
PCMCIA Adapter for Parallel Port Programming

History

The first generations of personal computers provided, for the most part, communication to peripheral hardware only through the classic bulky parallel port. Many peripheral devices are supported from a parallel port, including early field programmable gate array (FPGA) programming hardware such as Microsemi's FlashPro Lite for programming the ProASIC[®] and ProASIC^{PLUS}[®] series devices.

For the last several years, laptops and desktop PCs have given up parallel ports in favor of space-saving USB ports. Multiple USB ports accommodating multiple peripherals can be included in the same space previously occupied by one parallel port.

Microsemi's FlashPro Lite programmers are still used by customers around the world. Microsemi continues to support the programmers with software; however, customers have found that since PCs no longer have parallel ports, they cannot use the FlashPro Lite units to program or reprogram the devices that will continue to remain in working systems all over the world for many years to come.

FlashPro Driver for Parallel Port Hardware

Starting v9.0 SP1, Libero[®] integrated design environment (IDE), and FlashPro tool include a new parallel port driver software¹ that enables FlashPro Lite to program via parallel port converter such as, personal computer memory card international association (PCMCIA) card. This combination of a driver and hardware allows FlashPro Lite users to continue programming ProASIC and ProASIC^{PLUS} devices with the newer PCs or laptops that do not have parallel port in them. Refer to "[Additional Details](#)" section for software and platform support information.

Specifically, Microsemi has tested the following available PCMCIA-to-Parallel Port converter cards:

StarTech CB1PECP



Figure 1 • StarTech PCMCIA-to-Parallel Port Converter Card

Detailed information on the card, including purchasing of the card, can be found at the StarTech website: www.startech.com/item/CB1PECP-1-Port-Parallel-EPPECP-CardBus-Adapter.aspx

Qatech SPP100

Detailed information is available at www.qatech.com/catalog/parallel_pcmcia.php.

1. *Microsemi software license terms apply.*

StarTech EC1PECPS



Figure 2 • StarTech PCIe Card (ExpressCard Parallel Adapter Card)

Detailed information on the card, including purchasing of the card, can be found at the StarTech website: www.startech.com/item/EC1PECPS-1-Port-PCI-Express-Base-Parallel-ExpressCard.aspx.

Microsemi has also tested the following adapter card for a desktop PC with the PCIe slot:

StarTech PEX1P



Figure 3 • StarTech Port PCI Express Dual Profile Parallel Adapter Card

Detailed information on the card, including purchasing of the card, can be found at the StarTech website: <http://www.startech.com/Cards-Adapters/Parallel/1-Port-EPP-ECP-PCI-Express-Parallel-Card-~PEX1P>.

Additional Details

Libero IDE v9.0 SP1 and FlashPro v9.0 SP1 support the following operating systems for the new parallel port driver:

1. Windows® XP 32-bit and 64-bit systems
2. Windows Vista 32-bit
3. Windows 7 32-bit

FlashPro v11.1 SP2 supports the following additional operating systems:

1. Windows® 7 64-bit system
2. Windows Vista 64-bit system

New parallel port driver features:

1. Supports any type of hardware parallel ports using I/O addresses
 - PCMCIA to parallel port cards
 - PCI to parallel port cards
2. ECC, EPP, and PS/2 port mode

3. PCIe to parallel port card
4. Supports FlashPro Lite programmers
5. Programming time using Libero IDE/FlashPro v9.0 SP1 with the StarTech CB1PECP is comparable to use a traditional parallel port (LTP1 port) with pre-SP1 software.

After the installation with administrative privileges, the programmer can be operated by any level of user privileges.

Microsemi does not guarantee that FlashPro software will work with later versions of the above mentioned PCMCIA hardware or with other PCMCIA hardware not tested.

Contact the respective vendors for more information on the above mentioned PCMCIA hardware.

List of Changes

The following table lists critical changes that were made in each revision of the document.

Revision*	Changes	Page
Revision 2 (April 2014)	Added "StarTech PEX1P" section	2
	Updated "History" section	1
	Updated "FlashPro Driver for Parallel Port Hardware" section	1
	Updated "Additional Details" section	2
Revision 1 (May 2012)	The "StarTech EC1PECPS" section was added.	2

Note: *The revision number is located in the part number after the hyphen. The part number is displayed at the bottom of the last page of the document. The digits following the slash indicate the month and year of publication.



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