amplifier
- ↪ Linearizer operates in the RF signal path without ADCs or DACs

↪ Benefits

- Increase amplifier efficiency by up to 4x
- Reduced cost/size of RF power devices
- Reduce distortion & increased spectral purity

↪ Applications

- Mobile Infrastructure
- Microwave Radio
- Public Safety and Military
- Broadcast
- Any application requiring linear RF power amplification



↪ System-on-Chip RF Power Amplifier Linearizer

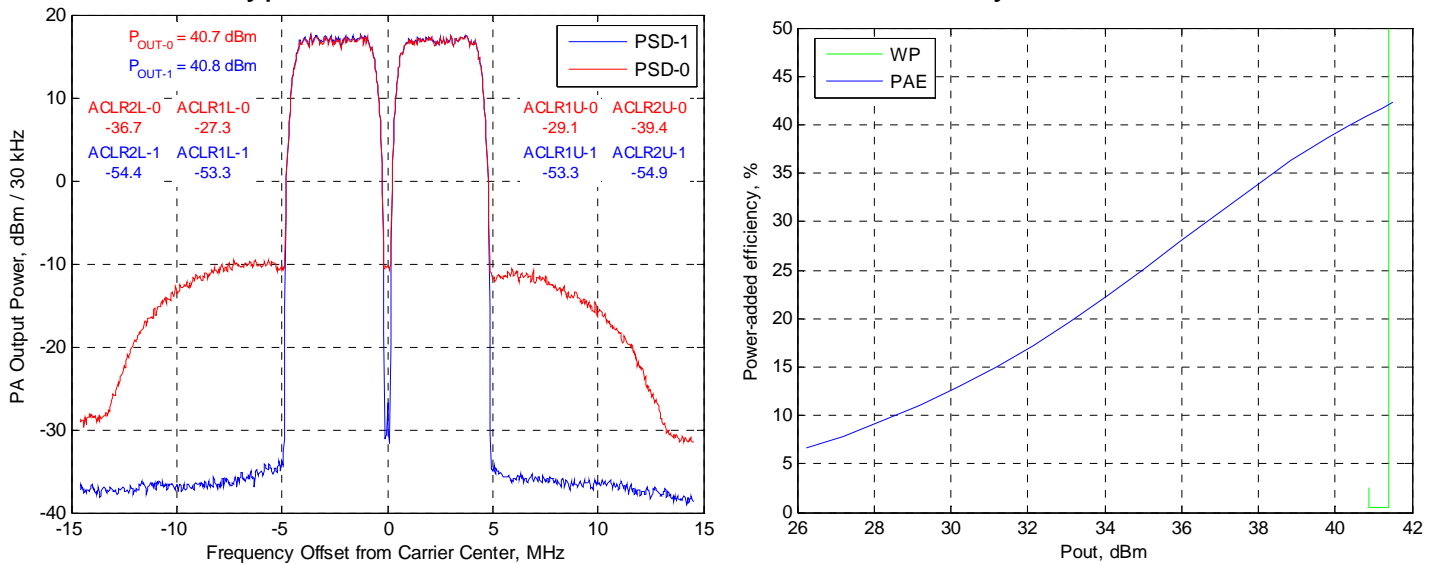
- Analog RF Signal Processing data path
- Dedicated Mixed-signal adaptation path
- Integral μ Controller & non-volatile memory
- Pre-programmed downloadable firmware
- RFin/RFout solution

SC1887 – Single Chip Adaptive RF Predistortion



- ↪ 600-3000 MHz Operating Frequency
- ↪ Up to 60 MHz Signal Bandwidth
- ↪ Suitable for outdoor applications (-40 to +85C operating range)
- ↪ Wide range of modulation signals and bandwidths supported
- ↪ Fully adaptive with continuous optimization
- ↪ Up to 24dB of ACLR correction & results in <1% EVM
- ↪ Power consumption of ~1W supports PAs of 2-60W average RF output

Typical Linearization Performance on a Doherty LDMOS PA



For More Information Contact Scintera:

1154 Sonora Court
Sunnyvale, CA 94086
408-636-2600

sales@scintera.com

<http://www.scintera.com>