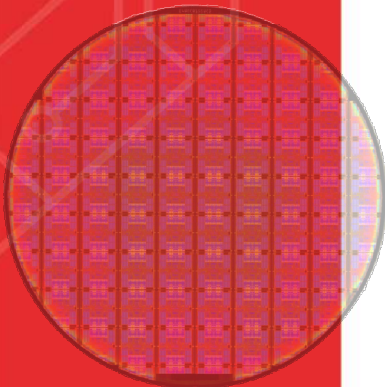
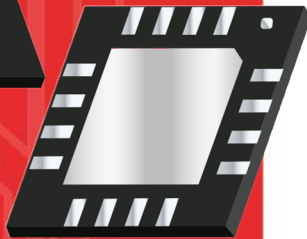
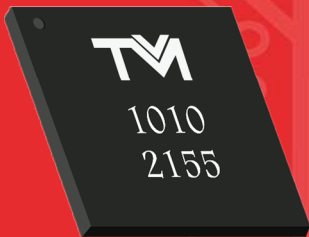




Taiwan Microelectronics Inc.



www.taiwanmicro.com.tw

TM1010

QFN-3x3mm-16L

2.4-2.5GHz RF Front-End IC

The TM1010 is a front-end IC and uses an advanced Gallium Arsenide Hetero-junction Bipolar Transistor (GaAs HBT) process. The front-end consists of a Power Amplifier (PA) and Low-Noise Amplifier (LNA). This device makes it ideal for IEEE 802.11.b/g/n, *Bluetooth*, Wireless Data Terminal and portable battery powered equipment. The PA delivers +23dBm output power with a high Power Added Efficiency (PAE) 41%. The noise figure of LNA is below 2dB in the 2.4GHz to 2.5GHz range. The device is packaged in a QFN 3mm by 3mm 16L package.

Features

- High Efficient Power amplifier: 41% at Pout = +23dBm
- Low-Noise Amplifier (NF typical 1.8dB)
- QFN 3x3 mm 16L with thermal ground / RF Ground ultra-small plastic package
- MSL-1 package, 260°C per JEDEC J-STD-020
- Lead (Pb)-free RoHS

(Restriction of Hazardous Substances) compliant packaging.

Applications

- Bluetooth™ PA.
- Wireless Data Terminal.
- Wireless Audio
- Portable Battery Powered Equipment.

Functional Block Diagram

