



aJile Wireless Reference Platform

aJ-100WRP

Overview

The aJ-100WRP is aJile's Wireless Reference Platform based on the low-power, direct execution Java™ processor, aJ-100. The platform is designed to meet the feature set of a new generation of wireless Internet devices capable of voice communication, Internet accessibility and secured dynamic delivery of on-demand mobile entertainment, eCommerce and location-based services.

The aJ-100WRP is a complete Java-based wireless mobile computing system solution built upon aJile's high performance Java technology and Sun Microsystems' J2ME / CLDC / MIDP technology. The platform leverages the mobile industry preferred Java APIs and wireless communications to provide access to the widest variety of third party applications and multimedia.

The aJ-100WRP is a licensable reference design intended to provide a turn-key wireless mobile computing system for OEM manufacturers. OEMs will be able to customize the ergonomic design and feature set to enable rapid product deployment. The aJ-100WRP can be applied directly to implement wireless devices like PDAs, smartphones, gaming devices, mobile POS terminals, and wireless webpads.

Features

Processor

- aJile direct execution Java processor, aJ-100

Memory configuration

- 8MB PSRAM
- 8MB Flash

Wireless communication port

- Dual band GSM/GPRS module
- Dual band CDMA module

Audio

- MP3 decoder
- FM synthesizer

Display

- 3.5" LCD TFT reflective display
- 320 by 240 (QVGA)
- 65K color

Input and navigation

- Touch screen
- Thumb wheel selector
- QWERTY thumb keyboard

Storage

- MMC card

Optional I/O

- CMOS Camera
- Compact flash slot
- IrDA

Rechargeable Lithium Ion battery pack

Real-time clock

Runtime OS

- Sun J2ME / CLDC / MIDP

PDA applications

- MIDP application manager (JAM)
- Address book
- Scheduler
- Calculator
- World clock
- Note pad
- Host synchronization

Mobile phone applications

- Dialing with integrated phone book
- Call history

Wireless applications

- Email reader
- HTML web browser
- SMS instant messaging

Multimedia applications

- Video streaming
- MP3 player
- MIDP Games

Jacks

- Stereo headphone
- Microphone
- USB

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Deliverables for aJile Wireless Reference Platform

Platform schematics, parts list and net list

Platform user's guide and memory map

Java runtime environment

- Sun Microsystems' J2ME / CLDC / MIDP class libraries
- aJile native classes
- Java application manager (JAM)

Source code for all software drivers

aJile tool chain

- Optimizing Linker/Application Builder
- Application Debugging Tools
 - Host-target communications via an IEEE 1149 (JTAG) interface
 - Host-based full featured low-level debugger - Charade
 - Host-based JPDA compliant source-level debugger

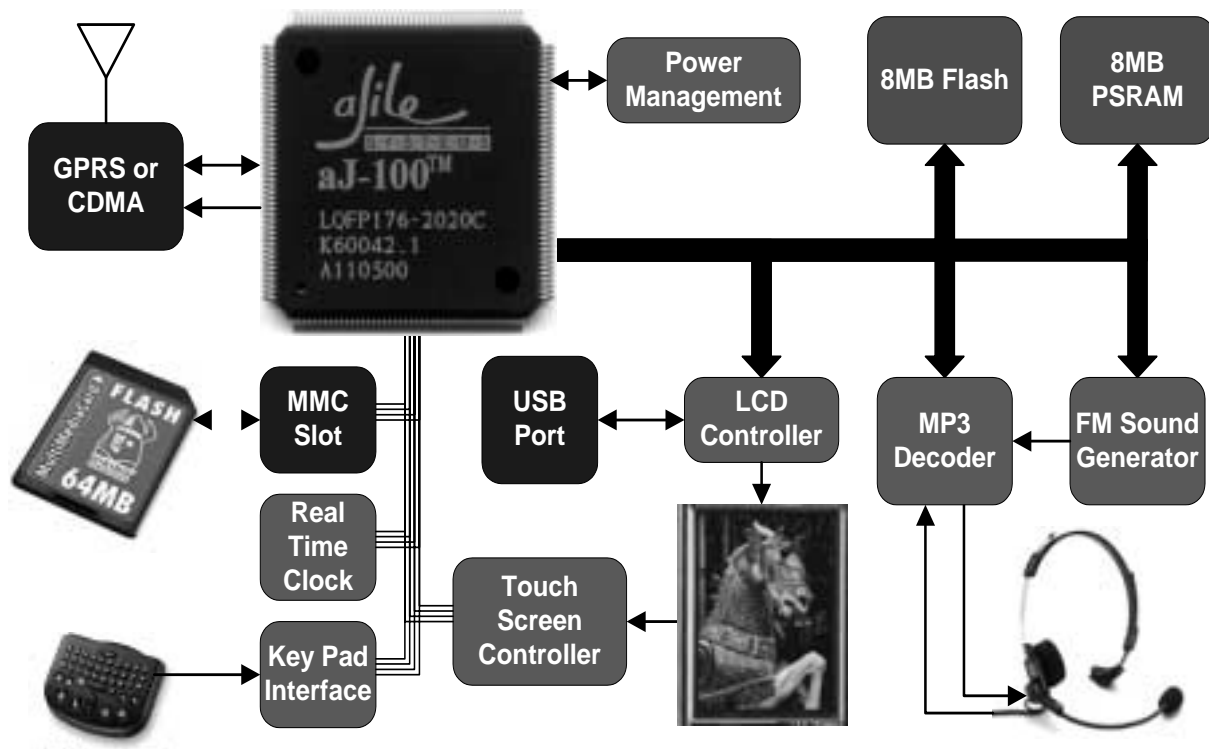


Figure 1: Block Diagram of the aJile Wireless Reference Platform (aJ-100WRP)

Target wireless Internet devices

The aJ-100WRP is a licensable platform that can be modified to implement the Java based wireless devices like:

- Smartphones
- Gaming devices
- Mobile POS terminals
- Wireless webpads