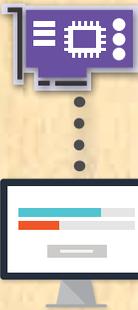


Echo™ Express SEL

DESKTOP THUNDERBOLT™ 2-TO-PCIE
CARD EXPANSION CHASSIS
ECHO-EXP-SEL

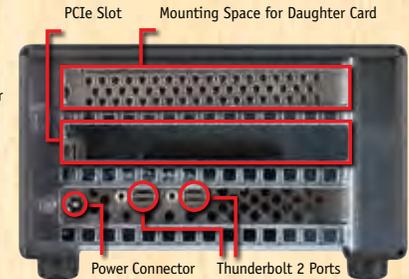
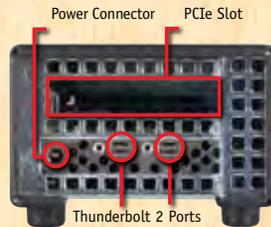
Echo Express SE I

DESKTOP THUNDERBOLT 2-TO-PCIE
CARD EXPANSION CHASSIS
ECHO-EXP-SE1



Use One PCIe Card With Computers Lacking Slots

Sonnet's Echo Express SEL and Echo Express SE I enable you to connect one high-performance PCIe card to any Mac or PC with a Thunderbolt port. Differing only in size, these two compact Thunderbolt 2-to-PCIe card expansion chassis each feature a PCIe 2.0 x8 slot, and include two Thunderbolt 2 ports to support daisy chaining of up to six devices to a single port on your computer.



20Gbps Thunderbolt 2

The SEL and SE I feature Thunderbolt 2 technology, which provides ample bandwidth for many of the most demanding, highest performance PCIe cards, and supports the DisplayPort 1.2 protocol to enable streaming to a 4K monitor. They are also backward compatible with 10Gbps Thunderbolt hosts and devices.



Cool Design Outside and In

The rugged, lightweight aluminum shell of each SEL and SE I chassis securely protects the card inside and helps radiate heat away from it. The airflow path within each was specially designed to enable the temperature-controlled fan to quietly and efficiently cool the installed card, which automatically speeds up and slows down smoothly as needed.



Echo Express SEL The Smallest One

The Echo Express SEL is the smallest, quietest Thunderbolt 2-to-PCIe card expansion system available. Sonnet designed the SEL specifically to house a single low-profile PCIe card, allowing us to reduce the enclosure to a scant 4" wide x 2.8" high x 8.4" deep, making it great for travel, and enabling great flexibility in placement in your workspace. A perfect match for many Thunderbolt-compatible 16Gb and 8Gb Fibre Channel, 10 Gigabit Ethernet, video capture and processing like the Bluefish 444 Epoch 4K Neutron, SAS and SATA host bus adapters, RAID controller cards the SEL enables you to connect one of these cards to any computer with a Thunderbolt 2 or Thunderbolt port.

PCIe 2.0 x8 slot supports one low-profile card



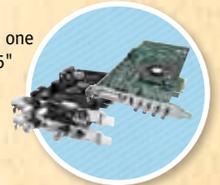
Echo Express SE I More Room to Expand

At 5.6" wide x 3.5" high x 8.6" deep, the Echo Express SE I is a bit larger than the SEL, but supports one half-length+ (up to 7.75" long), full-height card such as such as the AJA KONA 3G, BlackMagic Decklink, Avid Pro Tools|HD Native, and any of the Universal Audio UAD-2 line of DSP accelerators. The added space within enables the SE I to support nearly every Thunderbolt-compatible card available, even double-width cards!

Specialty cards such as RME's HDSpe MADI FX card, Blackmagic Design's DeckLink Studio 4K Extreme, and the Lynx AES16e-50, include a daughter card (a.k.a. extension board or I/O bracket) that mates with and provides additional external connections to the main card, but doesn't require a PCIe slot's electrical connections. The daughter card occupies the space adjacent to the PCIe card, without filling a slot.

PCIe 2.0 x8 slot supports one half-length+ (up to 7.75" long), full-height card

Supports daughter card installation



ThunderLok™ Included

Sonnet includes a ThunderLok Thunderbolt connector retainer clip, which slides onto the included Thunderbolt cable, and screws into the Echo chassis to prevent accidental cable disconnections.



Thunderbolt-Compatible Cards?

Do you have a card in mind but are not sure if it's Thunderbolt compatible? Check out our [PCIe Card Thunderbolt Compatibility Chart](#) to learn more.



Enables use of high-performance PCIe cards



Thunderbolt 2 interface delivers maximum performance with Mac or PC with Thunderbolt 2 port, backward compatible with 10Gbps Thunderbolt technology hosts and devices



Temperature-controlled fan automatically operates slower and quieter with cooler cards; provides better cooling for hotter cards



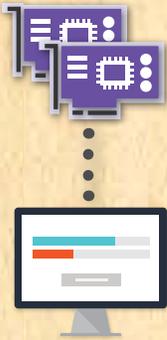
Includes two Thunderbolt 2 ports for daisy chaining devices



80W power supply provides plenty of power for card and downstream Thunderbolt devices



Includes Thunderbolt cable and ThunderLok Thunderbolt connector retainer clip



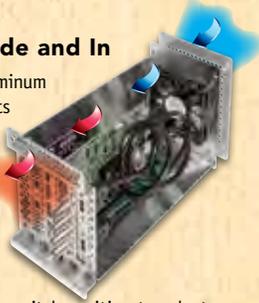
Use Two PCIe Cards With Computers Lacking Slots

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 or Windows PC 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" high by 11" deep, 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. Two Thunderbolt 2 ports support daisy chaining of up to six devices to a single port on your computer.

Cool Design Outside and In

The Echo Express SE II's aluminum outer shell securely protects the cards inside and helps radiate 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 in front and back to facilitate airflow over the cards.

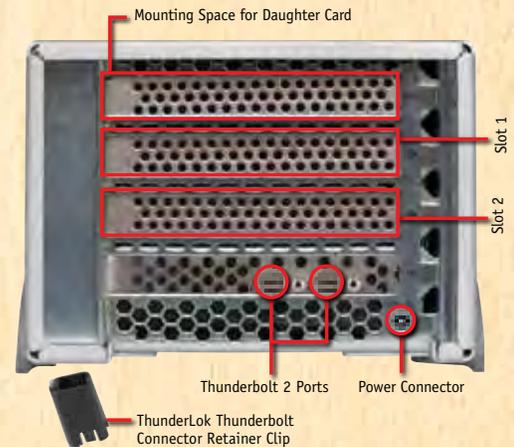
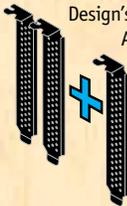


20Gbps Thunderbolt 2 Technology Built for Speed

The original Thunderbolt interface provided breakthrough bandwidth for external expansion, supporting the maximum performance of most PCIe cards. However, some bandwidth-hungry cards such as 16Gb Fibre Channel, 10 Gigabit Ethernet, and some storage interface cards are performance-limited by 10Gbps Thunderbolt. Thunderbolt 2 technology was developed to open up the bottleneck by providing even more bandwidth to enable greater performance. Featuring a 20Gbps Thunderbolt 2 interface, the Echo Express SE II provides ample bandwidth for many of the most demanding, highest performance PCIe cards, and supports the DisplayPort 1.2 protocol to enable streaming to a 4K monitor. It is also backward compatible with 10Gbps Thunderbolt hosts and devices.

Two PCIe 2.0 Slots Plus Space for a Daughter Card

The Echo Express SE II's PCIe 2.0 slots (one x16, one x8) support two half-length+ (up to 7.75" long), full-height, single-width PCIe cards, or one single-width card plus one double-width card. 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 Echo Express SE II accommodates a daughter card's installation without wasting a slot.



ThunderLok Included

Sonnet includes a ThunderLok Thunderbolt connector retainer clip, which slides onto the included Thunderbolt cable, and screws into the Echo chassis to prevent accidental cable disconnections.

Add Storage Inside The Expansion Chassis

Install a **Tempo™ SSD** card (with your own 2.5" SSD attached) or the 1100 MB/sec **Tempo PCIe SSD** card into the Echo Express SE II for super fast access to your data. For more info, visit sonnettech.com/product/computercards



Enables use of high-performance PCIe cards



Thunderbolt 2 interface delivers maximum performance with Mac or PC with Thunderbolt 2 port, backward compatible with 10Gbps Thunderbolt technology hosts and devices



Includes two Thunderbolt 2 ports for daisy chaining devices



Two PCIe 2.0 slots (one x16, one x8) support two half-length+ (up to 7.75" long), full-height, single-width cards



Supports daughter card installation without sacrificing a PCIe slot



Large, temperature-controlled fan automatically operates slower and quieter with cooler cards; provides better cooling for hot cards



80W power supply handles any combination of cards plus power for a downstream device

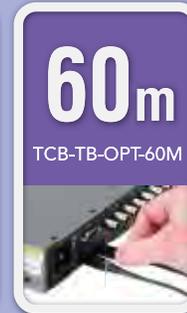


Includes Thunderbolt cable and ThunderLok Thunderbolt connector retainer clip

NEW

SONNET OPTICAL THUNDERBOLT CABLES

FIBER OPTIC THUNDERBOLT CABLES FOR LONG DISTANCE CONNECTIONS



SONNET THUNDERBOLT EXPANSION SYSTEMS AT-A-GLANCE

	Slots	PCIe Connector	Cards	Thunderbolt Ports	Thunderbolt Interface	Universal Power Supply	PCIe Auxiliary Power	Desktop	Rackmount	Warranty
Echo Express SEL	1	x8	Low-Profile	2	Thunderbolt 2 (20 Gbps)	80W External		✓		1 Year
Echo Express SE I	1	x8	Half-Length+	2	Thunderbolt 2 (20 Gbps)	80W External		✓		1 Year
Echo Express SE II	2	x16/x8	Half-Length+	2	Thunderbolt 2 (20 Gbps)	80W External		✓		1 Year
Echo Express III-D	3	x8/x16/x8	Full-Length	2	Thunderbolt 2 (20 Gbps)	300W Internal	✓	✓		5 Years
Echo Express III-R	3	x8/x16/x8	Full-Length	2	Thunderbolt 2 (20 Gbps)	300W Internal	✓		✓	5 Years
PCIe Card Expansion Edition*	3	x8/x16/x8	Low-Profile	2	Thunderbolt 2 (20 Gbps)	300W Internal	✓		✓	5 Years
xMac Pro Server	3	x8/x16/x8	Full-Length	2	Thunderbolt 2 (20 Gbps)	300W Internal	✓		✓	5 Years
xMac mini Server	2	x16/x8	Full-Length Half-Length	2	Thunderbolt 2 (20 Gbps)	150W Internal	✓		✓	5 Years

* Mobile Rack Device Mounting Kit - Thunderbolt 2-to-PCIe Card Expansion Edition

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