

# CompactPCI 9054RDK-860

## Features

- PICMG v2.0 R2.1 CompactPCI specification compliant, full Hot Swap adapter board based on the powerful PLX PCI 9054 Bus Master I/O Accelerator Hot Swap Friendly chip with direct connect to Motorola MPC860 PowerQUICC
- 50MHz Motorola MPC860MH PowerQUICC processor
- Complete OrCAD schematics, CPLD Verilog code and Hardware Reference Manual
- Sample PCI 9054 chip and Data Book

## SDK-PRO

- Flexible PCI 9054 API object code libraries for host and MPC860
- Board Support Package (BSP) allows easy porting to your design
- Sample Windows NT device drivers with source code
- PLXMon, a comprehensive GUI utility for monitoring, debugging, configuration, and code download
- WxWorks and pSOS BSP with source code for quick RTOS application development
- Comprehensive reference manuals for SDK and PLXMon

## Compatible Tools:

- Compatible with software development tools for the Motorola MPC860

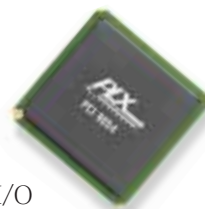
## *PCI 9054 and MPC860 Rapid Development Kit*

Based on the powerful combination of the PLX PCI 9054 Bus Master I/O Accelerator Chip and the Motorola® MPC860 PowerQUICC™ microprocessor, the PLX CompactPCI 9054RDK-860 Rapid Development Kit (RDK) provides a complete development environment for CompactPCI Hot Swap embedded adapter designs based on the Motorola MPC860 processor.

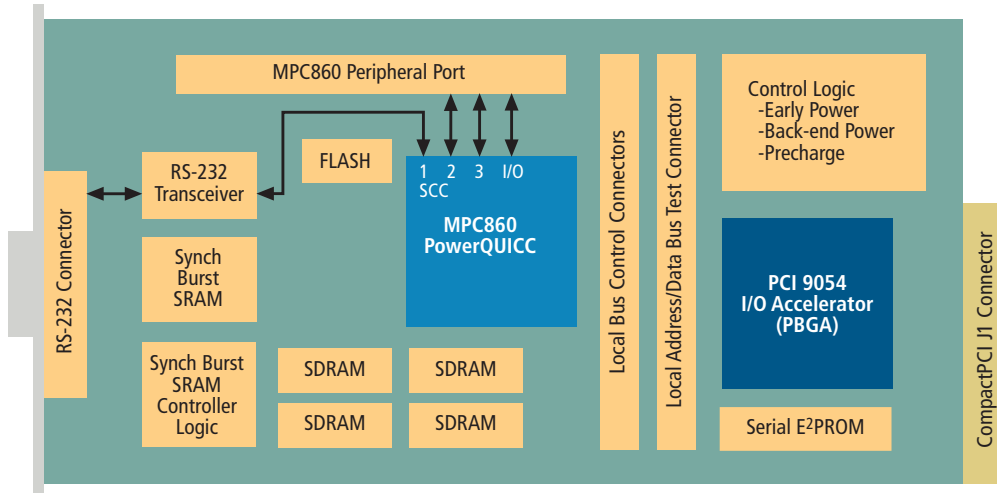
At the heart of the RDK is the PLX PCI 9054 Bus Master I/O Accelerator which supports a 32-bit, 33MHz CompactPCI Bus and 50 MHz Local Bus. This CompactPCI Hot Swap Friendly device provides a complete PCI v2.2 specification implementation enabling burst transfers up to 132 Mbytes/second. The PCI 9054 incorporates PLX's industry leading advanced Data Pipe Architecture™ technology including DMA engines, programmable PCI Initiator and Target data transfer modes and PCI messaging functions.

The CompactPCI 9054RDK-860 allows customers to quickly and easily add CompactPCI and Hot Swap capability to a variety of applications in telecommunications and data communications where the MPC860 excels.

The PLX CompactPCI 9054RDK-860 Rapid Development Kit includes a CompactPCI full Hot Swap board that is PICMG v2.0 R2.1 CompactPCI specification compliant and the PLX Software Development Kit Professional Edition (SDK-PRO). The PCI SDK features a complete set of tools for software development which significantly reduce the time necessary to develop PCI and I/O Processor (IOP) based software. The PCI SDK includes PCI 9054 host and local side application programming interface (API) object code libraries for the Motorola MPC860. A Board Support Package (BSP) with "C" source code provides everything necessary for porting to your target design. Also included are sample Windows drivers with source code. Plus you also get PLXMon®, a robust and comprehensive Windows based debug tool that allows for interactive PCI and local bus monitoring, debugging, configuration, and code download to the RDK board.



## CompactPCI 9054RDK-860 Block Diagram



## CompactPCI 9054RDK-860

Function	Description/Value
PCI Bus Interface	PCI 9054 I/O Accelerator
Processor	MPC860MH PowerQUICC
Processor Speed	50MHz Max
Local Bus Speed	50MHz Max
PCI Bus Speed	33MHz Max
SDRAM	32Mbytes (8Mx32)
Synch Burst SRAM	512 Kbytes (128Kx32)
Boot ROM Flash	512 Kbytes (512Kx8)
Synch Burst SRAM Controller	Lattice isp LSI 2064 V
SDRAM Memory Controller	MPC860 Memory Controller
RS-232 Serial Ports	MPC860 SCC1
MPC860 Peripheral Port	PLX Option Module 2 (POM2) connector
Documentation & Schematics	Hardware Reference Manual, OrCAD schematics, logic files

## PLX SDK-PRO

Features	Benefits
PCI 9054 software API object code libraries for the Motorola MPC860 PowerQUICC	Simplifies the programming of complex hardware control with simple, powerful API calls. Enables easy creation of device drivers for RTOS or custom environments Provides for easy porting to future PLX PCI devices
Board Support Package (BSP) with "C" source code	Allows easy porting to customer design
Sample Windows NT drivers with "C" source code	Allows effortless creation of PLX device drivers
PLXMon with User Manual	Enables easy monitoring, debugging, and configuring of PLX's PCI device and other PCI/local bus devices Supports downloading of sample boot FLASH code on to RDK or customer design and allows debugging via serial port
VxWorks and pSOS BSP with source code	Allows easy developing of VxWorks or pSOS RTOS applications
Programmer Reference Manual	Enables easy use of the PLX powerful API calls
Compatibility	Compatible with tools for Motorola MPC860

## Product Ordering Information

Part Number	Description
PCI 9054-AB50PI	PCI to Local Bus Master I/O Accelerator Chip (PQFP)
PCI 9054-AB50BI	PCI to Local Bus Master I/O Accelerator Chip (PBGA)
PCI 9054RDK-860	PCI 9054 Reference Design Kit with Motorola MPC860 PowerQUICC CPU
CompactPCI 9054RDK-860	CompactPCI 9054 RDK with Motorola MPC860MH PowerQUICC CPU
SDK-PRO	PCI Software Development Kit for PLX PCI chips and major embedded processors

Please visit the PLX Web site at <http://www.plxtech.com> or contact PLX sales at 408-774-9060 for pricing and samples.



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