

DX7283

2.4GHz 802.11be WLAN FEM

Key Features

- Frequency Range: 2.4- 2.5GHz
- 3.85V Supply Voltage
- Output Power
 - 17.0dBm @ -46dB HE40 MCS13
 - 19.5dBm @ -42dB HE40 MCS11
 - 21.0dBm @ -44dB VHT40 MCS9
 - 24.5dBm @ HT20 MCS0 Mask
- Current Consumption
 - 160mA Quiescent Current
 - 315mA @ 24.5dBm HT20 MCS0
- 30.5dB TX Gain
- 16.5dB RX Gain
- 2.0dB Noise Figure
- Superior gain flatness
- Integrated input and output matching circuit
- Small footprint LGA (2.0 x 2.4 x 0.684mm package)
- MSL (Moisture Sensitivity Level)= 3

Applications

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

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

Product Description

The DX7283 is a Wi-Fi 7 (802.11be) RF front-end module (FEM) optimized for 2.4GHz WLAN systems. It integrates a high-performance 2.4GHz power amplifier (PA), RF coupler, and a low-loss SP4T transmit/receive (T/R) switch, enabling WLAN and Bluetooth co-antenna operation.

The DX7283 provides a complete transmit and receive solution, leveraging its high-efficiency, highly linear PA, low-noise LNA, and SP4T switch to enhance signal quality, extend communication range, and improve energy efficiency for WLAN devices.

Functional Block Diagram

