

Embedded Systems Essentials with Arm: Getting Started

Module 2

KV2 (2): The Mbed software resources and Hardware Development Kit

The Mbed platform provides an array of software libraries, as well as a hardware development kit.

The software provided by the Mbed platform, includes multiple resources that enable rapid prototyping of embedded system applications. This includes C and C++ software libraries that encompass start-up code, peripheral drivers, networking, RTOS and runtime environment.

There are also community-developed libraries and code, including a 'cookbook' of hundreds of reusable peripheral and module libraries.

Software tools such as build tools, test scripts, and debug scripts are also included.

The Mbed Hardware Development Kit or HDK consists of a collection of designs to help develop custom hardware. It includes Eagle schematics and board files, PDF schematics and board copies, CAM Job Gerbers for manufacture (including pick/place and drill), a Bill of Materials for each item, a repository of content and projects, and easy-to-use USB and debugging support.

Working with boards based on the Mbed HDK allows developers to use the Mbed ecosystem and associated technologies, including Mbed OS and DAPLink, in the design process.