# INTEL QUARTUS PRIME DESIGN SOFTWARE

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The Intel Quartus Prime software is revolutionary in performance and productivity for FPGA, CPLD, and SoC designs, providing a fast path to convert your concept into reality. The Intel Quartus Prime software also supports many third-party tools for synthesis, static timing analysis, board-level simulation, signal integrity analysis, and formal verification.

| INTEL QUARTUS PRIME DESIGN SOFTWARE V19.1 | | | AVAILABILITY | | |
|---|---|---|---|---|---|
| | | | PRO EDITION ($) | STANDARD EDITION ($) | LITE EDITION (FREE) |
| Device Support | Stratix series | IV, V | | ✓ | |
| | | 10 | ✓ | | |
| | Arria series | II | | | ✓[1] |
| | | II, V | | ✓ | |
| | | 10 | ✓ | ✓ | |
| | Cyclone series | IV, V | | ✓ | ✓ |
| | | 10 LP | | ✓ | ✓ |
| | | 10 GX | ✓[2] | | |
| | MAX series | | | ✓ | ✓ |
| Design Flow | Partial reconfiguration | | ✓ | ✓[3] | |
| | Rapid recompile | | ✓ | ✓[4] | |
| | Block-based design | | ✓ | | |
| | Incremental optimization | | ✓ | | |
| Design Entry/Planning | IP Base Suite | | ✓ | ✓ | Available for purchase |
| | Intel HLS Compiler | | ✓ | ✓ | ✓ |
| | Platform Designer (Standard) | | | ✓ | ✓ |
| | Platform Designer (Pro) | | ✓ | | |
| | Design Partition Planner | | ✓ | ✓ | |
| | Chip Planner | | ✓ | ✓ | ✓ |
| | Interface Planner | | ✓ | | |
| | Logic Lock regions | | ✓ | ✓ | |
| | VHDL | | ✓ | ✓ | ✓ |
| | Verilog | | ✓ | ✓ | ✓ |
| | SystemVerilog | | ✓ | ✓[5] | ✓[5] |
| | VHDL-2008 | | ✓ | ✓[5] | |
| Functional Simulation | ModelSim-Intel FPGA Starter Edition software | | ✓ | ✓ | ✓ |
| | ModelSim-Intel FPGA Edition software | | ✓[6] | ✓[6] | ✓[6] |
| Compilation (Synthesis & Place and Route) | Fitter (Place and Route) | | ✓ | ✓ | ✓ |
| | Early placement | | ✓ | | |
| | Register retiming | | ✓ | ✓ | |
| | Fractal synthesis | | ✓ | | |
| | Multiprocessor support | | ✓ | ✓ | |
| Timing and Power Verification | Timing Analyzer | | ✓ | ✓ | ✓ |
| | Design Space Explorer II | | ✓ | ✓ | ✓ |
| | Power Analyzer | | ✓ | ✓ | ✓ |
| In-System Debug | Signal Tap Logic Analyzer | | ✓ | ✓ | ✓ |
| | Transceiver toolkit | | ✓ | ✓ | |
| | Intel Advanced Link Analyzer | | ✓ | ✓ | |
| Operating System (OS) Support | Windows*/Linux* 64 bit support | | ✓ | ✓ | ✓ |

Notes:
1. The only Arria II FPGA supported is the EP2AGX45 device.
2. The Intel Cyclone 10 GX device support is available for free in the Pro Edition software.
3. Available for Cyclone V and Stratix V devices only and requires a partial reconfiguration license.
4. Available for Stratix V, Arria V, and Cyclone V devices.
5. Limited language support.
6. Requires an additional license.