Integrate Wireless Connectivity Easily

Powering millions of devices operating worldwide, the Sierra Wireless Open AT application framework is the world's first complete software package for M2M application development.

Available for 2G and 3G, it offers a range of readily available building blocks to accelerate the application development process and reduce total cost.

LESS EFFORT ON INTEGRATION, MORE TIME FOR INNOVATION

The Open AT application framework makes it easier and faster to deploy M2M solutions. It allows you to use a 10-year track record technology that is already widely deployed, to provide the foundation for the wireless connectivity. Save time on integration to focus on the unique value you are bringing to the market.

"Working with Sierra Wireless allowed us to focus on our own core strengths – we didn't need to become wireless experts to integrate the connectivity we needed and get our router to market quickly." Helmut Ratzenhofer, CEO, GÖRLITZ Austria GmbH

KEY BENEFITS:

- Focus on innovation, not integration
- Accelerate application development
- Reduce cost
- Effortlessly deploy one application on global 2G and 3G networks
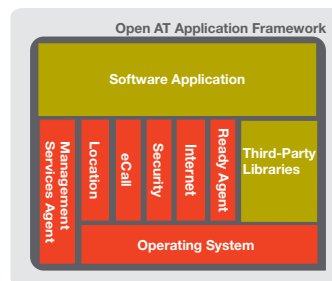
A Complete Software Package

OPERATING SYSTEM

Open AT includes the world's only operating system designed specifically for M2M. It allows you to easily write embedded applications in standard ANSI C/C++.

LIBRARIES

A wide choice of libraries provide extra features and protocols to facilitate software development.

• **Internet:** Manages file transfer (FTP), email (POP3, SMTP), web services (HTTP) and MMS. IP routing with DHCP server, port forwarding, DNS proxy and NAT provide.

• **Security:** Protects your transactions and data through SSL, a cryptographic engine and jamming detection.

• **Location:** Facilitates GPS integration with a power management feature, fast TTFF and Assisted-GPS capability.

Open AT Application Framework

The Open AT Application Framework includes an operating system and libraries to ease the integration of your software.

• **eCall InBand Modem:** Brings emergency call capability,standardized by 3GPP, to in-vehicle systems.

• **Ready Agent:** Connects to the AirVantage M2M Cloud Platform.

DEVELOPER STUDIO

Developer Studio is an easy-to-use development tool based on Eclipse™ which makes the application development experience more streamlined and efficient.

SIERRA WIRELESS™ | AirPrime™

Key Features

Operating system	
Real time, preemptive and multitask Timer and captures services Bus services: GPIO, USB, UART, I2C and SPI, ADC and DAC Interruption management RTC	Watchdog Fail safe file system, Flash storage Update service for firmware and application Application trace capabilities and error management
Programming language	
ANSI C/C++	
Compiler compatibility	
GCC and ARM RVDS	
Wireless connectivity management	
SIM management: PhoneBook, open SIM access, SIM toolkit Call, GPRS, SMS and MMS services GSM stack services: PLMN scan, cell information, TX burst indication Network Scan	
Power down management	
Ability to completely turn off radio interface Ability to dynamically Up/Down CPU processing speed	Configurable alarm and external interrupts to leave low power modes
Audio management	
DTMF coder and decoder Tone player Audio player and recorder	Echo cancelation and noise reduction PCM audio stream control
AT Commands management	
Standard and extended command set Incoming / outgoing AT command control	Custom AT commands capability AT commands filtering
IP Connectivity	
TCP and UDP sockets Email: POP and SMTP Ping, DNS resolution, SNMP Client	Web service: HTTP File transfer: FTP
IP routing	
Gateway capabilities: DHCP server, DNS Proxy, port forwarding, NAT	
Security	
SSL (Secure Sockets, HTTPS), Crypto engine	Jamming detection
Location services	
GPS capability, NMEA frame, fast TTFF, Assisted-GPS, jamming removal	
eCall service	
3GPP compliant, MSD PUSH and PULL modes, PSAP Test Server	

Test Open AT Application Framework Today

- **Download the installer:**

  http://developer.sierrawireless.com/OpenAT/download

- **Join our developer community:**

  http://developer.sierrawireless.com

Device Management

AirPrime™ Management Services is a cloud-based device management solution which enables you to remotely monitor and upgrade Open AT applications and AirPrime embedded modules firmware in the field through a web portal.

REMOTE DEVICE MONITORING & CONFIGURATION

The user interface includes the possibility to create dashboards in order to easily manage devices in the field:

- Monitor key parameters and communication traffic
- Configure devices
- Remotely send AT commands

REMOTE SOFTWARE AND FIRMWARE UPGRADES

AirPrime Management Services enables application software and firmware upgrades over-the-air, including the following features:

- Delta generation (download only the code that has changed for faster downloads and reduced data volume)
- Upgrade for multiple devices
- Reports

Easy to deploy, secure and scalable, AirPrime Management Services are based on industry standards: OMA-DM and full IP architecture.

SIERRA WIRELESS™ | AirPrime™