Taiwan Microelectronics Inc.





# TM1016

### DFN-2x2mm-8L 5.8GHz Power Amplifier High Efficiency HBT MMIC with 17dBm Power Out

The TM1016 is manufactured on Gallium Arsenide Heterojunction Bipolar Transistor (GaAs HBT) process. The device is a low cost, high linearity, low power consumption, high efficiency amplifier IC designed for IEEE 802.11a, ETC, Wireless Audio/Video and other application in the 5.8GHz ISM band. The device also features analog power control to optimize transmit power while maximizing battery life in portable equipment. The device includes an integrated power control circuit for closed loop control of output power. The TM1016 is packaged in a compact 2mm by 2mm DFN package with a backside ground.

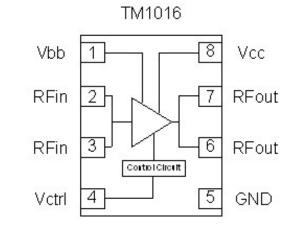
#### Features

- Power Gain 13 dB with 17 dBm power out
- Current consumption is very low: 53mA/ 3.3V
- Analog power Control
- DFN 2x2 mm -8L with thermal ground
- RoHS compliant
- MSL-1

## Applications

- WLAN 802.11.a
- Wireless Audi/Video
- 5.8Ghz ETC
- Wireless Data Terminal
- Cordless Handset
- Portable Battery Powered Equipment

# **Functional Block Diagram**



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