

GCC-HCS12 Project

CSE4080: Computer Science Project
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Difficulties on embedded platforms (for intermediate developers)

- Finding affordable **hardware** platform
- Finding easy-to-follow and organized **documentations**
- Finding open source and customizable **compilers** and assemblers
- Finding simple and affordable Integrated Development Environment (**IDE**)

Difficulties on embedded platforms (for intermediate developers)

- Difficulties with testing, transferring and **debugging** codes on target platform
- Finding simple and understandable **examples** for hardware modules
- Need of electrical **knowledge** and general understanding of target platform

Difficulties on embedded platforms (for intermediate developers)

- Need of **high tech tools** and expensive equipments (i.e. Oscilloscopes and logic analyzers)

Freescale HCS12 Microcontrollers

- HCS12 is a **powerful** and very affordable industry level MCU
- Easy to follow **documentation** is available free of charge (not really organized though)
- **GNU tool chain** and open source assemblers are available free of charge (GPL)

Freescale HCS12 Microcontrollers

- There does not exist an affordable and simple **IDE** for HCS12
- There are some difficulties to test, transfer, and **debug** codes on HCS12
- Unfortunately, similar to many other platforms, **examples** are not simple and good enough

What GCC-HCS12 project covered

- Organized necessary **documentations** for beginners and intermediate developers
- Provided easy to follow and simple **examples** for HCS12 hardware modules
- Provided multi platform, simple and free of charge **IDE**

What GCC-HCS12 project covered

- Provided detailed documentation on the [GNU tool chain](#) for HCS12
- Full [real-time](#) implementation of HCS12 [PWM](#) module as a demonstration of aboves
- For more information, please refer to <http://gcc-hcs12.com>

Thank You