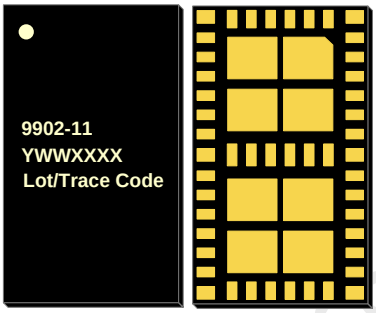
OM9902-11

Datasheet

Multimode Multiband (MMMB) Power Amplifier (PA)

Product Features



- Two T/R (RX) ports and 14 outputs
- Dual Low Band RF inputs support separate transceiver outputs or interstage filtering
- Industry-leading PAE for 3G/4G/5G
- Optimized for APT operation
- Fully programmable Mobile Industry Processor Interface (MIPI) control
- MIPI programmable bias modes optimize best efficiency / linearity trade-off for 3G/4G/5G; minimizes DG09 for 3G.
- N1 Power Class 3 up to 50MHz Bandwidth with max 3.8V Vcc
- N7 Power Class 3 up to 60MHz Bandwidth with max 3.8V Vcc
- N40 Power Class 3 up to 80MHz Bandwidth with max 3.8V Vcc
- N41 Power Class 2 up to 100MHz Bandwidth with max 4.6V Vcc
- N2/N3/N5/N8/N20/N25/N28/N30/N38/N66/N71 Power Class 3 up to 20MHz Bandwidth with max 3.8V Vcc
- Small package: 4.0 mm × 6.8 mm × 0.75 mm, LGA 42 pad configuration

Applications

3G/LTE/NR handsets	
WCDMA Bands	1, 2, 3, 4, 5, 8, 9
TD-SCDMA Bands	34, 39
CDMA2000 Bands	BC0, BC1, BC4, BC6, BC010, BC015
FDD LTE Bands	1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14, 17,18, 19, 20, 25, 26, 27, 28, 30, 66, 71
TDD LTE Bands	34, 38, 39, 40, 41
5G NR Bands	N7, N30, N38, N40, N41, N1, N2, N3, N25, N66, N5, N8, N20, N28, N30,N71

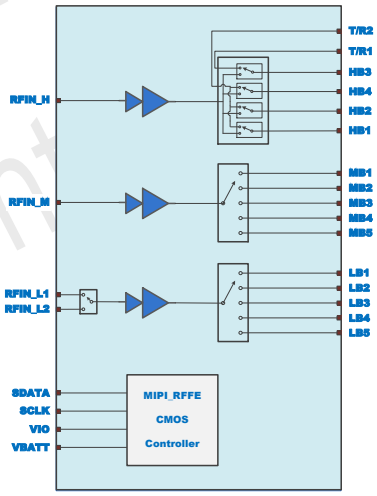


Figure 1 Functional Block Diagram.

Product Description

OM9902-11 is a Phase 5N Power Amplifier Module (PAM) that supports 3G/4G/5G NR handsets and operates efficiently in CDMA, WCDMA, TD-SCDMA, and LTE/NR modes. The module is fully programmable through a Mobile Industry Processor Interface (MIPI).

The PAM consists of a 3G/4G/5G PA blocks for low, high, and mid-bands, and a Multi-Function Control (MFC) block, RF input/output ports internally matched to 50 ohm to reduce the number of external components. A CMOS integrated circuit uses standard MIPI control to provide the internal MFC interface and operation. Extremely low leakage current maximizes handset standby time. The devices packaged in a small LGA package. (4.0 mm x 6.8 mm x 0.75 mm)