

## Infineon – the Powerhouse for Small Signal Semiconductors

INFINEON is a leading supplier of small signal discrete semiconductors finding application industry-wide in sectors such as communications, consumer products, automotive and computing.

THE COMPANY OFFERS a broad technology portfolio that includes DC - 75GHz silicon-based processes, MEMS technology-based devices that save design space and manufacturing costs, and the Hipac technology offering the highest possible level of integration between active and passive components. The company also leads in driving miniaturization towards leadless packages such as TSLP, TSSLP and WLP. In addition, Infineon provides a wide variety of discrete commodity products in standard SMD packages that meet customer needs today and in the future.

### The comprehensive range of products includes

- Radio frequency front-end products and technologies giving state-of-the-art RF performance
- Infineon® Hipac technology offers highest integration of active and passive components
- Advanced MEMS silicon microphones
- High-volume front- and back-end production guaranteeing lowest cost and an extremely high quality level
- RF switches manufactured in unique, ESD-robust CMOS technology with no external components required
- Leading edge packaging technologies with the world's smallest leadless package and lowest profile for TVS diodes, MMICs and other discretes

## Where to buy

**Our location finder shows your nearest Infineon distributor or sales office.**

▶ [www.infineon.com/sales](http://www.infineon.com/sales)

## Innovation Meets Bandwidth

Infineon small signal discretes –  
your top choice from  
ultra-low-cost to  
feature phone



[www.infineon.com/smallsignaldiscretes](http://www.infineon.com/smallsignaldiscretes)

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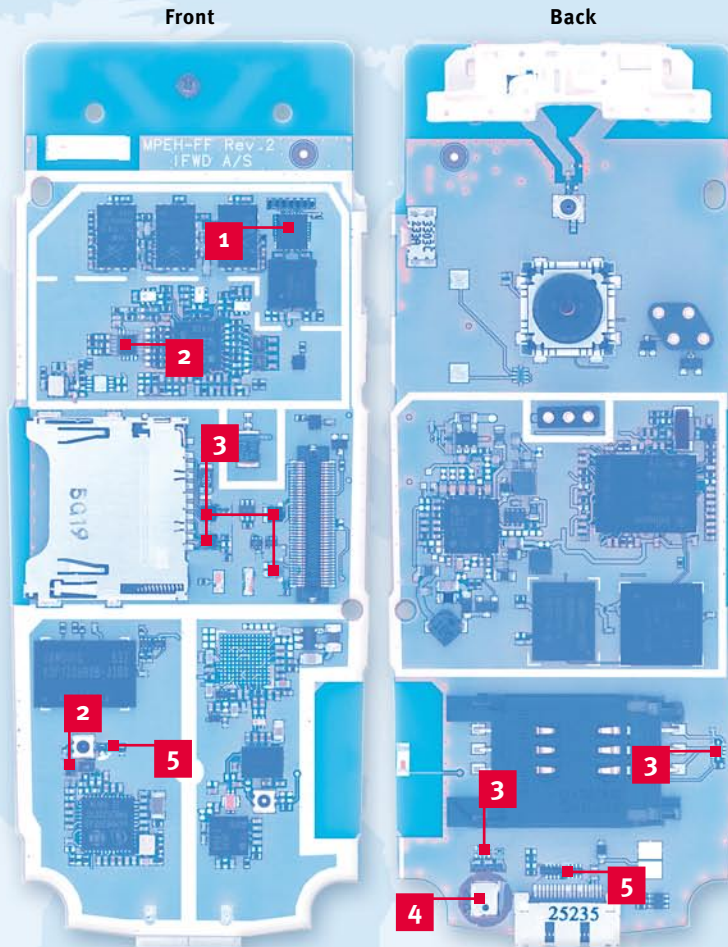
Never stop thinking

### 1 RF Switches

- Cost-efficient CMOS technology with GaAs-like performance
- No external parts required
- Highest integration level
- On-chip ESD protection up to 8kV
- Fine pitch chip-scale package with ultra-small size and height

### 2 RF MMICs

- Cost-effective SiGe:C technology with performance superior to GaAs
- Ultra-low noise figure (0.5dB at 1.8GHz) enables mobile handset designs with best-in-class receive sensitivity
- Lowest profile MMIC- packages (h=0.39mm) available in the market
- RF output internally matched to 50Ω
- Low external component count
- Digitally controlled low power mode and power off functions on chip, enabling increased standby time for mobile handsets
- On-chip 1kV ESD protection



### 3 Infineon® Hipac

- Enhanced ESD protection for improved functional performance
- Space saving of up to 80% PCB/substrate area
- Leading position on LC filters
- Highest quality level
- Customized design available
- Portfolio continuously growing

### 4 Silicon Microphone

- Enhanced and cost-reduced manufacturability due to reflow soldering capability
- Excellent reliability and no degradation at high temperature and humidity, shock and vibration
- Small size and low current consumption
- Good audio quality, long-term stable
- High power supply rejection ratio
- New reverse side SMM350 microphone available

### 5 TVS (Transient Voltage Suppression) Diodes

- World's lowest capacitance values for high-speed data transmission (e.g. USB2.0, HDMI, S-ATA)
- World's smallest packages (down to 0.6 x 0.3 x 0.3mm)
- Lowest clamping voltages and lowest leakage currents
- Outstanding ESD protection, exceeds IEC 61000-4-2 standard
- GPS and DVB/DMB antenna protection diodes