

## NET2282 Key Features

- ◆ PCI v3.0 – 33Mhz, 32 Bit Bus
- ◆ Hi-Speed USB 2.0 Peripheral Port
- ◆ Integrated 8051 CPU @ 30 Mhz
- ◆ 32K of integrated RAM useful for emulating main system memory and storing descriptors
- ◆ Descriptor based DMA controllers (4) for automatic data transfers
- ◆ Sustained throughput up to 40Mbytes/sec
- ◆ PCI Host mode for configuring and controlling PCI devices
- ◆ Low Power 0.18u process ideal for USB Bus Powered Operation



## Application: *USB TV Tuners*

## PLX Product: *NET2282 – PCI to USB 2.0 Hi-Speed Peripheral Bridge*

### Using a PC as a Home Media Center

Microsoft's Windows XP Media Center Edition turns a standard PC into a Home Entertainment Center, integrating multiple audiovisual devices into a single system with PVR capabilities. To take advantage of this, video content must be fed to the PC via a tuner. This TV tuner can reside either internally or externally to the computer.



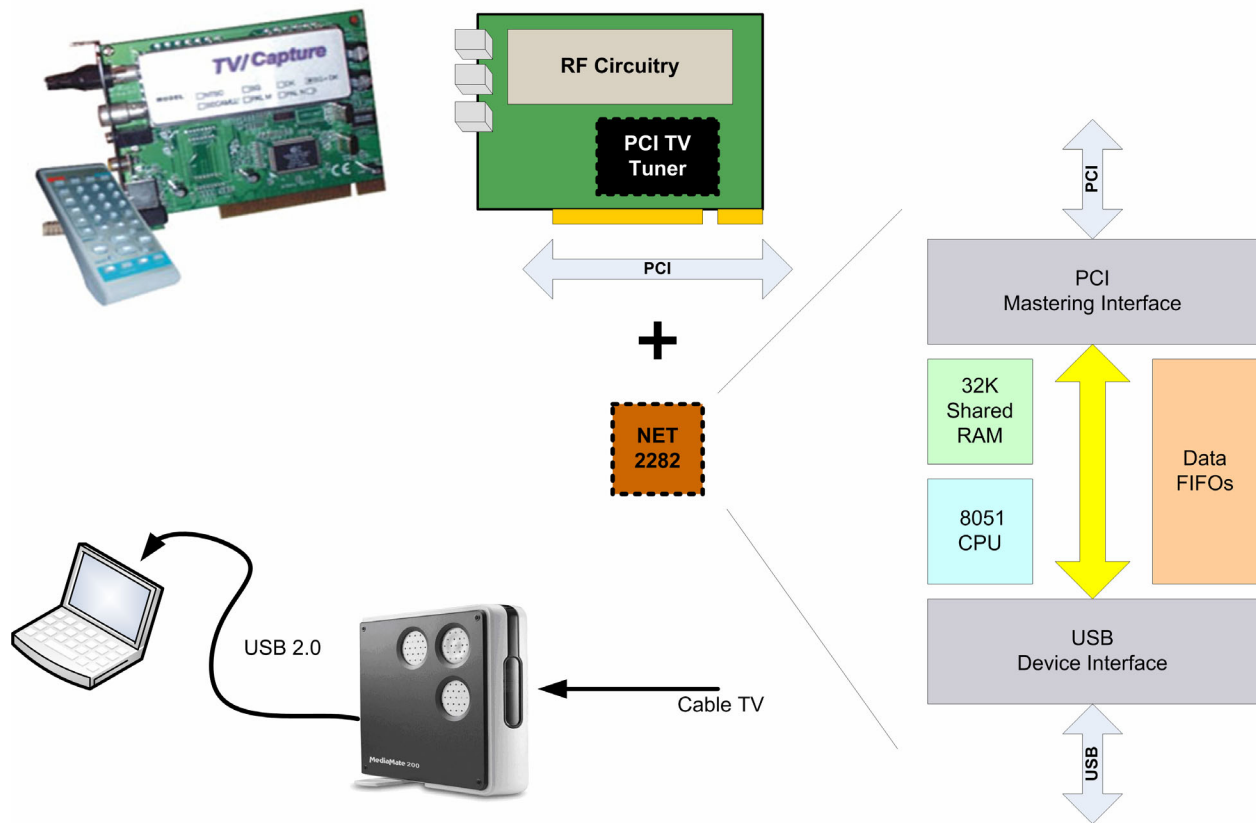
### Converting PCI Cards to USB Peripherals

Most TV tuners on the market today are in the form of PCI Cards. This is especially true of HDTV tuners or dual channel tuners (for recording and watching different programs simultaneously). However, consumers are increasingly hesitant to open up their PCs to install these cards. Furthermore, these cards cannot be used with set top boxes or notebook computers. Therefore an external USB solution is also needed.

The PLX Technology NET2282 is optimized for migrating PCI based designs, like TV tuners, to USB. It also has enough performance bandwidth to transfer uncompressed HDTV content.



Instead of a system's CPU configuring the PCI tuner chip, the NET2282 can act as the system host. Its integrated CPU functions as the main processor while its shared RAM emulates main system memory (for holding descriptors or other control data). The NET2282 also includes PCI clock, reset, interrupt, and arbitration pins to compensate for those components usually found in a PC.



### Converting a PCI TV Tuner Card to a USB Peripheral

#### Additional PLX Advantages

- ◆ Superior USB 2.0 expertise and support
- ◆ Wide Range of Application Notes
- ◆ Schematic and Layout Design Reviews
- ◆ USB 2.0 Compliance Testing
- ◆ Complete firmware library for many standard USB devices (including video device class), and standard APIs for custom applications
- ◆ USB host library for converting legacy PCI drivers to USB drivers
- ◆ Supported in Windows, WinCE, and Linux

#### Design Tools & Documentation:

<http://www.plxtech.com/products/NET2000/NET2282/default.asp>

- ◆ DataBook, Application Notes, Migration Guide, Design Guidelines, Linux Gadget Drivers, Development Kit Info, etc.

#### Contact Information

PLX Technology, Inc.  
 870 Maude Ave.  
 Sunnyvale, CA 94085 USA  
 Tel: 1-800-759-3735  
 Tel: 1-408-774-9060  
 Fax: 1-408-774-2169  
 Product Marketing:  
 Adam Chen: [achen@plxtech.com](mailto:achen@plxtech.com)  
 Web Site: [www.plxtech.com](http://www.plxtech.com)

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