

### NET 2282 Highlights

- PCI v3.0 – 33/66 MHz, 32-bit bus
- Hi-Speed USB 2.0 Peripheral Port
- Supports driver for mass storage and networking function
- Software driver support for Windows XP and Linux
- Ideal for PCI embedded systems
- Easy hardware integration
  - 32-bit PCI interface
- Ultra fast performance of up to 480 Mbps
- Integrated 8051 CPU @ 30MHz
- 32K of integrated RAM for emulating main system memory and storing descriptors
- Descriptor-based DMA controllers (4) for automatic data transfers
- Compliance to USB 2.0 specification



\* Source: DisplaySearch  
(www.displaysearch.com)

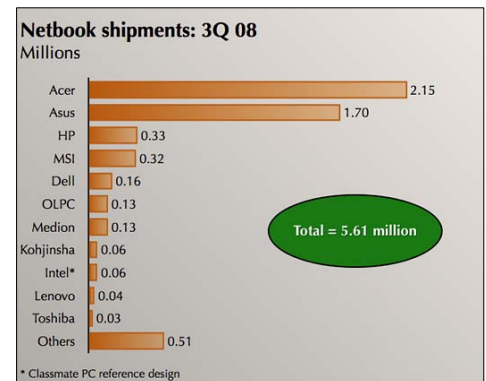
### Application: **Netbook**

### PLX Product: **NET 2282 – PCI to Hi-Speed USB 2.0 Peripheral Controller**

### Key Benefit: **Adds File Sharing, Outlook Sync, and USB Networking**

### What differentiates your netbook?

*The netbook craze is on, and it only looks to increase in the next couple years. In 2008, netbooks sales were estimated to be 14 million units, and in Q3 '08 alone, netbook sales were 5.61M\*, a 160% jump from the previous quarter, which shows tremendous growth and potential for these small, portable, and low-cost PCs.*



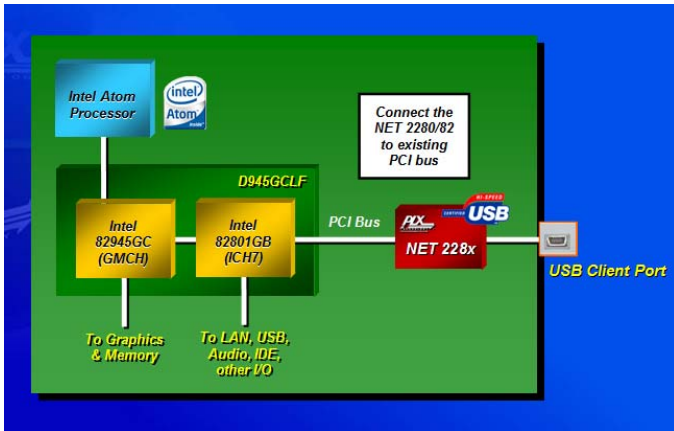
To reach the market potential, netbook vendors must overcome the problem that many of the today's netbooks are almost identical to one another, leaving pricing the only differentiator. UMPC Portal, a technology website, asks, "How long before... all the devices become die-stamped copies? Will the next one use the Facebook brand as the differentiator?" How can the next netbook stand out from the rest? PLX's NET 2282 and USB Duet Technology adds file sharing, Outlook sync, and USB networking to the netbook. These attractive, innovative, and differentiating features will help generate the next wave of netbook sales.

### Easy hardware design & turnkey solution

The NET 2282 is a PCI to USB 2.0 peripheral controller that can be easily integrated into the netbook architecture. The hardware design can be done in five minutes, by connecting the PCI signals of the NET 2282 to the PCI bus of the Intel D945 chipset, which is used in the majority of today's netbooks (alternative may be Nvidia's GeForce 9400M chipset, which also has a PCI bus). Software is already complete, with



Windows XP WHQL'd drivers available for the USB Duet file-sharing and networking functions. PLX provides a turnkey hardware and software solution, which brings the netbook with USB Duet quick to market.



**Figure 1: Netbook architecture (Intel) with NET 2282**

### USB Duet HD – File sharing

USB Duet HD creates a shared drive on the netbook that allows file sharing with other PCs and devices that support USB removable storage. For example, users will place files they want to share in the netbook's USB Duet shared drive. When they connect the USB cable from their netbook to another PC, the shared drive will appear on the other PC with access to the files chosen by the user. The shared drive is like a USB flash key that resides in the netbook, so there's no more worry about losing any USB keys ever again! And as a security measure, the shared drive is only accessible when the user is logged on to the netbook!

### Sync Outlook data with USB Duet HD

Using USB Duet HD's secure shared drive, users can easily sync their Outlook data back and forth between their netbook PCs and primary PCs (at home or office). Users can connect the USB Duet shared drive to their primary PC, and with existing sync software, sync their Outlook data to the shared drive. The latest Outlook data can now be synched to the Outlook application on the netbook, and users can continue to work on the road. When they return

home or to the office, they can sync back any changes from their netbook to their primary PC.

### USB Duet FastLink – USB networking

USB Duet FastLink connects a netbook to another PC using the standard Ethernet protocol. The USB cable connection looks just like an Ethernet connection. No router or switch is needed, and the performance is much faster at 480Mbps! Using this USB network foundation, users can leverage any existing networking software, such as KVM over network, which will allow users to use their desktop's keyboard, mouse, and monitor to control their netbook.



**Figure 2: USB peripheral port on netbook**

### Additional PLX Advantages

- Superior USB 2.0 expertise and support
- USB Duet software drivers
- Wide Range of Application Notes
- Schematic and Layout Design Reviews
- Full USB 2.0 Compliance Testing Support
- PCI-based development systems

### Design Tools & Documentation:

- NET 2282: [www.plxtech.com/2282](http://www.plxtech.com/2282)
- USB Duet Technology: <http://www.usbduet.com>

### Available on PLX Website:

Data Book, Application Notes, Performance Reports, Migration Guide, Design Guidelines, Video Demos, and more.