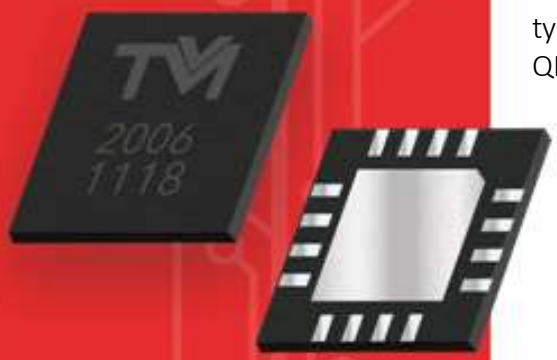
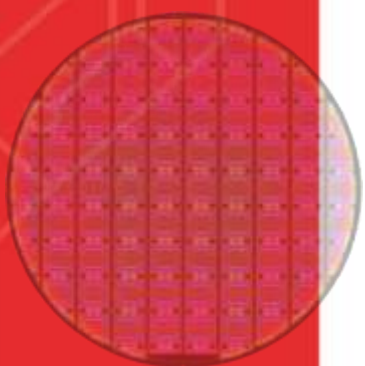
Taiwan Microelectronics Inc.





www.taiwanmicro.com.tw

TM2006

QFN 3x3mm-16L
2.4-2.5GHz RF Front-End MCM IC

The TM2006 is a front-end MCM Module and uses an advanced Gallium Arsenide (GaAs) process. The front-end module consists of a Power Amplifier (PA), Low-Noise Amplifier (LNA) and a RF single pole double throw (SPDT) Switch. This device makes it ideal for IEEE 802.11.b/g, *Bluetooth*, 2.4Ghz Audio/Video, Wireless Data Terminal and portable battery powered equipment. The PA delivers +22.5dBm (biased at +3.3V) output power with a high Power Added Efficiency (PAE) 32%. The noise figure of LNA is below 1.8dB. The RF SPDT Switch has very low insertion loss 0.4dB typical 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: 32% at Pout = 22.5dBm
- P-1dB: 21+dBm Typical @ +3.3V
- Low-Noise Amplifier (NF typical 1.8dB)
- Low Insertion Loss: 0.4dB @ 2.45GHz
- IIP3: 55dBm @ Input Power up to 20dBm
- QFN 3x3 mm -16L with thermal ground ultra small plastic package
- MSL-1
- ROHS, PFOS, REACH compliant

Applications

- Bluetooth™ PA (Class 1)
- Wireless Data Terminal
- Wireless Audio/Video
- Portable Battery Powered Equipment

Functional Block diagram