

# CW10.3 - ARM gcc Compiler

- Adding gcc compiler for ARM Cortex-M Series (M0+, M4)
  - New Project Wizard will create projects using the ARM gcc compiler by default
    - Kinetis L Series (Cortex M0+)
    - Kinetis K Series (Cortex M4)
  - Newlib and Embedded Warrior Library (EWL) libraries will be provided. EWL will be the default library.
  - Benefits
    - Leverage the investment ARM Ltd. is making in gcc compiler for Cortex-M Series
    - FSL ARM build tools investment will continue at the same level. Compiler engineers will work on gcc bug fixes and optimizations, which will be submitted back to the open source community. Result - faster, smaller, more robust code over time.
    - FSL will provide support for the gcc compiler integrated with CodeWarrior.
    - No support will be provided for non-integrated gcc compilers.



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### CW10.3 - FSL ARM Compiler

- Continuing to provide FSL ARM compiler (M4 only)
  - FSL ARM compiler will continue to be provided, but it will be in maintenance mode (bug fixes only)
  - An application note will be provided to help customers migrate existing FSL ARM compiler based projects to ARM gcc compiler.
  - Deprecation Plans
    - FSL expects to continue to offer the FSL ARM compiler and fix bugs until a preponderance of customers indicate that they are using the ARM gcc compiler.
    - FSL will strongly urge customers to move to the ARM gcc compiler when it is convenient for their development cycle.
    - FSL will give a deprecation notice one (1) release before the FSL ARM compiler is removed from the product.



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## **ARM Compiler Frequently Asked Questions**

1. Is CodeWarrior going to be lower priced?

**Answer:** No, CodeWarrior provides value well beyond the gcc compiler including:

- gcc enhancements focused on FSL silicon and on-going support
- Embedded Warrior Library optimized for embedded programming
- Processor Expert to generate optimized code for FSL silicon
- Trace/profile support for on-chip and external trace capture buffers
- Debugging through low power modes
- Kernel aware debug
- 2. Can I create a project for Kinetis L and try it with the GCC and CW compilers to benchmark them to see which is best?

**Answer:** No, the FSL ARM compiler does not support M0+. You can do this benchmarking for the Kinetis K Series.



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# **ARM Compiler Frequently Asked Questions**

3. Can I download a newer GCC compiler from the community and place that in CodeWarrior?

**Answer:** No, FSL is working with ARM Ltd. on the latest and most optimized Cortex M-series gcc compiler and will stay in synch with the ARM releases. Only the integrated gcc compiler will be tested with the EWL libraries.

4. Can I get an IDE/Debugger only version of the tools and bring in the GCC Compiler from ARM Tools I own or the community?

**Answer:** No, there is no reason to provide an IDE/debugger only product since FSL works with ARM Ltd. to provide the latest and most optimized M-series gcc compiler integrated into CodeWarrior

5. Where can I download the gcc source code?

**Answer:** ARM Ltd. gcc compiler sources are available on LaunchPad. FSL patches will be available on the CW MCU 10 download page.

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