



ExpressCard® Standard: Expansion Technology for the Future

Patrick Maher
Executive Director, PCMCIA

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Agenda

- What is the ExpressCard Standard?
- ExpressCard Applications
- Product Highlights
- WIBU SYSTEMS Announcement



The ExpressCard Standard

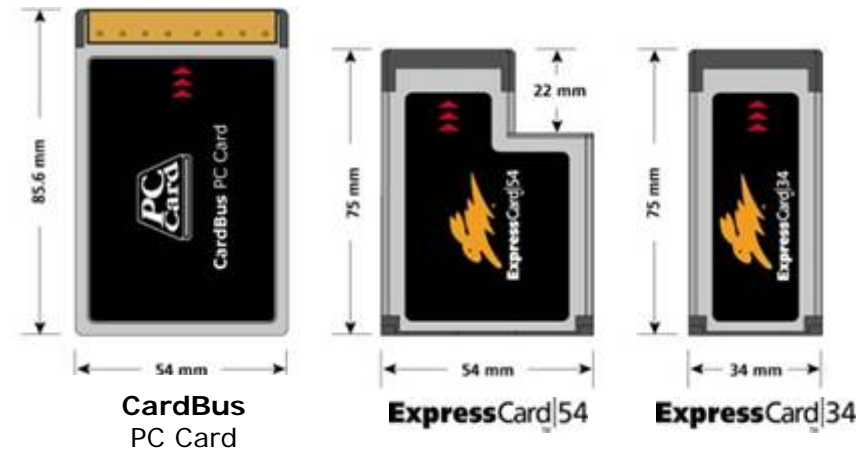
- Replaces PC Card (CardBus) as the next generation standard for modular I/O expansion
- Response to advances in I/O bus technology and PC architecture
- Designed for notebook and desktop PCs
- Developed and supported by PCMCIA members including industry leading PC, module, and component vendors





ExpressCard Standard Highlights

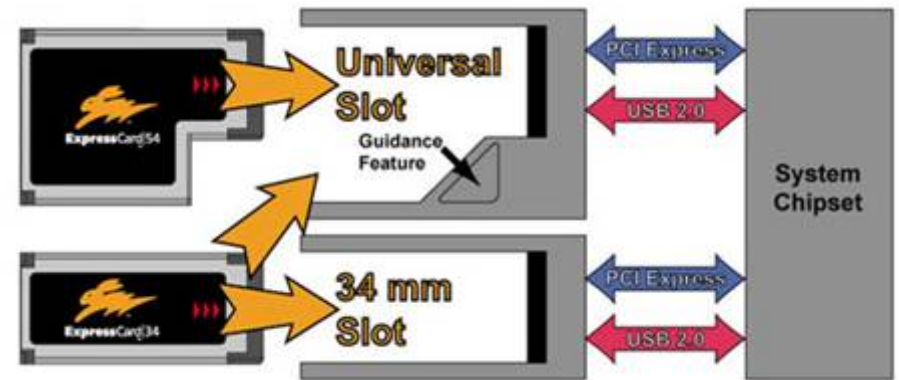
- Supports PCI Express* and USB* standards
- Two module sizes
 - 54mm X 5mm x 75mm
 - 34mm x 5 mm x 75mm
- All operating systems supported
- Not backward compatible with PC Card





ExpressCard Slots in Notebooks

- ExpressCard Standard supports two slots
 - **Universal slot** accepts both 54mm and 34mm modules
 - **34mm slot** accepts 34mm size only
- Some notebooks offer both PC Card and ExpressCard slots to help ease the transition for consumers





What ExpressCard Technology Delivers.....

- **Improved performance:** USB and PCI Express applications of today and the future.
 - HDTV, WWAN, etc.
- **Easy installation:** Plug'n'play installation with auto-configuration. Just plug in a module and go!
- **Smaller size:** Roughly half the size and lighter than the old PC Card.
- **Lower Cost:** Smaller modules, simpler connectors and elimination of the CardBus controller.
- **Popular applications:** Wide variety of applications are available today.



ExpressCard Applications



Notebook Developers

**Acer
Aspire**



**Apple
MacBook Pro**



**Dell
Latitude**



**Fujitsu
LIFEBOOK**



**HP
Pavilion**



**LG
S Series**



**NEC
LaVie**



**Lenovo
Thinkpad**



**Sony
VAIO**



**Toshiba
Satellite**



**All Top 10 Global Notebook Developers* Offer Systems
With ExpressCard Slots**



Popular Applications

- Entertainment
 - Analog and digital TV tuners, audio
- Connectivity
 - Bluetooth*, (e)SATA, IEEE1394 (Firewire*)
 - Ethernet, wireless WAN & LAN
- Storage
 - Flash memory, memory media adapters
- Security
 - Card readers, SIM cards



**Users Have Access to a Wide Range
of ExpressCard Products**



Selected Currently Available Modules

- **AboCom Systems#** Memory Media Adapter, Gigabit Ethernet, 1394a/b
- **Atech Flash** Memory Card Adapters
- **AVerMedia** Analog and Digital TV Tuner, HybridExpress (HD TV)
- **Belkin** Wireless LAN, Memory Media Adapter, Gigabit Ethernet, 1394a/b, Docking Station
- **Buffalo Technology** Memory Card Adapter
- **DataFab** Memory Media Adapter
- **Delkin** CompactFlash Adapter
- **Dell** TV Tuner
- **Hagiwara-Syscom** CompactFlash Adapter
- **HP** TV Tuner
- **Mobility Electronics** Expansion solution
- **Newton Peripherals** Wireless Mouse
- **Novatel** Wireless WAN
- **SCM Microsystems** Smart Card Reader, SIM Reader
- **SIIG** SATA II, eSATA, 1394a/b, Serial port
- **Tai-Sol Group#** Memory Card Adapters
- **WIBU_SYSTEMS** Security, Digital Rights Management
- **YE Data** Memory Card Adapters



ExpressCard Compliance Program

- Program assures customers that ExpressCard products will work together
- **Approx. 60 companies have participated to date**
 - 200 products in the program so far
 - 127 products have passed compliance
- Developed with support of the PCI SIG* and USB-IF compliance programs
- Compliant products feature orange rabbit logo





IDC Interface Report

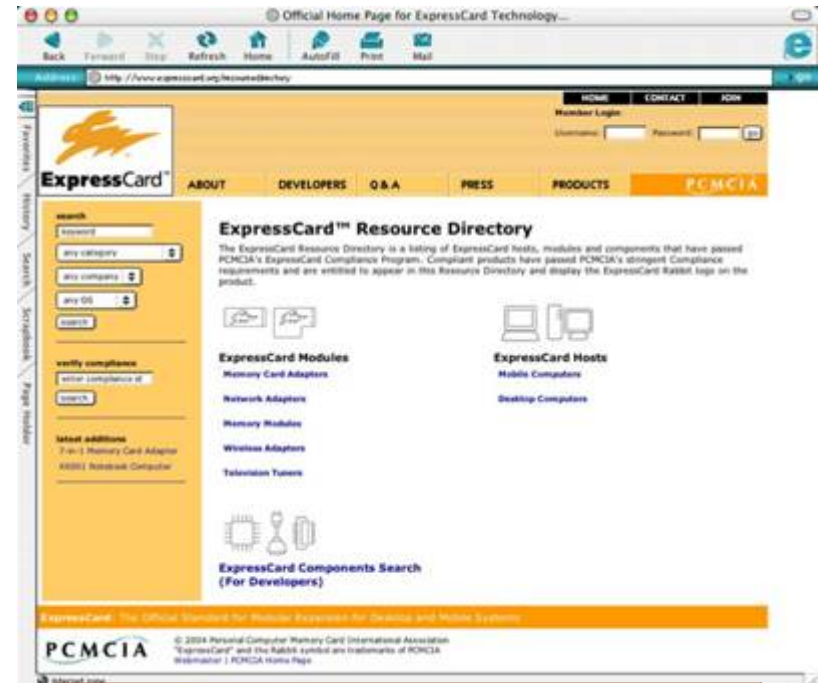
- ExpressCard technology
 - Penetration rate of 67.2% of notebooks shipped by 2010
 - Consumer adoption will be ahead of corporate adoption
 - Based on component and host system projections
- IDC Interface Report, January 2007





Information is a Click Away

- **Website Features:**
- “Where to Buy” page features new products
- **Resource Directory** offers searchable database of products
- **ExpressCard University** provides online training for computer retail sales associates
- **Photos & graphics** available to press



www.expresscard.org



ExpressCard Technology Today

- All major **notebook developers** offer ExpressCard slots
- More than **200 products** have participated in a compliance program
- More than **50 modules** are available for purchase today
- **Industry adoption** has quickly picked up speed in 2006/2007
- Products available in a **wide variety of applications** – from a wireless mouse to networking, communications, memory and security





Product Highlights

(Vendor representatives are available following the press conference.)



Belkin

- **N1 Wireless ExpressCard Module**
802.11n-draft wireless LAN card
- Doubles your available bandwidth
- Runs multimedia applications, such as streaming HD video, file exchange online games, and expands the wireless range for better connections to hotspots
- **High-Speed Docking Station**
- Instantly access all of your devices with one easy ExpressCard connection that offers high-bandwidth performance.
- Crystal clear, DVD quality video to 1600x1200 resolution (VGA and DVI), USB 2.0, Ethernet and surround sound audio built in





Novatel Wireless

- Wireless Wide Area Network (WWAN) Modules
 - Smaller, more efficient, advanced version of the traditional PC card
 - The industry's first wireless module for EMEA, APAC and North American markets
- Merlin™ X950D HSUPA/HSDPA ExpressCard
- Merlin XU870 HSDPA ExpressCard
- Merlin X720 EV-DO Rev A ExpressCard
- Merlin XV620 EV-DO Rev 0 ExpressCard
- Available now in US and Europe





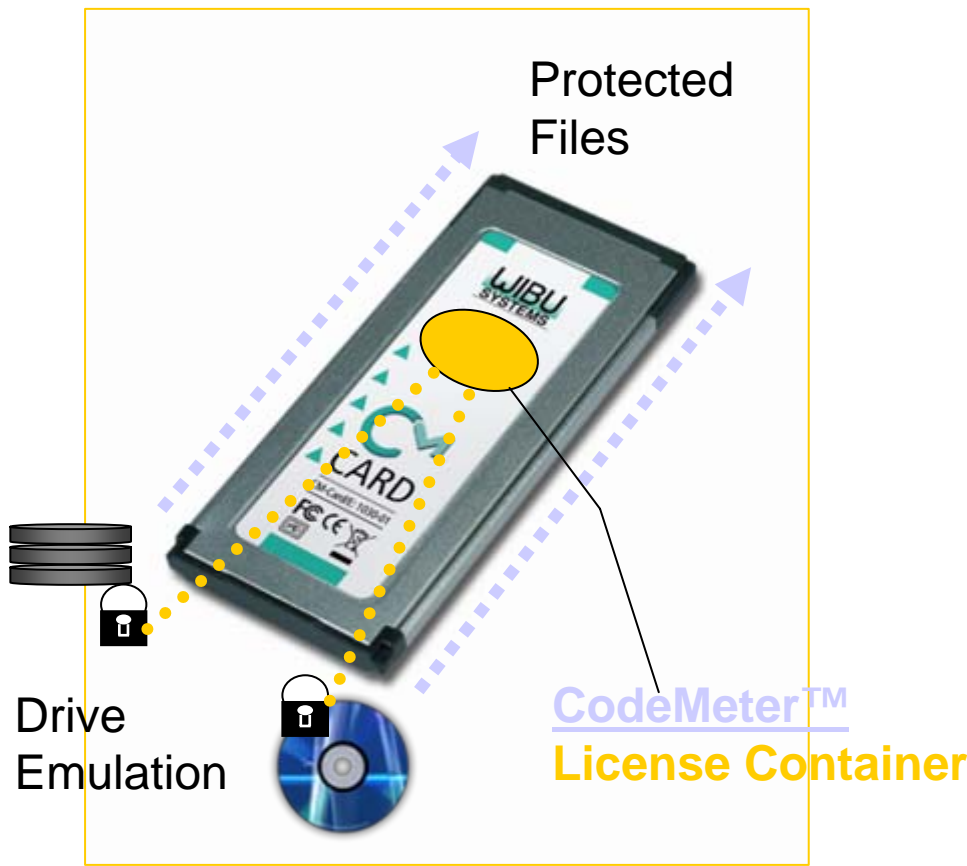
SCM Microsystems

- **SCR3340 ExpressCard Reader**
- Smart Card Reader for providing user authentication for applications such as network logon, e-government, secure e-commerce and healthcare management
- Offers a plug-and-play USB 2.0 interface
- 54mm size





WIBU-SYSTEMS: Licensed Digital Products Stored in Portable Drives: CmCard/E



- CodeMeter™ DRM Technology **NOW** available in the ExpressCard form factor
- CodeMeter Digital Rights Management System is a proven and highly flexible protection technology for digital products
- CodeMeter was named one of the top 5 products in the category "Best Digital Rights Management" for the SIIA Codie Awards 2007



Presentation, press materials and
collateral material available at
www.expresscard.org/CeBIT