



Connectivity & Capability Expander

Echo™ Express SE II

THUNDERBOLT™ 2 EXPANSION CHASSIS FOR PCIe CARDS



Use Two PCIe Cards With Computers Lacking Slots

Sonnet's Echo Express SE II enables you to connect two high-performance, professional pro video capture and processing, digital audio interface, DSP accelerator, FireWire, RAID controller, 10 Gigabit Ethernet, eSATA, and other PCIe cards to any Mac® with a Thunderbolt port. Accommodating cards up to 7.75" long, this compact Thunderbolt 2-to-PCIe card expansion chassis supports nearly every Thunderbolt-compatible PCIe card on the market, including double-width (PCIe card + daughter card) cards. Measuring just 6.5" wide by 4.6" tall by 11" long, the Echo Express SE II takes up little space wherever you work, be it in the studio, on location, at your desk, or in the edit suite. Like all Echo Express chassis, the SE II has two Thunderbolt ports that support daisy chaining of up to six devices to a single port on your computer.

Built for Speed



20Gbps Thunderbolt 2 technology-equipped computers are here. The original 10Gbps Thunderbolt interface provided breakthrough bandwidth for external expansion, more than sufficient to support the maximum performance of most PCIe cards. However, some high bandwidth cards such as 16Gb Fibre channel, multi-port

10 Gigabit Ethernet cards, or multiple bandwidth-hungry cards require more than 10Gbps. Thunderbolt 2 removes this barrier by providing more bandwidth for demanding applications. The Echo Express SE II's Thunderbolt 2 interface takes full advantage of this increased bandwidth to ensure optimum performance from installed cards when the chassis is connected to a Thunderbolt 2-equipped computer. Need to connect to a computer equipped with 10Gbps Thunderbolt? No problem, the SE II is fully compatible with earlier generation Thunderbolt computers as well.

Two PCIe 2.0 Slots Plus Space for a Daughter Card

The Echo Express SE II's PCIe 2.0 x8 slots support two half-length+, full-height, single-width PCIe cards, or one single-width card plus one double-width card. Double-width? Some specialty cards, such as RME's HDSPe MADI FX card, Blackmagic Design's DeckLink 4K Extreme, and the Lynx AES16e 50, include a daughter card that mates with and provides additional external connections to the main card. The daughter card occupies the adjacent PCIe card space without filling a slot. The Echo Express SE II accommodates a daughter card's installation without wasting a slot.

Thunderbolt 2 Upgrade Customers Process Your Upgrade Here



Key Features

- **Connect Professional PCIe Cards**—Use high-performance PCIe card with Thunderbolt-equipped computers
- **Thunderbolt 2 Interface**—Maximum performance with computers with 20Gbps Thunderbolt 2 technology, backward compatible with 10Gbps Thunderbolt technology
- **Two PCIe Slots**—Support two half-length+ (up to 7.75" long), full-height, single-width cards
- **Two Thunderbolt Ports**—Daisy chain up to six devices to a single port on the host computer
- **Temperature-Controlled, Fan**—Automatically operates slowly and quietly with cooler cards, provides better cooling for hot cards
- **Energy Saver Mode**—Powers on/off automatically with the computer
- **Sufficient Power**—80W power supply handles any combination of cards
- **Aluminum Housing**—Portable protection for any environment

PCIe Card Thunderbolt Compatibility Chart ▶

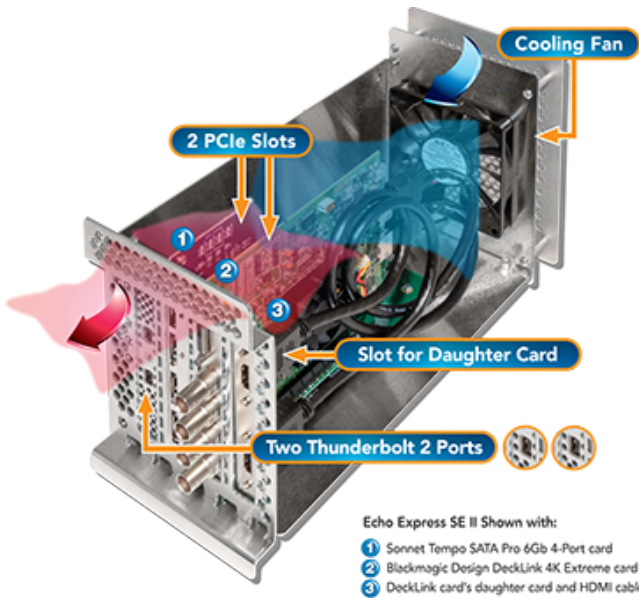
Product	Mac	Windows	Echo Express	Echo Express Pro	eMac mini Server		
			Full Height 3.0 Length+	Full Height Full Length	Low Profile Half Length	Full Height Full Length	
Pro Audio							
Lane Audio	✓		✓	✓		✓	
Lane ADI 16e-50C	✓		✓	✓		✓	

Nearly Every Thunderbolt-Compatible Card Supported

With its ability to accommodate cards up to 7.75" long, The Echo Express SE II supports nearly every Thunderbolt-compatible card available. PCIe 1.1, PCIe 2.0, and PCIe 3.0 cards are supported. Do you have a card in mind but aren't sure it's compatible? We've worked closely with PCIe card manufacturers to provide a list of compatible cards on our supporting [PCIe Card Thunderbolt Compatibility Chart](#). The chart provides an up-to-date list of cards that have been tested to be recognized over a Thunderbolt connection and compatible with Thunderbolt technology requirements.

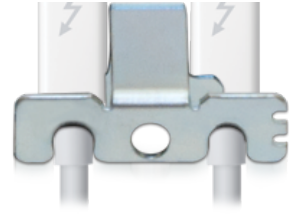
Cool Design Outside and In

The Echo Express SE II's aluminum outer shell securely protects the cards inside and helps transfer heat away from them. The large and quiet, temperature-controlled fan automatically speeds up and slows down smoothly as needed, so there's no guesswork in deciding which switch position to select. The enclosure is ventilated front, back, and bottom to facilitate airflow over the cards.



Thunderbolt Cable Lock Included

Sonnet includes a lock that secures Thunderbolt connectors(3) plugged into the Echo chassis. It is easy to install and prevents accidental cable disconnections.



Strong Link in the Chain

These Sonnet solutions support daisy chaining of additional Thunderbolt technology-enabled peripherals such as an additional Echo Express, the Apple® Thunderbolt Display, video capture devices, and data storage devices. For connected devices requiring extra power, 10 watts is provided through the daisy chain port to peripherals.

Sonnet Thunderbolt Expansion Partners

Sonnet works closely with the following partners to ensure Thunderbolt compatibility for their products. See the [PCIe Card Thunderbolt Compatibility Chart](#) for an up-to-date list of products that have passed Thunderbolt compatibility testing with Sonnet products.



PCIe cards and computer hardware shown in photos for illustration purposes; items sold separately.

Technical Specifications

Part No.	
ECHO-EXP-SE2	Echo Express SE II Thunderbolt 2 Expansion Chassis for PCIe Cards ⁽¹⁾
Hardware	
Warranty	1-year
Dimensions WxDxH:	6.5 x 11 x 4.6 in. (16.5 x 27.9 x 11.7 cm)
Weight	3.7 lbs. (1.7 kg)
External Connectors	<ul style="list-style-type: none">Two Thunderbolt12V power
Expansion Slot	Two x8 PCIe 2.0
PCIe Cards Supported ⁽¹⁾	Two half-length (up to 7.75" long), single-width, full-height x8 PCIe 2.0 cards plus one daughter card
Compatible PCIe Cards ⁽²⁾	Up-to-date PCIe cards listed on our supporting PCIe Card Thunderbolt Compatibility Chart
Power Adapter	Input: 100–240V AC 1.6A, 50–60 Hz Output: 12V@7.0A (80W)
PCIe Card Minimum Guaranteed Power	25W
Operating Temperature	0° C to 35° C (32° F to 95° F)
RoHS Compliant	Yes
Package Contents	<ul style="list-style-type: none">Echo Express SE II chassis⁽¹⁾Universal power adapterPower cordThunderbolt cable lock⁽³⁾User's guide <p>Note: PCIe cards and Thunderbolt cable sold separately</p>

Compatibility

- Any Mac with a Thunderbolt or Thunderbolt 2 port
- Any Windows® 8 or 7 computer with a Thunderbolt or Thunderbolt 2 port⁽⁴⁾

PCIe Card Compatibility

- For up-to-date PCIe card compatibility see our [PCIe Card Thunderbolt Compatibility Chart](#)

Technical Notes

- PCIe cards sold separately; requires Thunderbolt cable, available at the [Sonnet Online Store](#) or the [Apple Store](#).
- Compatibility requires the installation of Thunderbolt technology-aware drivers, available from the manufacturer. See our supporting [PCIe Card Thunderbolt Compatibility Chart](#) for a list of up-to-date compatible PCIe cards.
- Thunderbolt cable lock compatible with Apple and Sonnet Thunderbolt cables. Not compatible with optical Thunderbolt cables.
- Windows requires a Thunderbolt 2 interface in the computer and in the expansion chassis to support more than two PCIe controllers. Note that some PCIe cards have a bridge to multiple controllers, so it is possible for a single dual-controller PCIe card to reach the limit if not connected via Thunderbolt 2. Not all Mac-compatible PCIe cards are also compatible with Windows. See the [PCIe Card Thunderbolt Compatibility Chart](#) for details.

Specifications subject to change without notice.



For
Windows



RoHS
COMPLIANT