



Android

Android is a Linux-based operating system for mobile devices such as smartphones and tablet computers. It is developed by the Open Handset Alliance led by Google. Google purchased the initial developer of the software, Android Inc., in 2005. According to the Android project "The goal of the Android Open Source Project is to create a successful real-world product that improves the mobile experience for end users".

Android consists of a kernel based on the Linux kernel, with middleware, libraries and APIs written in C and application software running on an application framework which includes Java-compatible libraries based on Apache Harmony. Android uses a virtual machine with just-in-time compilation to run dex-code (Dalvik Executable), which is usually translated from Java bytecode. The main hardware platform for Android is the ARM architecture, however recently there has been support added for x86 from the Android x86project.

Anyone considering using Android should realize that using Android in Embedded Applications adds a layer of complexity and inefficiency that may not make sense for many User Interfaces in the Embedded arena. However, if the unit is an battery backed Industrial Tablet or similar mobile device Android may be a good fit. Application programming is typically done in Java although C can be used with some difficulty.

EMAC can provide Android (Gingerbread, Ice Cream Sandwich or Jellybean) for several of our products. Call for further details.
