

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 FPGA programming hardware such as Actel's FlashPro¹ or 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.

Actel's FlashPro and FlashPro Lite programmers are still used by customers around the world. Actel continues to support the programmers with software; however, customers have found that since PCs no longer have parallel ports, they cannot use the FlashPro or 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

Libero[®] Integrated Design Environment (IDE) v9.0 SP1 and FlashPro v9.0 SP1 (available at <http://www.actel.com/download/default.aspx>) include driver software² and support that enables parallel port programming via any parallel port hardware that uses I/O addresses, such as a Personal Computer Memory Card International Association (PCMCIA) to Parallel Port converter card. This combination of driver and hardware allows FlashPro and FlashPro Lite users to continue to program and provide ISP for ProASIC and ProASIC^{PLUS} devices.

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

StarTech CB1PECP



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

Detailed information about the card, including purchasing of the card, can be found at the StarTech website:

<http://www.startech.com/item/CB1PECP-1-Port-Parallel-EPPECP-CardBus-Adapter.aspx>

Quatech SPP100

Detailed information is at http://www.quatech.com/catalog/parallel_pcmcia.php.

1. The FlashPro programmer is discontinued and is no longer available.
2. Actel software license terms apply.

Additional Details

FlashPro v9.0 SP1 supports the following operating systems (for the parallel port driver):

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

FlashPro v9.0 SP1 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. Supports FlashPro and FlashPro Lite programmers
4. Programming time using FlashPro v9.0 SP1 with the StarTech CB1PECP is comparable to using a traditional parallel port (LTP1 port) with pre-SP1 software.

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

Actel makes no guarantees that FlashPro software will work with future versions of the above mentioned PCMCIA hardware or with other PCMCIA hardware not tested.

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



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