arm

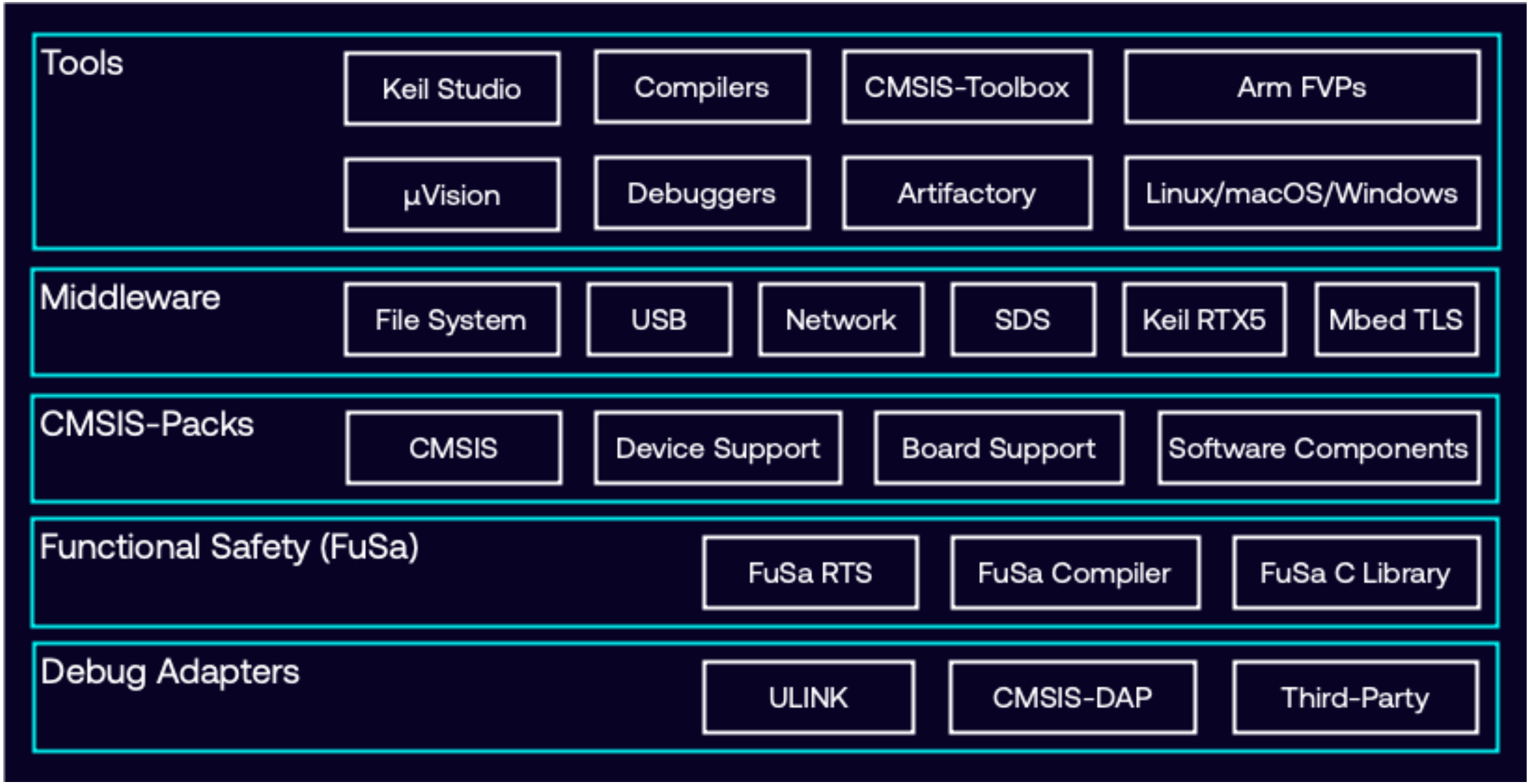
What's New In Keil MDK

Transform your Embedded Development with Keil MDK-6

Ralf Kopsch, Hans Schneebauer

May 19, 2026

Keil MDK Version 6 – Commitment to Professional Users



Editions and Pricing

Learn about MDK Editions

Feature	MDK-Community *Free for non-commercial use*	MDK-Essential *Supports all Cortex-M cores and for commercial use*	MDK-Professional *All-in-one solution including FVPs and FuSa and for commercial use*
All Cortex-M cores	✅	✅	✅
Middleware	✅	✅	✅
Arm Compiler for Embedded	✅	✅	✅
Arm FVP Simulation Models	✅	⛔	✅
FuSa Compiler + libraries	⛔	⛔	✅
FuSa Run-Time System	⛔	⛔	✅
Support	Community	✅	✅
Price 1 year	Free	$999	$1,999

Purchasing options: Local distributors/Arm Developer Store (incl. subscription)

arm

Software packs simplify software integration over the product lifetime

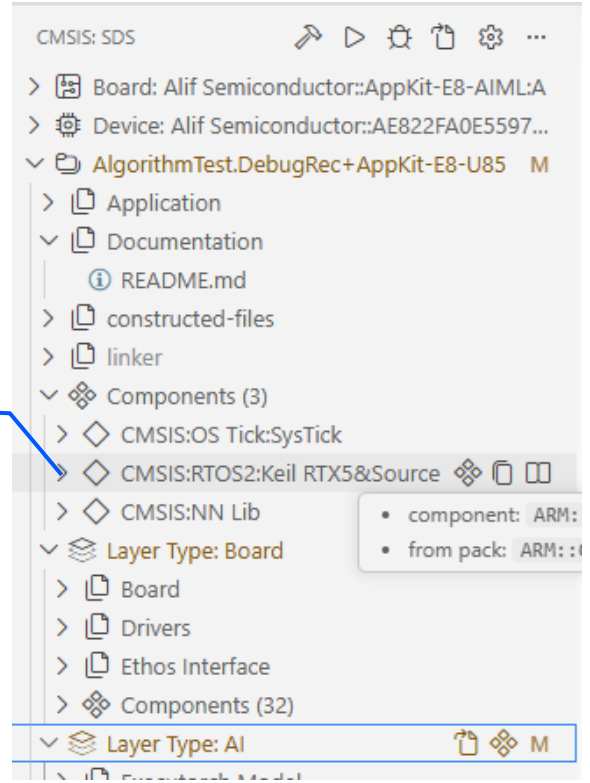
Base software maintained by Arm

CMSIS-RTOS2 Real-time execution	CMSIS-Driver Middleware I/F	CMSIS-DSP Compute library	CMSIS-NN Machine learning	CMSIS-Core Device Access
Keil RTX RTOS Kernel	CMSIS-View Event recorder	CMSIS-Compiler I/O Retargeting	LiteRT (TFLu) TensorFlow Edge AI	ExecuTorch PyTourch Edge AI
CMSIS-FreeRTOS RTOS Kernel	MDK Middleware	mbedTLS Security	SDS-Framework DSP/ML development	Arm-2D Image Processing

3rd party collaboration

Source and header files are added as a single component that come from a pack.

This makes updates easy as changing the pack will update the source files.



12K+
Devices supported

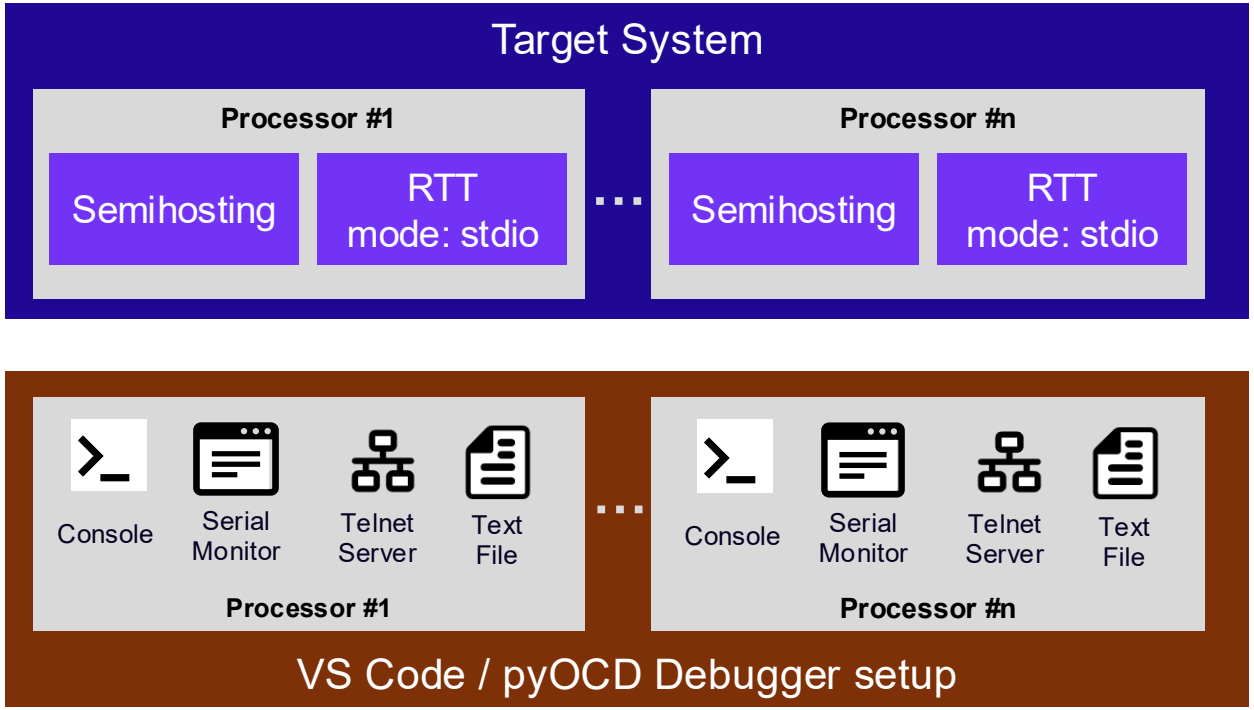
Device Family Pack (DFP)
provided by Silicon Partners describes memory, peripherals, debug topology. Includes Flash algorithms and optional peripheral drivers.

Compiler & Debugger support for the ecosystem (pyOCD, µVision, Arm-Debugger)

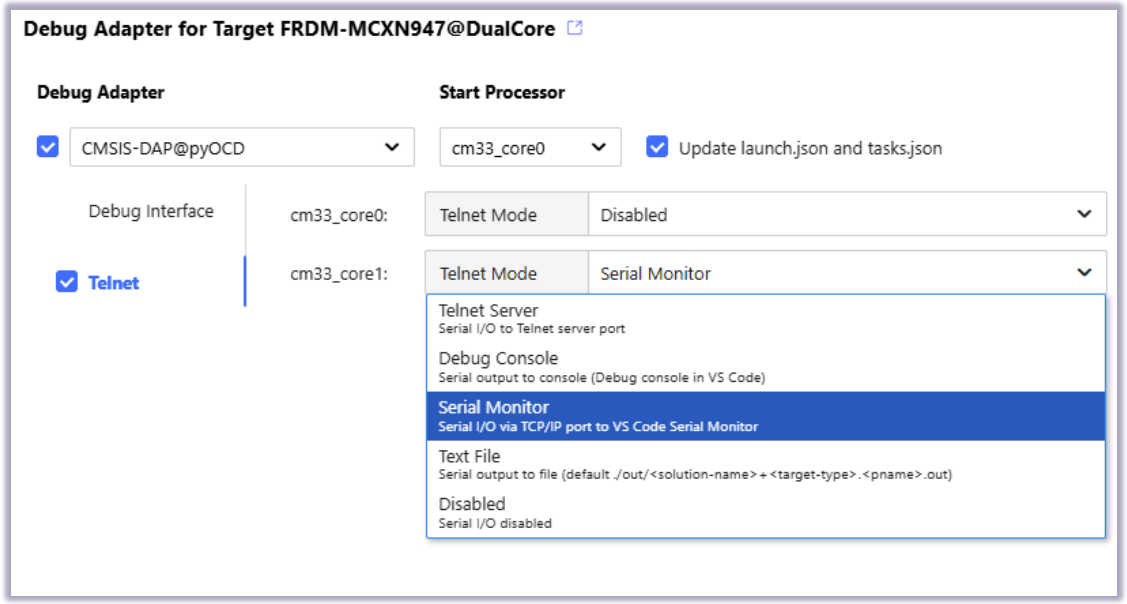
arm

Telnet service for character I/O (stdio)

Use `printf` messaging via debug connection (with no separate UART)

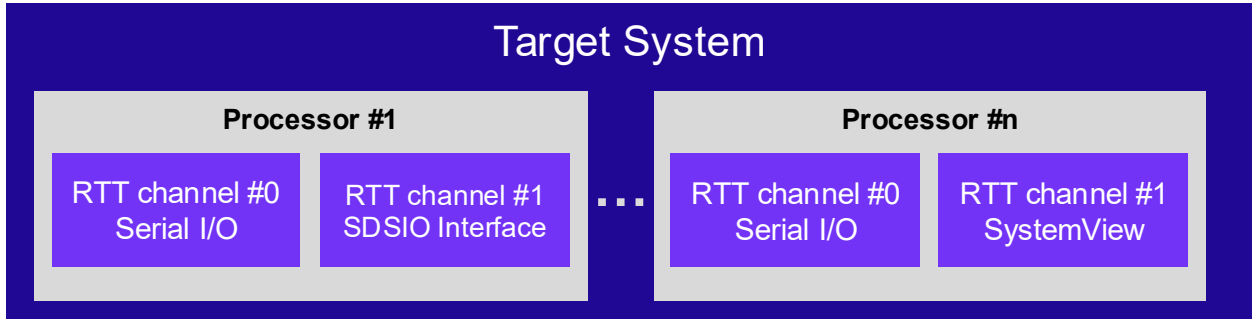


Manage Solution Settings



- Semihosting (C library feature using breakpoints) or retargeting via SEGGER RTT (for higher bandwidth).
- Features for regression testing: Text File output or Telnet Server connection
- VS Code Serial Monitor connects to both UART or Telnet service

RTT: Real-Time Transfer for I/O and system monitoring



RTT modes:

- **stdio** – retargeting of STDIO functions.
- **server** – connects a TCP port to an RTT channel for remote interface. Used by SDS-Framework to capture data files for ML training.
- **systemview** – capture data files for SEGGER SystemView tool. Requires annotations in the target system.
- **systemview-server** – connects to SEGGER SystemView tool for live monitoring.

Setup

- CMSIS projects: add software packs RTT and SystemView and select related components.
- Zephyr: add `west-defs:` in csolution.yml:

```
build-types:
  - type: Debug-RTT
    west-defs:
      - CONFIG_DEBUG: y
      - CONFIG_DEBUG_THREAD_INFO: y
      - CONFIG_DEBUG_OPTIMIZATIONS: y
      - CONFIG_USE_SEGGER_RTT: y
      - CONFIG_RTT_CONSOLE: y
      - CONFIG_UART_CONSOLE: n
      - CONFIG_TRACING: y
      - CONFIG_SEGGER_SYSTEMVIEW: y
      - CONFIG_SEGGER_SYSVIEW_RTT_CHANNEL: 1
```

- Add `rtt:` node to `debugger:` in csolution.yml:

```
debugger:
  …
  rtt:
    - channel:
      - number: 0
        mode: stdio
      - number: 1
        mode: systemview
```

Resources, next webinars and Q&A

- www.keil.arm.com – access to tools and software packs
- github.com/arm-examples – show usage of Keil Studio

Webinar 2: DevOps with Arm Keil MDK

June 23 | 8 AM PDT · 4 PM BST · 5 PM CET

Discover how DevOps improves embedded systems with Arm Keil MDK. Explore build testing, hardware-in-the-loop simulation, and ML/DSP regression testing.

Register Now

Webinar 3: Integrating ModelNova Fusion Studio with Arm Keil MDK

July 21 | 8 AM PDT · 4 PM BST · 5 PM CET

Discover how to build and deploy optimized ML models using ModelNova Fusion Studio and Keil MDK. Includes MLOps, model validation, and workflow tips.

Register Now