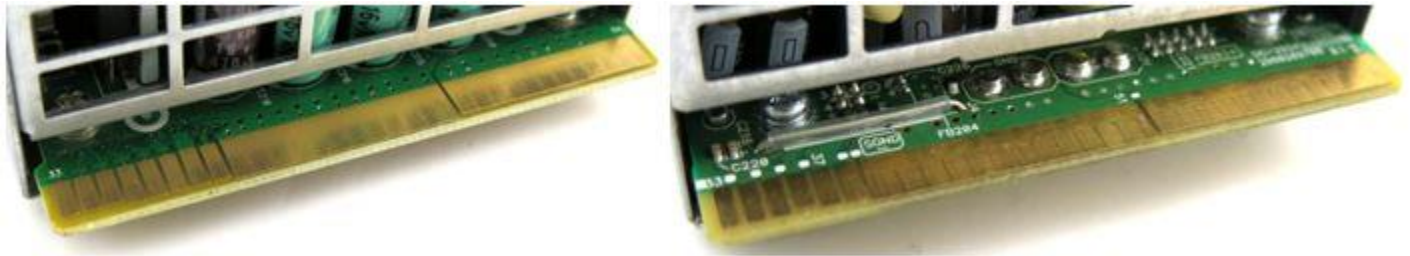




## ZSX Breakout Board Manual

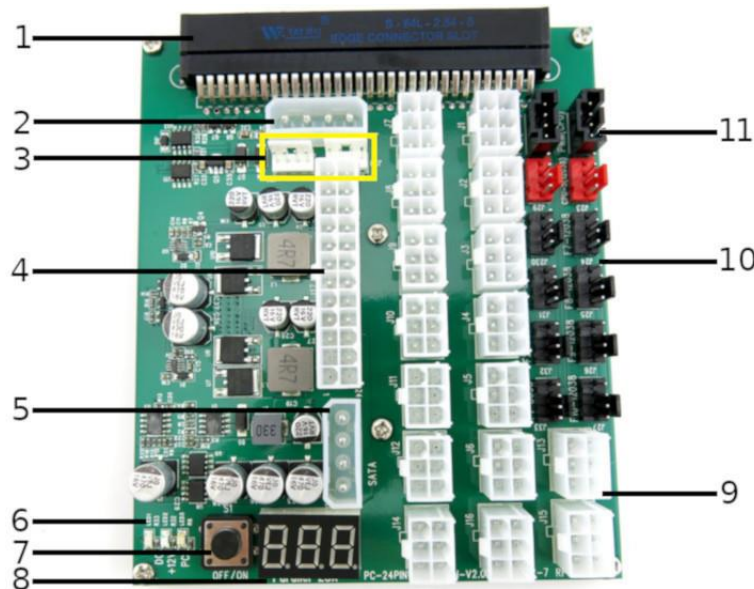
The ZSX [breakout board](#) is the first of its kind to include a full ATX PICO 24pin connector to directly power your motherboard, CPU, and an HDD or SSD. Additionally, it features built-in fan hubs to power up to 10 fans. The ZSX is truly the single board for 100% GPU mining rigs.

The ZSX is designed to be compatible with the Delta/Dell/Lite-On 1100W and 1400W server power supplies (picture on the left with 8 smaller pins) and are also backwards compatible with HP 750W, 1200W, 1500W, and Delta 2400W power supplies (picture on the right with 6 smaller pins). These boards will automatically detect which model power supply it is currently connected to and adjust itself for compatibility.



The notable known compatibility exceptions are part numbers 0TCVRR, 0GVHPX, and 0XCHHD, which are **only** compatible with our older [X12](#) model. If you are ever in doubt, please refer to the extensive [breakout board compatibility list](#) on our site to look for specific model and part numbers.

### Breakout Board Features



1: **Connector slot.** When connecting the breakout board to your PSU we recommend sliding in one corner of the slot from the PSU at a 45-degree angle and then sliding the rest of the power bar into the connector slot. (Lubricant is not required, but can be recommended. Apply on the PSU power bar and wipe away any excess prior to connecting the adapter.)

2: **4-pin Molex input.** This is to allow remote access to manually or automatically cycle power on/off your power supplies via our optional [remote management module](#). **!!WARNING: NEVER CONNECT THIS PORT TO YOUR**

## MOTHERBOARD; DOING SO CAN CAUSE DAMAGE TO THE BREAKOUT BOARD, CABLES, AND/OR YOUR MOTHERBOARD.

3: **Two 4-pin 5V inputs ports.** The 4-pin ports will allow you to sync our breakout board to another of our breakout boards using our 4-pin interconnect sync cable. Only use these ports with our interconnect sync cables between our breakout boards. **!!WARNING: CONNECTING ANY OTHER CABLE BESIDES OUR CABLES OR ANY OTHER DEVICE BESIDES OUR BREAKOUT BOARDS CAN CAUSE DAMAGE TO THE BREAKOUT BOARD, CABLE(S), AND/OR THE OTHER ELECTRONIC(S).**

4: **24-pin Port.** ATX 24-pin power port.

5: **4-pin Molex for SATA input.** Provide power to 1 HDD/SSD on your motherboard.

6: **LED indicator lights.** Yellow (receiving power from PSU), Green (pushing power), and Blue (Motherboard powered).

7: **Electronic power button.** Even though there is a power button, the board retains its state in the event of a power loss.

8: **LED voltage display.** This will provide you with the current voltage output of the power supply.

9: **6-pin PCIe Ports.** Connect up to 16 PCIe cables to power various devices.

10: **Red/Black Fan Hub Ports.** Power up to 10 fans.

11. **PWM 4-Pin Ports.** Connect these ports to your motherboard with our [4-pin PWM Cable](#) to regulate the speed of attached fans attached to the corresponding row. (Our next model board will have just 1 port to control all connected fans.)

## ATX Module Instructions

Provide up to 180W power to your motherboard by using the included cables:

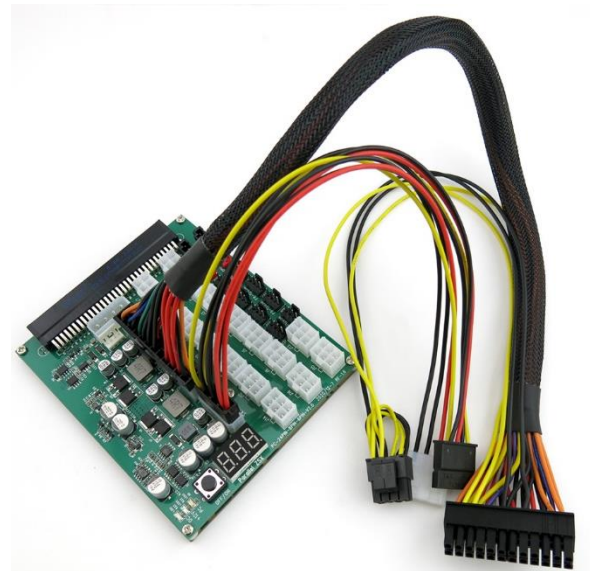
- (1) 24-pin to 24-pin and 4+4 pin for CPU power
- (1) 4-pin Molex to 4-pin Molex Female and SATA

The included Molex cable is wired in a non-standard fashion (as shown in all pictures), but is wired correctly to be used with our ZSX board's Molex SATA port.

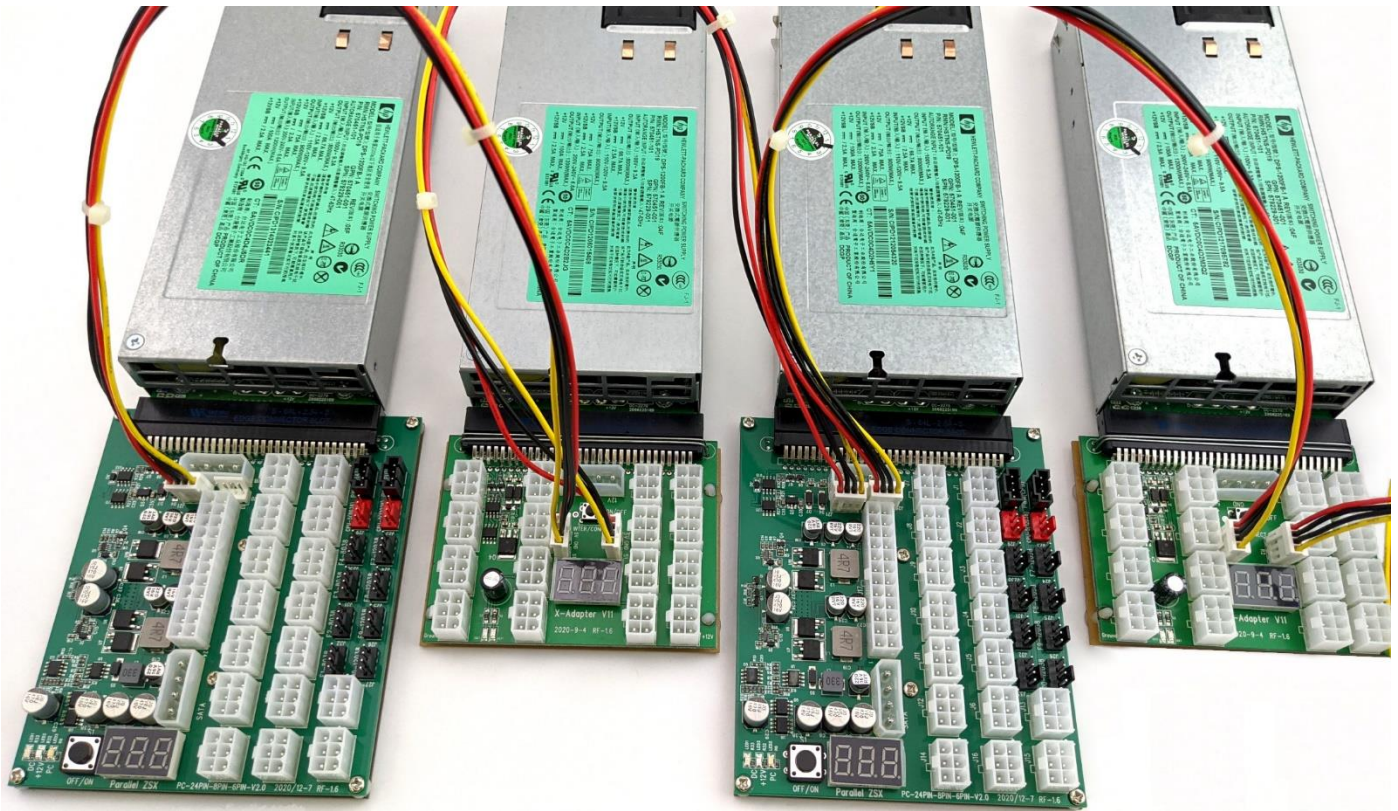
Note that some motherboards, such as the HTC 110 Pro, require multiple Molex for power; you will need a separate [PCIe to Molex](#) and/or [Molex splitter](#) cable.

An important note specifically about the **ASUS B250**: this motherboard has 3 different 24-pin ports, but only port A is required. Ports B and C were included with the assumption that you would need two extra ATX power supplies to power the GPUs and, therefore, would need a way to turn these PSUs on and off. Our server PSUs completely bypass this, making the two extra 24-pin ports useless. However, all 3 Molex ports are required!

Please [contact us](#) if you have any questions about your specific motherboard.



## Interconnect Sync Instructions



Every order containing 2 or more breakout boards will include a free [interconnect sync cable](#) to chain each breakout board together. The cable is approximately 19 inches long.

The ZSX, along with the previous generation of breakout boards, have two 4-pin input ports; you can sync any amount of power supplies together by connecting the 4-pin port to the next breakout board's 4-pin port and so on. We have tested up to 20 linked PSUs.

By syncing the power supplies, you will be able to power on/off all power supplies in the chain by pressing the power button on any one of the breakout boards in the chain. In the event that one power supply gives out and is no longer working, the sync will not be interrupted; all working power supplies will still power on/off together.

Further, the interconnect sync cables facilitate the use of our optional [Remote Management Module](#) for all connected PSUs.

**Watch some of the older features in action here:** <https://www.youtube.com/embed/KYPKXVuHFwC>

**We are still working on a new video to best showcase all of the new features.**