**Specifications**

Designed specifically for the Arm architecture, Development Studio is the most comprehensive embedded C/C++ dedicated software development solution with support of multicore debug for Cortex-X, Cortex-A, Cortex-R, Cortex–M, and Neoverse Arm CPUs. Uniquely it provides the earliest support for all the latest CPUs and interconnect. Primarily the Arm Debugger is used for validation of SoCs through emulation, simulation, FPGA, and silicon bring-up.

|  |  |
| --- | --- |
| Components | * Arm Toolchain for Embedded Professional. Next-generation Arm Embedded C and C++ compilation toolchain, optimized for performance on Arm AArch64-based devices. Includes support for the latest Arm architectures.
* Arm Compiler for Embedded 6 for compiling bare-metal embedded applications.
* Arm Compiler for Embedded FuSa, assessed by TÜV SÜD against the requirements of common safety standards, including ISO 26262.
* Complete library of reference Fixed Virtual Platforms (FVPs) along with pre-built examples.
* Streamline Performance Analyzer to view of performance for your entire system and generate easy to interpret visualizations.
 |
| Debugger | Arm Debugger supports Arm software development via IDE or command line interface. Combined with a DSTREAM High-Performance Debug and Trace unit, Arm debugger enables software debug and optimization on Arm processor-based Silicon/FPGA targets. The debugger also supports virtual platforms, such as the supplied FVPs. |
| Debug probes | Debug adapters (sold separately) vary in complexity and capability. When you use them with Arm Development Studio, they provide high-level debug functionality, for example:* Reading/writing registers
* Setting breakpoints
* Reading from memory
* Writing to memory

Supported Arm debug adapters include:* Arm DSTREAM
* Arm DSTREAM-ST
* Arm DSTREAM-PT
* Arm DSTREAM-HT
* Arm DSTREAM-XT
 |
| Supported processor IP | Whether you are designing a custom SoC or developing an off-the-shelf device not yet on the tool database, the Development Studio Platform Configuration Editor (PCE) and the Debug and Trace Service Layer (DTSL) enable debug connection to virtually any design using supported processors. |
| System requirements | * Windows 10
* Windows 11
* Red Hat Enterprise Linux 8 Workstation
* Ubuntu 22.04 LTS
* Ubuntu 24.04 LTS

**Note:**Development Studio IDE only supports 64-bit host platforms. |

