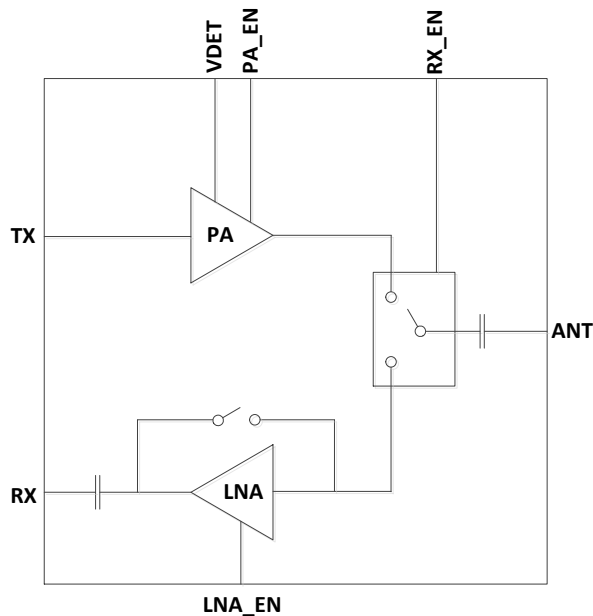




2.4GHz WLAN Front-End Module



Description

KCT8223H is a fully integrated 802.11b/g/n/ac WLAN RF Front-end module (FEM) which incorporates key RF functionality. It is integrated with a high-efficiency power amplifier (PA), a low noise amplifier (LNA) with bypass, the associated matching network and a single-pole, double-throw (SPDT) switch all in one device.

The PA power detector and a digital enable control are also integrated.

KCT8223H is assembled in a compact, low-profile 3*3*0.55mm 16-pin QFN package. It is the perfect RF Front-end solution for implementing 2.4GHz high performance WLAN systems supporting multiple standards.

Applications

- ▶ 802.11b/g/n/ac set-top boxes, networking, and personal computer systems
- ▶ PC cards, PCMCIA cards, mini-cards, and half mini-cards
- ▶ WLAN enabled wireless video systems

FEATURES

- ▶ Integrated high performance 2.4GHz PA, LNA with bypass, and T/R switch
- ▶ Fully-matched input and output
- ▶ Integrated Power Detector
- ▶ Output power: +23.5dBm @ DEVM=-35dB, VHT40/MCS9, 5V
- ▶ Output power: +24.5dBm @ DEVM=-30dB, HT20/MCS7, 5V
- ▶ Transmit gain: 29.5dB at 5V
- ▶ Receive gain: 16dB at 5V
- ▶ Noise figure: 1.5dB
- ▶ ESD protection circuitry on all PINs
- ▶ Minimal External Components Required
- ▶ Small package: QFN 16-pin, 3×3×0.55mm (MSL3, 260 °C per JEDEC J-STD-020)
- ▶ RoHS and REACH Compliant