FUJITSU THE POSSIBILITIES ARE INFINITE

Fujitsu RF CMOS

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RF CMOS Announcement Highlights

- The Fujitsu 65nm and 90nm RF CMOS process technologies
- Advanced analog and RF device process design kit
- RF CMOS technology platform for consumer, wireless and high speed analog applications

Market Trends

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- Rapid growth of wireless link, networking, telecommunication and consumer applications
- Short-range, wireless personal network will become ubiquitous
- Very high-speed wireless link for multimedia and data
- Enterprise-grade, high-speed wireless LAN
- New opportunities in WiMAX and 3GPP LTE
- Integrated digital tuners for broadcast audio and video
- Navigation system for location-based services
- Wireless sensor network and remote meters

The Fujitsu RF CMOS Capabilities

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- Single-chip GPS IC
- Wireless USB
- Digital TV demodulator/tuner
- Bluetooth EDR
- Others in development

The Fujitsu RF CMOS Differentiation

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- Advanced process technologies
  - 90nm and 65nm low leakage process technology
    - Triple well
    - Up to 12 layers of metal
    - Very low and ultra-low K inter-metal dielectric
    - MIM and MOS capacitors
    - Thick metal inductor
  - Roadmap for 40nm and beyond
  - Very high transistor switching frequencies
  - Excellent device matching
- Process design kit
  - Highly accurate PSP transistor models
  - MOSVAR varactor models
  - Inductor synthesis toolbox
  - X-sigma process corner analysis
  - PCM based model validation tool
  - Full suite of parameterized cells

Summary

- Fujitsu is committed to providing leading-edge RF CMOS technology platforms
- Highly accurate and flexible process design kits available for 90nm and 65nm
- Design IP available for target applications