



Intel® SoC FPGA Embedded Development Suite Features and Availability

Arm* Development Studio 5* (DS-5*) Intel SoC FPGA Edition

Linux* application debugging over Ethernet

- Available for: Free license (Standard and Pro) and Paid license (Standard and Pro)

Debug with Intel FPGA Download Cable II

- Board bring-up
- Device driver development
- Operating system (OS) porting
- Bare-metal programming
- Arm CoreSight* trace support
- Available for: Paid license (Standard and Pro)

Debug with Arm DSTREAM* debug and trace unit

- Board bring-up
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FPGA-adaptive debugging

- Auto peripheral register discovery
- Cross-triggering between CPU and FPGA domains
- Arm CoreSight trace support
- Access to System Trace Module (STM) events
- Available for: Paid license (Standard and Pro)

Streamline performance analyzer support

- Limited availability for: Free license (Standard and Pro)
- Full availability for: Paid license (Standard and Pro)

KEY FEATURES	FREE LICENSE (STANDARD)	PAID LICENSE (STANDARD)	FREE LICENSE (PRO)	PAID LICENSE (PRO)
Supported Device Families				
Cyclone® V SoC	✓	✓		
Arria® V SoC	✓	✓		
Intel® Arria 10 SoC	✓	✓	✓	✓
Intel Stratix® 10 SoC			✓	✓
Compiler Tools				
Linaro Compiler	✓	✓	✓	✓
Sourcery CodeBench Lite Arm EABI GCC	✓	✓	✓	✓
Arm Compiler 5 (included in the DS-5 Intel SoC FPGA Edition)		✓		✓
Arm Compiler 6 (included in the DS-5 Intel SoC FPGA Edition)		✓		✓
Libraries and Other Tools				
Hardware Libraries (HWLIBs)	✓	✓	✓	✓
Intel Quartus® Prime Programmer	✓	✓	✓	✓
Signal Tap Logic Analyzer	✓	✓	✓	✓
Intel Boot Disk Utility	✓	✓	✓	✓
Device Tree Generator	✓	✓	✓	✓
Design Examples				
Golden Hardware Reference Designs for SoC FPGA Development Kits	✓	✓	✓	✓
Triple-Speed Ethernet (TSE) with Modular Scatter-Gather Direct Memory Access (mSG-DMA) [†]	✓	✓	✓	✓
PCIe* Root Port with Message Signal Interrupts (MSI) [†]	✓	✓	✓	✓
Partial Reconfiguration Design Example	✓	✓	✓	✓
Host OS Support				
Windows* 7 64 bit	✓	✓	✓	✓
Windows 10 64 bit	✓	✓	✓	✓
Red Hat Linux* 6 64 bit	32 bit libraries are required	32 bit libraries are required	32 bit libraries are required	32 bit libraries are required



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