



GSM SINGLE-CHIP BASEBAND PROCESSOR

FEATURES

- **Single 200-pin FBGA device (13 mm x 13 mm)**
- **GSM voice handset capabilities**
- **Data capability**
 - GSM single slot up to 14.4 Kbps
- **Multi-voltage SIM and IrDA compliant interfaces**
- **GSM850, E-GSM900, GSM1800, and GSM1900 bands**
- **Extremely low power design: 3V I/O and 2V core**
- **Two UART serial ports for data/fax/testing**
- **Flexible RF transceiver control interface:**
 - Integrated PA controller
 - APC DAC with ramping RAM
 - Support straight or multiplexed I&Q
 - Schedule-based programmable serial control
- **Power/cost-flexible audio circuitry**
 - Noise suppression and echo cancellation for speakerphone and car phone environments
 - Sidetone/microphone amplification control
 - High output speaker driver
- **Flexible clock rates for processors (0 to 52 MHz)**
- **Real-time clock and alarm**

SUMMARY OF BENEFITS

- **Comprehensive GSM handset software**
 - Layer 2/3 and user interface software
 - For bar-type and flip-type GSM handsets
 - Multiple LCD panels (B&W to 65K color)
 - Polyphonic ringer interface
 - Multicolored LED notifications/backlight
 - Type approved Phase 2+ multiband protocol stack
 - Fully functional GSM handset user interface
 - Foreign language fonts, including Chinese
 - Startup animations, songs, games, and ring tones
 - Unicode SMS and full EMS messaging
 - SIM Application Toolkit (SATK)
- **Fully integrated Layer 1, including all drivers**
- **AT commands (7.05 and 7.07)**
- **Phase 2+ supplemental services**
- **Error correction: Radio Link Protocol (RLP)**
- **Complete development system available**

GSM Handset Terminal Using ML2011

