

Programmer Studio-5

SOFTWARE DEVELOPMENT KIT

Netronome Programmer Studio-5 software development kit (SDK) is Integrated Development Environment (IDE) running as Graphical User Interface (GUI) on Windows platforms. Programmer Studio-5 SDK drives developer's accelerated time-to-market by putting powerful tools at their fingertips. Agilio Intelligent Server Adapter (ISA) and any other custom NFP-4000 and NFP-6000 based designs will benefit from intuitive software development environment, sophisticated profiler, optimizing C compiler, cycle-accurate simulation and extensive profiling capability for rapid debug and prototyping. Applications written for prior generations of NFP or IXP can also be imported into Programmer Studio 5.



Details

Programmer Studio IDE

- Project Creation
- Chip Designation
- Incorporation of all project components
 - Sources (C and Assembly)
 - Headers
 - Macros
 - Standard Libraries
 - Scripts

Code Development Tools

- Network Flow C Compiler (NFCC)
- Network Flow Assembler (NFAS)

Optional Flow Processing software

- Software Application Kits
- Software Building Blocks
- Sample Code (example apps)
- MicroC and Assembly Libraries
- Standard packet processing APIs
- Linux Simulator and tool chain with Compiler, Assembler and Linker

KEY FEATURES

- Optimized language processors designed to combine C-level abstraction and assembly level bare metal control and performance
- Cycle-accurate chip simulation presented in an intuitive graphical format, enabling parallel software and hardware development efforts
- Hardware debugger for Netronome Agilio ISAs or custom NFP-4000/NFP-6000 hardware designs using Programmer Studio
- Board support package (BSP) API integration for simplified and easier board bring up with Agilio ISA and any NFP-6000 and NFP-4000 based platforms
- User-friendly work environment with project-based source, header, macro, and script collection and tracking
- Throughput, code coverage and event profiling tools for precise optimization
- Reference applications for the NFP-6000 and NFP-4000 for project creation and simulations
- Compatible with prior-generation NFPs and IXPs code, preserving application development investment and talent



Precision Flow Modeler Simulation

- Debug
 - Cycle-accurate data history
 - Cycle-accurate core execution history
 - Cycle-accurate event and queue history
- Profiling
 - Per-thread performance statistics
 - FIFO space coverage
 - Per-thread execution coverage profiling
 - Per-port frame and byte performance
 - Bandwidth Estimates

Hardware Debug

- Debug Server enables direct connection between Programmer Studio IDE and HW targets
 - Netronome Agilio Intelligent Server Adapters (ISAs)
 - Netronome Customer Development Platform (CDP)
- Debug Server runs from host of off PCIe bus

Accessories

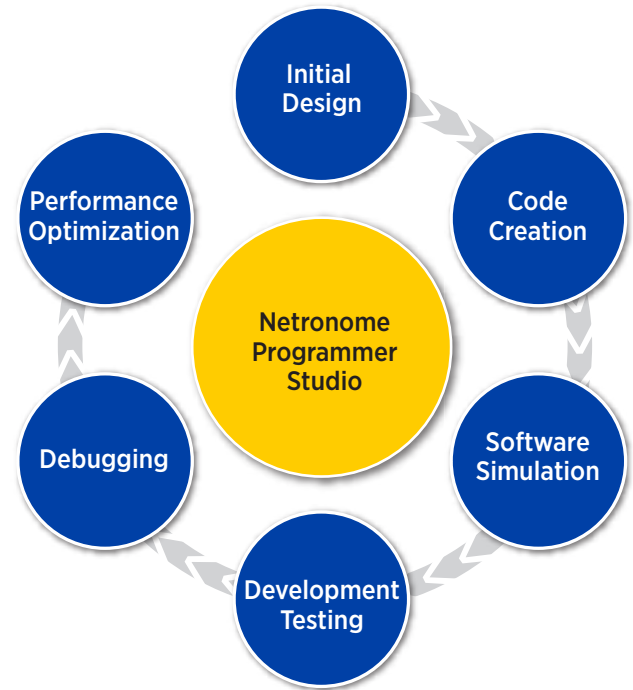
- Linker
- Loader
- BSP with system access API and Linux kernel host layer for Agilio ISA platforms.

Specifications

- Included in the SDK:
 - Programmer Studio IDE
 - C Compiler (NFCC)
 - MicroC Libraries
 - Assembly Libraries
 - Precision Flow Monitor Simulation
 - Assembler (NFAS)
 - Linux Boards Support Package
 - Detailed documentation and user guides

Requirements

- 2.2 GHz (x86) with 8GB RAM and 2 GB of available hard drive space. 64 bit Windows 7 or Windows 8/8.1.
- Linux – Quad core i7 with CentOS 6 64-bit or Ubuntu 12.04.2/14.04.x 64-bit LTS with 8GB RAM.



Netronome's fully Integrated Development Environment (IDE) enables developers to speed the time-to-market for their products and applications.

NETRONOME

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