

## Preliminary DATA SHEET

# GSM4024: 3700 to 4200MHz High Linearity 24dBm Power Amplifier

### Product overview

GSM4024 is a Three-stage HBT small cell power amplifier for indoor cellular base stations. It works at 3700~4200 MHz (n77). This PA can deliver 23dBm output power with 100M NR signal and still meet ACPR -45dBc, higher than 30dB power gain.

### Key Features

- 3700MHz – 4200MHz
- 31dB Gain
- 11% PAE at 23dBm output power
- -45dBc ACPR at 23dBm output power w/o DPD
- Input/output internally matched to 50Ohm
- Integrated temperature compensation circuits
- Compact and low-cost 5mm x 5mm LGA package (MSL3, 260°C per JEDEC J-STD-020)
- ESD Level: HBM 1000V; CDM 1000V
- ROHS compatible

### Applications

- 3GPP 5G NR n77
- Driver amplifier for micro-base and macro-base stations
- Active antenna array and massive MIMO
- Customer Premises Equipment (CPE)



Figure 1. 16 Pad 5 x 5 mm Laminate Package

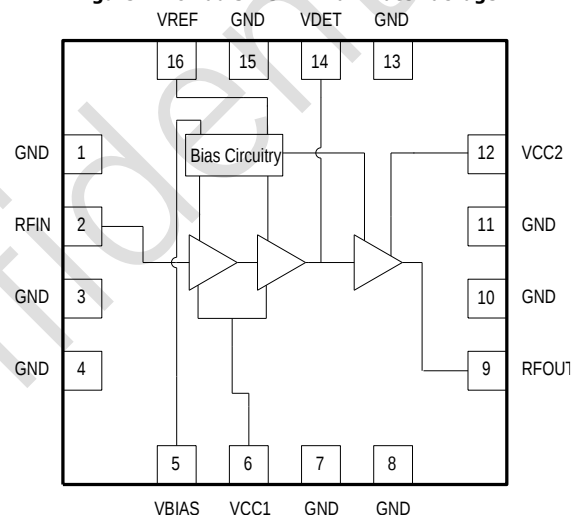


Figure 2. GSM4024 Function Block Diagram

Table 1. Pin-to-Pin Compatible PA Family

| Part Num | Frequency (MHz) | 3GPP Band        |
|----------|-----------------|------------------|
| GSM0724  | 728-821         | Bands n12, n20   |
| GSM0824  | 869-894         | Band 5, n5       |
| GSM0924  | 925-960         | Band 8, n8       |
| GSM1824  | 1805-1880       | Band 3, n3       |
| GSM2124  | 2110-2170       | Band 1, n1       |
| GSM2424  | 2300-2400       | Band 40, n40     |
| GSM2624  | 2496-2690       | Band 41, n41     |
| GSM3524  | 3300-3600       | Band 42,48, n78  |
| GSM3724  | 3600-3800       | Band 43, 48, n78 |
| GSM4024  | 3700-4200       | n77, C Band      |

### Ordering Information

| Part No. | Description                                        |
|----------|----------------------------------------------------|
| GSM4024  | 3700-4200MHz 24dBm linear PA, 7' Reel with 1500pcs |