

# ATAIF\_SD-LNX

Parallel ATA Disk Host Software Linux Driver

## MAJOR FEATURES

- ◆ Supports for two devices
- ◆ Supports all ATAIF transfer modes
- ◆ Transaction layer interface based on libATA model
- ◆ Auto Timing configuration
- ◆ Support for internal DMA controller
- ◆ Interrupts support
- ◆ Scatter-gather support
- ◆ ATA command set
- ◆ ATAPI (PACKET command)
- ◆ Device reset on error
- ◆ C/H/S, LBA, and LBA48

## OVERVIEW

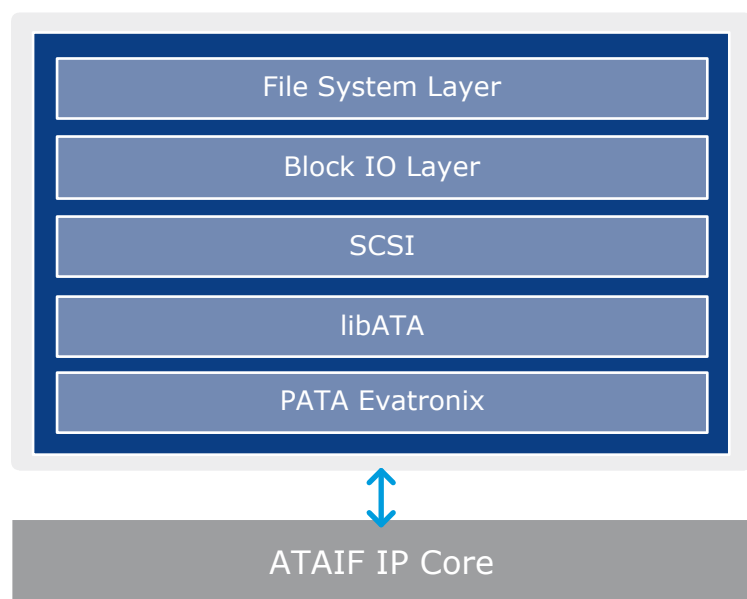
The PATA Evatronix Linux Driver is a complete software set allowing higher-level Linux kernel to interact with the Evatronix ATAIF IP core.

The driver supplies the ATAIF controller with software elements enabling smooth integration of the controller in a target Linux application. It allows the user to easily access high capacity storage media without detailed knowledge of controller interface.

The support for two channels (master and slave) makes operations on two drives significantly easier.

Transfer operations can be executed in PIO, MDMA or Ultra- ATA modes. All operations can be performed using high level functions (provided they are consistent with Linux environment). The driver supports both ATA device and DMA controller interrupts.

## BLOCK DIAGRAM



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## BENEFITS

- ◆ Together with the IP core it constitutes a fully functional, complete Parallel ATA solution
- ◆ The PATA Evatronix Linux Driver can be used in a wide range of Embedded Linux applications due to its flexibility and it can be easily integrated into systems based on different processors

## APPLICATIONS

- ◆ HDD storage devices
- ◆ Compact Flash card readers
- ◆ Routers
- ◆ Internet terminals
- ◆ Network servers

## STANDARD DELIVERABLES

- ◆ ANSI C source code
- ◆ Design Specification
- ◆ User Manual
- ◆ Reference project

## RELATED PRODUCTS

**ATAIF** – a Parallel ATA interface controller supporting ATA-8 standard for Hard Disk Drives, optical media and Compact Flash cards. It supports PIO, MDMA and Ultra-DMA transfer modes.



For more information on our IP portfolio visit [www.evatronix.com/ip](http://www.evatronix.com/ip)



## HEADQUARTERS AND SALES

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