



Avid Pro Tools HD Native Thunderbolt with HD Omni I/O



PreSonus Studio 192



iConnectivity iConnect Audio 4+



BlackMagic MultiDock



Other World Computing ThunderBay 4 Mini



Sonnet Echo Express III-D



EastWest virtual instruments are now available via cloud

solution for those who opt for a more modest desktop machine such as an iMac or Mac Mini.

STORAGE AND EXPANSION

BlackMagic MultiDock (\$595 MSRP)

Four-bay docking station lets you connect and hot-swap up to four SSDs or hard drives via Thunderbolt 2. Two ports for daisy-chaining. Supports 2.5" SATA SSDs and Just a Bunch of Drives (JBOD) mode, a popular mode for hard drives configured for use with sample instruments. Other RAID configurations are also supported.

Other World Computing ThunderBay 4 Mini (\$339 list for enclosure; starting at \$699 with SSDs pre-installed)

Four-bay 2.5" SSD enclosure with Thunderbolt 2 interface. Supports JBOD and other RAID configurations. OWC also makes a similar enclosure for 3.5" drives.

Sonnet Echo Express III-D (\$979 list)

PCIe expansion chassis that supports three full-length, full-height, single-width cards, or one double-width card plus one single-width card; Thunderbolt 2 interface supports 20 Gbps; can be upgraded to 40Gbps Thunderbolt 3 technology with a replacement interface card (not yet available). This allows you to use existing cards such as Avid's Pro Tools HD | X series with non-PCIe-card computers.

HighPoint RocketStor 5212 (\$149 MSRP)

Two-drive bay with Thunderbolt 1; supports 3.5" and 2.5" drives, SSD and SATA, and hot-swapping. This is a very affordable way to integrate internal hard drives with the new Mac Pro. I personally use this with my Mac Mini slave machine.

CLOUD ATLAS

When was the last time you installed an application using physical media such as a CD- or DVD-ROM? Probably not recently. Thanks to blazing fast Internet speeds, developers can deliver their wares online, and most do, saving the time and expense of shipping.

However, while it's one thing to ask a customer to download a 2GB installer, it's entirely another when file sizes are in excess of 40GB. Still, developers are pushing the limits—none more so than premier soundware maker EastWest. Recently they introduced Composer Cloud, a subscription-based model that gives customers complete access to EastWest's massive virtual instrument collection, including "Gold" editions of their orchestral libraries. Currently there are two plans: Student (\$14.99 per month) and Complete (\$29.99 per month). This effectively eliminates the cost barrier and opens up EastWest's catalog to more new customers, who will likely need to

it possible to configure large-scale, flexible audio systems interconnected with inexpensive Ethernet cables and hubs. Also in this product line are the 16A (32-in/32-out with 16 x 16 line-level I/O, ADAT and S/PDIF digital I/O; \$1495) and 8M (24-in/24-out with eight mic pre's; \$1495).

Avid Pro Tools HD Native Thunderbolt with HD Omni I/O (\$4,999 list)

This bundle includes the HD Native Thunderbolt interface, which connects other Pro Tools interfaces such as the HD Omni I/O (shown) to a Thunderbolt-equipped computer. Functionally, the HD Native Thunderbolt interface acts as a bridge between existing Pro Tools HD audio interfaces, which can't be connected directly to the computer. HD Omni I/O: two mic preamps, four-in/eight-out line, eight channels of ADAT I/O, two channels of AES/EBU, and two channels of S/PDIF.

PreSonus Studio 192 (\$1,199.95 list)

If your needs dictate USB over Thunderbolt, this 26-in/32-out USB3 audio interface has eight remote-controlled Class-A mic preamps and supports USB3. Built-in DSP includes three-band EQ and dynamics. Monitor control section includes talkback mic and two headphone outputs with independent source selection.

iConnectivity iConnect Audio 4+

This USB 2.0 Audio Interface has four ins and six outs, with four mic/instrument preamps, 24-bit/96kHz operation, and MIDI. But the killer app here is the multi-host device ports that let you use two hosts at the same time—for example, a Mac and an iPad. Though only USB, the added iOS connectivity and low price point make this an attractive

invest in high-speed hard drives to get the most value and best performance. We caught up with EastWest founder Doug Rogers to learn more about Composer Cloud and gain a better understanding of the trends he sees among customers regarding current-generation Macs.

According to Rogers, a subscription plan such as Composer Cloud is unprecedented in our industry. "In the past, composers with limited budgets could only purchase a new product periodically," he notes. "Now, they have access to everything we offer in Composer Cloud at an affordable monthly price. To give some perspective, at \$29.99 per month, it would take 18-and-a-half years to purchase everything in the current collection."



In response to whether Composer Cloud offers much value to existing customers, Rogers adds that "most of our customers don't have the 50-plus products in our collection, and cherry-pick according to what they think they'll need, missing out on some great inspirational collections in the process."

Composer Cloud gives them access to everything, and many users comment on our Facebook and Twitter pages that they've found so much inspiration in collections they never would've purchased outright."

We learned even more from Rogers about hardware choices and trends among customers in hopes of providing you with actionable information. Here it is in Q&A format:

How many customers are Mac-based, and of those, how many have switched to the cylinder model?

We don't collect system data from our users unless they require tech support, but with hard drive-specific format products such as Play (our virtual instrument engine) it's pretty evenly split between Mac and PC.

Many of our Mac users have switched to the iMac with Thunderbolt because the price tag on the [Mac Pro] cylinder model is a lot more.

What are the main considerations your customers have expressed about switching to a post-PCI computer? Any trends?

In fact, we see most users getting rid of their old systems because USB2 and FireWire are too slow, performance-wise with sample-based instruments. There has been a move to the new generation of Macs, both iMac and "trashcan," with the PCIe SSD and Thunderbolt or USB3. In particular, the Samsung 850 EVO SSD is popular [as an external drive] because of its great price, at around 50 cents per gig or less.

In our own tests we've found that the voice count from Play increases dramatically when using an SSD versus a spinning hard drive, and the load times are much faster. However, we don't notice much difference in performance between hard drives connected via USB3 versus Thunderbolt 1.

What type of hard drive do you recommend?

They should absolutely be using SSD on a fast connection, PCI-e being the fastest. SSDs have halved in price in the last two years, and the performance boost is worth the cost. They should also fill their computers with RAM, which is comparatively inexpensive. Both will dramatically improve performance more than paying extra for a faster CPU.

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