



# **KATANA R4 DEVELOPER DOCUMENTATION SET**



*Click on a book  
title to jump to  
its link banner  
and view topics*



*Books with this  
icon are new  
for this release*



- **KATANA R4 GETTING STARTED** ✨
- **KATANA SHINOBI LIBRARY** ✨
- **KAMUI**
- **KATANA NINJA GUIDE**
- **KATANA NINJA REFERENCE**
- **KATANA NINJA UTILITIES**
- **KATANA CODESCAPE**
- **KATANA GD WORKSHOP**
- **KATANA SH4 PROGRAM MANUAL** ✨
- **KATANA C COMPILER** ✨
- **KATANA ASSEMBLER** ✨
- **KATANA LINKER & LIBRARIAN** ✨

*Click on the banner below to open the book*



**Book Description:** This book will guide you through the installation and setup process of the Katana R4 Release hardware and software.

Included in the book are the following topics:

- Hardware and Software Requirements
  - Programming environment
  - Supported art packages
- Katana System Components
- Installing the Hardware and Drivers
- Installing the Development Software
- To perform a full manual installation
- Flashing the Katana ROMs
- Using the Codescape Debugger
- Using GD-ROM Workshop
- Compiling the Samples
- Shinobi Initialization



*Click to go  
Back to Index*

*Click on the banner below to open the book*



**Book Description:** This book contains the Shinobi System, File System, Memory Allocation, and Controller Functions.

Included in this document are the following:

- Shinobi System Functions
  - sbInit .....Initialize SHINOBI library
  - sbExitSystem.....Terminate system
- Shinobi File System Functions
  - gdFsInit..... Initialize and mount file system
  - gdFsCreateDirh ..... Get a handle to a directory
  - gdFsLoadDir..... Get directory information
  - gdFsChangeDir ..... Change current directory
  - gdFsOpen..... Open file
  - gdFsGetFileSize..... Get file size
  - gdFsGetFileSctSize..... Get file sector size
  - gdFsRead..... Read file
  - gdFsSeek ..... Seek to sector
  - gdFsTell ..... Get current sector
  - gdFsClose ..... Close file



*Click to go  
Back to Index*

*Click on the banner below to open the book*



**Book Description:** This book contains information on working with the Kamui Low-Level Graphics Library.

Sections covered are as follows...

- Overview
- Basic Processing Flow
- Kamui Functions
- Kamui Utility Library
- Structures
- Texture Format



*Click to go  
Back to Index*

*Click on the banner below to open the book*



**Book Description:**

This book contains information on working with the Ninja Graphics Library.

The materials presented are in Guide form and are intended as a supplement to the Ninja Library Specification.

Sections covered are as follows...

- View Function
- Texture Guide
- Ninja Light
- Ninja Model and Motion
- Scroll Guide
- Nindows Tutorial



*Click to go  
Back to Index*

*Click on the banner below to open the book*



**Book Description:**

This book contains information on working with the Ninja Graphics Library. The materials presented are in Reference form and are intended as a supplement to the Ninja Guide.

Sections covered are as follows...

- System Functions
- Matrix Functions
- Collision Functions
- Mathematical Functions
- 2D Graphics Functions
- 3D Graphics Functions
- Light Functions
- Scroll Functions
- Modeling Functions
- View Functions
- Texture Functions
- Sprite Functions
- Debugging Functions
- Special Effects Functions
- Motion Functions
- Memory Functions
- Drawing Functions
- Input Functions



*Click to go  
Back to Index*

*Click on the banner below to open the book*



**Book Description:** This book contains information on working with Ninja Graphics Library Tools.

Sections covered are as follows...

- PowerVR Texture Converter
- VQ Compression Tool
- Using the LightWave Converter
- Gigen Tool
- Ninja Export for 3D Studio MAX R2
- KeyListGen (3D Studio MAX R2)
- NinjaExport for SoftImage3D NT
- NinjaExport for SoftImage SGI



*Click to go  
Back to Index*

*Click on the banner below to open the book*



**Book Description:** This book contains information on working with Katana's (Cross Products) CodeScape Debugger software.

Sections covered are as follows...

- Using and Configuring the Interface
- How Windows and Regions Work
- Interacting with Target Processors
- Working with Projects
- Debugging
- Expressions
- Using the Command-line
- Frequent Operations



*Click to go  
Back to Index*



*Click on the banner below to open the book*



**Book Description:** This book contains information on working with Katana's (Cross Products) GD Workshop software, designed for CD/GD Authoring and Emulation.

Sections covered are as follows...

- How to Install the Software
- Where to Start
- How to Build a CD Project
- How to Edit a CD Project
- How to Emulate a CD
- How to Write a CD-R
- How to Use a Hard Drive
- How Content is Written on a CD/GD-ROM
- How to Use the Tab Controls
- Glossary
- Keyboard Shortcuts
- Reference Documents



*Click to go  
Back to Index*

*Click on the banner below to open the book*



**Book Description:** This book contains Programming information for Katana's (Hitachi) SH-4 Processor.

Sections covered are as follows...

- Overview
- Programming Model
- Memory Management Unit (MMU)
- Caches
- Exceptions
- Floating-Point Unit
- Instruction Set
- Pipelining
- Power-Down Modes
- Instruction Descriptions
- Address List
- Instruction Prefetch Side Effects



*Click to go  
Back to Index*

*Click on the banner below to open the book*



**Book Description:** This book contains reference materials for Katana's (Hitachi) SH-4 C-Compiler.

Sections covered are as follows...

- Overview and Operations
- C Programming
- System Installation
- Error Messages
- ALanguage and Standard Library Function Specifications of the C Compiler
- Parameter Allocation Example
- Usage of Registers and Stack Area
- Creating Termination Functions
- Examples of Low-Level Interface Routine
- ASCII Codes
- Index



*Click to go  
Back to Index*

*Click on the banner below to open the book*



**Book Description:** This book contains reference materials for Katana's (Hitachi) SH-4 Assembler.

Sections covered are as follows...

- Programmer's Guide
  - Overview
  - Program Elements
  - Executable Instructions
  - Assembler Directives
  - File Inclusion Function
  - Macro Function
  - Automatic Literal Pool Generation Function
  - SH-DSP Instructions
  - Executing the Assembler
- User's Guide
  - Executing the Assembler
  - Command Line Options
- Appendixes
  - Limitations and Notes on Programming
  - Assemble Listing Output Example
  - Error Messages
  - Differences from Former Version
  - ASCII Code Table



*Click to go  
Back to Index*

*Click on the banner below to open the book*



**Book Description:** This book contains reference materials for Katana's (Hitachi) SH-4 Linker and Librarian.

Sections covered are as follows...

- Linkage Editor Options and Sub-commands
- Librarian Options and Sub-commands
- Object Converter Guide



*Click to go  
Back to Index*