DX7883
5-7GHz 802.11be WLAN FEM

Key Features

- Frequency Range: 5.15- 7.2GHz
- 3.85V Supply Voltage
- Output Power
  - · 12.5dBm @ -45dB HE320 MCS13 (6-7GHz)
  - · 14.5dBm @ -45dB HE160 MCS13 (6-7GHz)
  - · 16.5dBm @ -44dB HE160 MCS13 (5-6GHz)
  - · 22.5dBm @ HT20 MCS0 Mask (6-7GHz)
  - · 24.5dBm @ HT20 MCS0 Mask (5-6GHz)
- Current Consumption
  - · 235mA Quiescent Current
  - · 405mA @ 24.5dBm HT20 MCS0 (5-6GHz)
- 33.0dB TX Gain
- 16.0dB RX Gain
- 2.3dB Noise Figure
- Superior gain flatness
- Integrated input and output matching circuit
- Small footprint LGA (2.0*2.0*0.684mm package)
- MSL (Moisture Sensitivity Level)= 3

Applications

For devices compliant with IEEE802.11a//n/ac/ax/be WLAN standards:

- Access Points
- Wireless Routers
- Residential Gateways
- Customer Premise Equipment
- Internet of Things

Product Description

The DX7833 is a Wi-Fi 7 (802.11be) RF front-end module (FEM) optimized for 5.1–7.2GHz WLAN systems. It integrates a high-performance 5.1–7.2 GHz power amplifier (PA), RF coupler, low-noise amplifier (LNA), and a single-pole, double-throw (SPDT) switch.

The DX7883 delivers a complete transmit and receive solution, leveraging its high-efficiency, highly linear PA and low-noise LNA, and low-loss SPDT switch to significantly enhance signal quality, extend communication range, and improve energy efficiency for WLAN devices.

Functional Block Diagram