What is jmCLIG

It's just my Command Line Interpreter Generator for microcontrollers. This is an interactive firmware project generator.

jmCLIG is about connecting people to chip the easy way.

It is a part of jmSCAG technology. A select and click application generator.

Problem

Choosing, evaluating and testing new microcontrollers chips are very difficult tasks for new comers.

Solution

Use standard PC resources and integrated connectivity of the chip to download firmware into it, and control it from a PC.

Users select modules from an available pool, download the firmware into the chip, then control it from a command line interface or any application with a serial port access.

Modules are based on a simple multitasks architecture for running multiple modules concurrently. You can mix any modules together. (hardware peripherals modules and software modules)

Applications

No programming, single chip evaluation and testing. No need for costly development boards, but you can use them.

Rapid, single or spread silicon application development. Enables you to spread your application on multi chips and use PC/Mobile connectivity to monitor and control your applications.

jmCLIG for Applications

jmCLIG targets single chip applications as well as multichip applications.

Because there is high volume of low cost commercial products already full equipped with connectivity, graphics and input technologies, there are applications where these standard equipments would make a lower cost and faster solution just by adding an external microcontrollers to get the job done.

A typical application would have sensors in different places and actuators in others places, each of these devices with a microcontroller that reports back to the main application running on a PC.

The microcontroller can be accessed by USB which has the advantage to power it at the same time. It can be accessed wirelessly for microcontrollers with integrated radio.

Why jmCLIG is written in C

I chose to write modules in C to support low end microcontrollers that comes with only C compilers. In multichip applications a sensor does not have to be stuffed with a 32 bit microcontroller to get the job done. In that case price matters most.

Where is jmCLIG

Right now jmCLIG is a standalone application. (for proof of concept)

A video demonstration will be put on-line soon.

Its plug-in architecture enables easy new module additions.

It's built from DotNet Technology and will be available as an on-line application or cloud service.

It can generate source files or firmware only.

Module software architecture is simple and will enable users to build their module if they choose to.

jmCLIG will be located at jmCLIG.com if I can find the time to put it up there.

(prevision date may 2011)

Right now, examples of source code and compiled firmware are available on mbed.org.