

# PCI 9054RDK-LITE

## PCI Bus Master Prototyping Kit

### Features

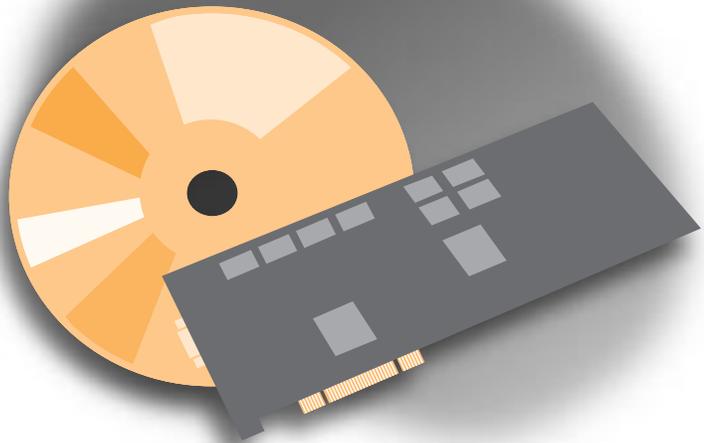
- A PCI prototype adapter board design based on the PLX PCI 9054 32-bit I/O Accelerator chip
- Surface mount footprints on the board support industry standard embedded CPUs, DSPs and PLCC packaging including the IBM PPC, Motorola MPC and Coldfire, Hitachi MCU and MPU, TI DSP, Analog Device DSP and many others
- 30 x 25 0.1" through hole grid space for expansion purpose
- PLXMon 99, a comprehensive GUI utility for debugging, configuration and code download
- Complete Schematics, Gerber Files, BOM, PLXMon 99 Manual, Hardware Reference Manual, and PCI 9054 Data Book on CD-ROM
- Compatible with PLX PCI SDK (available separately from PLX)
- 100-pin PLX Option Module (POM) J-Bus connector
- Sample PCI 9054 chip

Based on the powerful PLX PCI 9054, the PLX PCI 9054RDK-LITE (RDK-LITE) provides a low cost development environment for PCI 9054 embedded application designs.

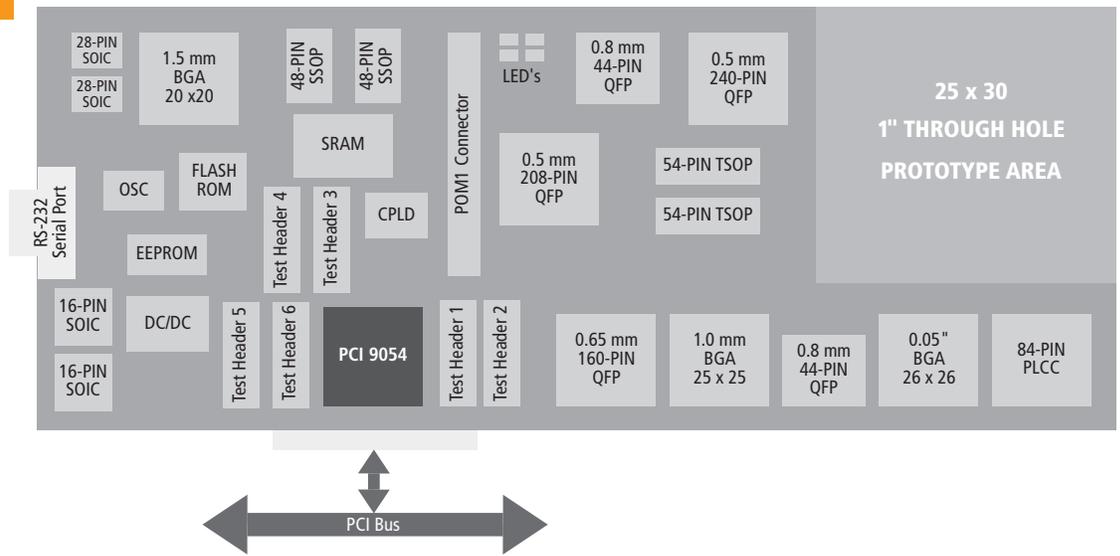
At the heart of the RDK-LITE is the PLX PCI 9054 I/O Accelerator which supports a 32-bit, 33MHz PCI bus and a 50MHz local bus. It provides a complete PCI v2.2 specification implementation enabling burst transfers up to 132 Mbytes/second. The PCI 9054 incorporates PLX's industry leading advanced Data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

There are various sizes of QFP footprints and through hole matrixes on the PCI board which support industry standard embedded CPUs, DSPs and PLCC packaging, including the IBM PPC, Motorola MPC and Coldfire, Hitachi MCU and MPU, TI DSP, Analog Device DSP and many others. The 100-pin PLX Option Module (POM) J-Bus connector can be used to connect to any POM. Also there is a 30 x 25 0.1" through hole grid spacing for expansion purposes.

The RDK-LITE comes with PLXMon99™, a comprehensive GUI utility for monitoring, debugging, configuration and code download. When used with the PLX PCI SDK, which can be purchased separately from PLX, the PCI 9054RDK-LITE will allow customers to quickly and easily add PCI to a variety of embedded applications in telecommunications, data communications, and many others.



## PCI 9054RDK-LITE Block Diagram



### PCI 9054RDK-LITE

Features	Description/Value
PCI Bus Speed	33 MHz Max
Local Bus Speed	50 MHz Max
Through Hole Matrixes	Supports BGA 0.050" pitch up to 26 x 26 BGA 1.0 mm pitch up to 25 x 25, BGA 1.5mm pitch up 20x20
Prototype Footprints	0.8 mm pitch: 54-pin TSOP (2), 44-pin PQFP (2) 0.65 mm pitch: 160-pin PQFP, 112-pin PQFP 0.5 mm pitch: 240-pin PQFP, 208-pin PQFP (2), 176-pin PQFP (2), 144-pin PQFP (2), 100-pin PQFP (2), 80-pin PQFP (2) 0.4 mm pitch: 128-pin PQFP 0.05" pitch: 84-pin PLCC, 68-pin PLCC, 44-pin PLCC, 28-pin PLCC (3), 28-pin SOIC (2), 16-pin SOIC (2) 0.025" pitch: 48-pin SSOP (2)
SDRAM	Supporting up to 64 Mbytes SDRAM with footprints on board (0.8mm pitch 54-pin TSOP)
EEPROM Socket	Supports boot-up FLASH memory
SRAM	128 Kbytes (32k x 32)
RS232 DB-9 Serial Port	Used for debugging or code downloading
RJ-45 and USB Connector Footprints	Can be used for Ethernet and USB connectors
Logic Analyzer Headers	Six (6) 2x10-pin for HP Termination Adapters
POM J-Bus Connector	Used for all PLX Option Modules
30 x 25 0.1" Through Hole Grid Space	Easy to add other devices on board
PLXMon 99 with User's Manual	Enables easy monitor, 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
Documentation & Complete Hardware Design Files	Hardware Reference Manual, Schematics, Gerber Files, BOM, Data Books, Product Briefs

### Product Ordering Information

Part Number	Description
PCI 9054-AB50PI	PCI 9054 I/O Accelerator Chip (PQFP)
PCI 9054-AB50BI	PCI 9054 I/O Accelerator Chip (PBGA)
PCI 9054RDK-LITE	PCI 9054 Bus Master Prototyping Kit
PCI 9054RDK-860	PCI Reference Design Kit with PLX PCI 9054 I/O Accelerator Chip and Motorola MPC860 PowerQUICC
PCI 9054HDK-860 CD-ROM	Hardware documentation and design files for PCI 9054RDK-860
CompactPCI 9054RDK-860	CompactPCI Reference Design Kit with PLX PCI 9054 I/O Accelerator Chip and Motorola MPC860 PowerQUICC
CompactPCI 9054HDK-860 CD-ROM	Hardware documentation and design files for CompactPCI 9054RDK-860
PCI SDK	PCI Software Development Kit for PLX PCI chips and major embedded processors and IOPs
SDK for I <sub>2</sub> O Architecture	I <sub>2</sub> O Software Development Kit for PLX PCI chips and major embedded processors and IOPs

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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