

EVGA E1 POWERBOARD MANUAL

V0.2

Introduction

The EVGA E1 is an extremely unique open case with a Carbon Fiber frame which benefits greatly from our PowerBoard. The E1 has very little in the way of cable management and all the cables are fully visible from both sides of the case. With the PowerBoard cable management is perfected becoming almost unnecessary. PWM and ARGB hubs are integrated reducing the clutter of more cables and hubs. There are three direct connect 2.5" SATA mounts meaning there is no need for SATA Power Cables. There are x18 integrated ARGB LEDs meaning extra LED strips are not necessary. The PowerBoard also has other integrated features such as a touch activated power button and extra power and reset buttons. The water-cooling loop is also on full display from both sides in the E1 with some long tube runs are necessary.

Features

- **PowerBoard Integration**

The PowerBoard is a PCB integrating 24pin, EPS, PWM and ARGB Hubs, SATA and Power and Reset Buttons. The SC PowerBoard EVGA E1 also has an integrated touch sensing Power Button. The PowerBoard has x18 ARGB LEDs positioned around the external perimeter to optimally light up the distribution plate and the build. The LEDs can be switched on or off. Essentially the PowerBoard is a distribution plate for cables also integrating other features and functions. It is a new method for cables allowing standardization of cable lengths and making cable management almost unnecessary. The SC PowerBoard EVGA E1 also comes included with a standard set of black sleeved linking cables including 24pin x1, 8pin EPS x2, ARGB 50cm x1, PWM 50cm x1, and a cable set for the touch activated power button meaning that these cables don't have to be purchased separately.

- **Reduced build time due to integration**

No cable management for the core component cables thanks to the PowerBoard integration.

Specifications

Included Items Cables

- SC PowerBoard EVGA E1.
 - SC Shift 24pin 90 Degree Adaptor.
- PowerBoard Linking Cables: 18AWG wire Black Sleeved. 24pin Inverted x1. 8pin EPS x2. 8pin EPS Inverted x2. RGB Extension Cable Black 50cm. PWM Fan Extension Cable Black Sleeved 50cm. Touch Activated Power Button Linking Cables x3. PowerBoard Linking Cables and PowerBoard PSU Cables available [here](#). Custom Cables available [here](#).

Electronics Integration

Inputs: 24pin x1. 8pin EPS x2. PWM x1. ARGB x1. SATA x3.
Outputs: 24pin x1. 8pin EPS x6 (only two can be used at the same time but there are multiple outputs to suit different motherboards). SATA Direct Mount x3. PWM x6. ARGB x11. ARGB built in LEDs x18 and on/off switch. Power and Reset Buttons. Touch activated power button with on/off switch.

Package Dimensions

W: 395mm x L: 430mm x H: 50mm.

Package Weight

1.5 kg.

Product Dimensions

H: 395mm x W: 391.5mm x Thickness: 25mm.

Product Weight

1 kg.

Materials

PCB.

Manufacturing Process

PCB.

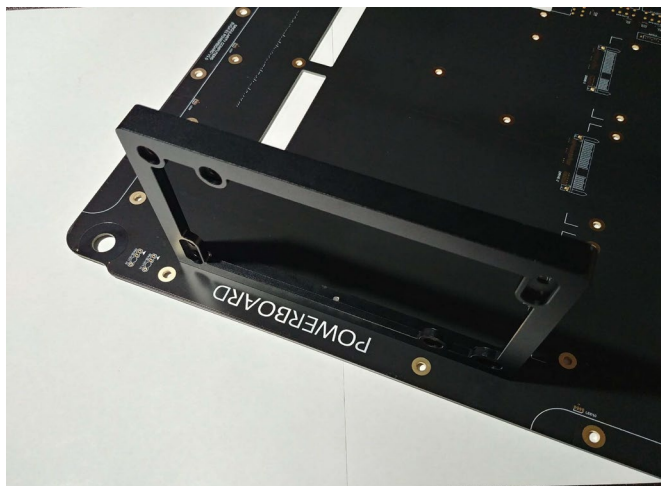
Fasteners

Stainless Steel.

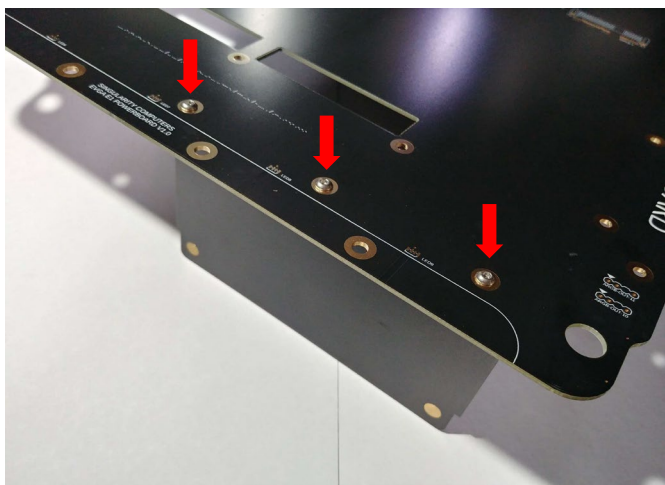
⚠ All PowerBoards need PowerBoard Linking Cables.

Assembly Manual

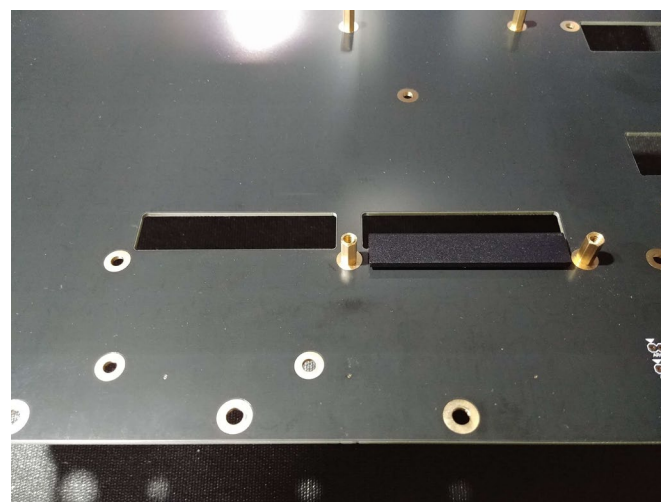
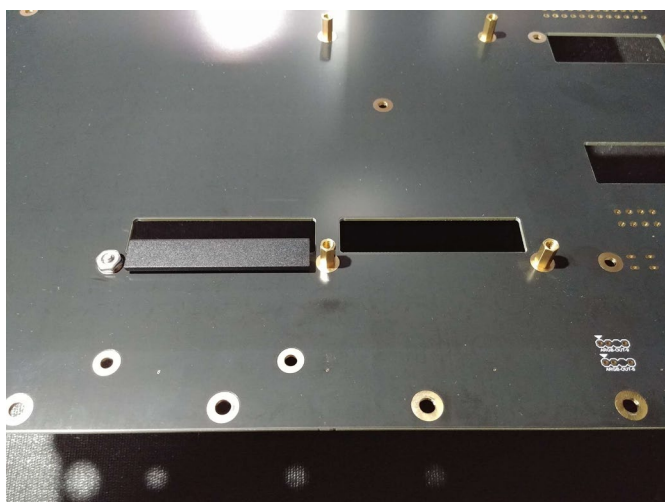
The PSU mount is attached with 3x M3 x 6mm:



The VGPU mount is attached with 3x M3 x 10mm:

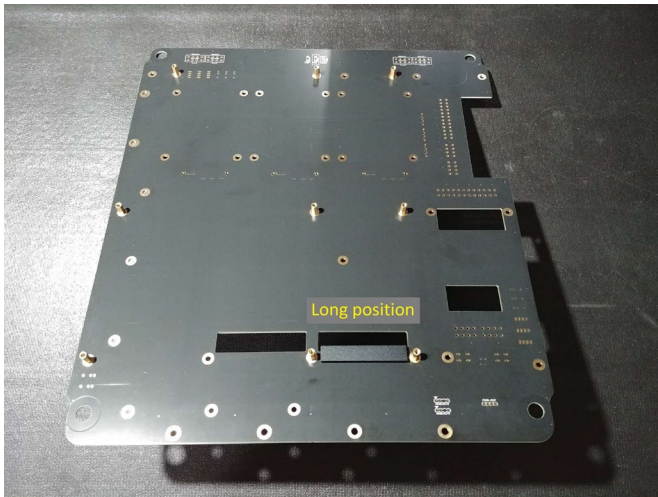


The PSU support bracket uses 2x #6-32 x 0.375" + 1x Nut. The Nut is only used if a short PSU is mounted, as this bracket uses the MB standoffs when a long PSU is used:



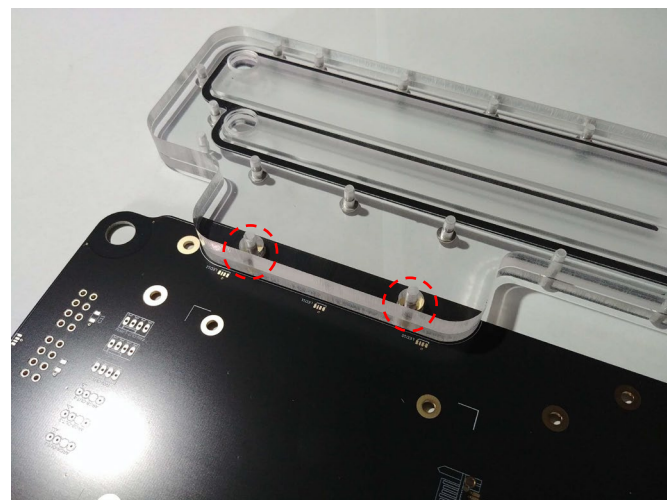
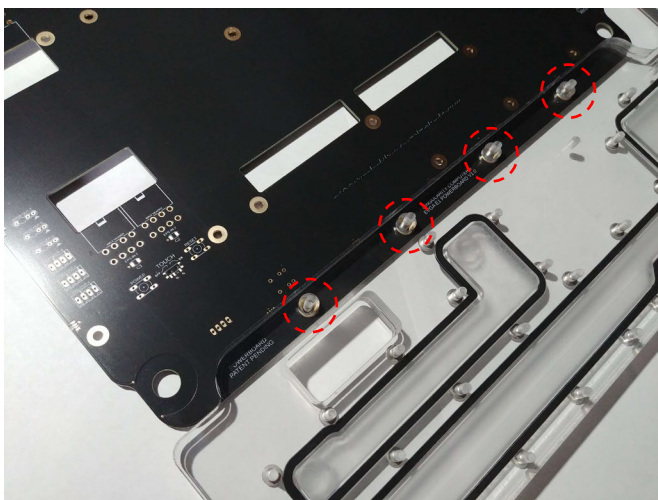


Motherboard standoffs are 9x #6-32 x 10mm 50-F and use 7x/8x #6-32 x 0.25" to secure them from the back, depending on the PSU support bracket's position:



Motherboards are secured with 9x #6-32 x 0.25".

The Distribution plate uses 6x M4 x 8mm, 4x at the bottom and 2x at the side:

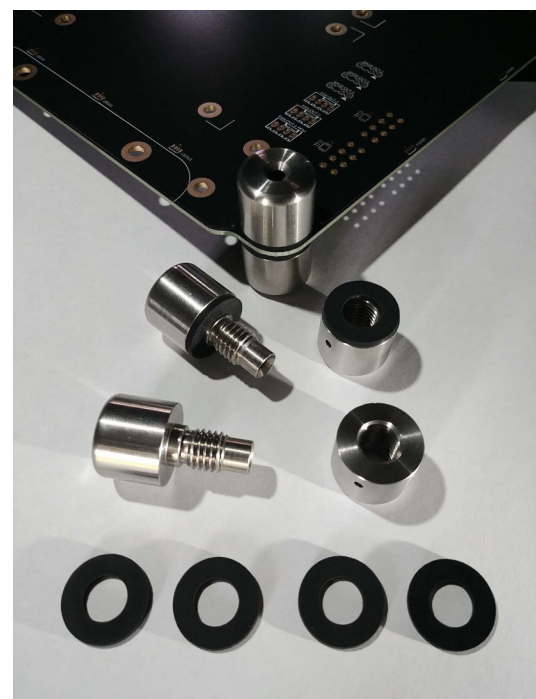


Installing the assembly back into the case is easier without the distribution plate, it can be slid into position from the bottom of the case and then secured to the PowerBoard.

Mind the ARGB LEDs on the PowerBoard while moving the distribution plate to avoid damaging them.

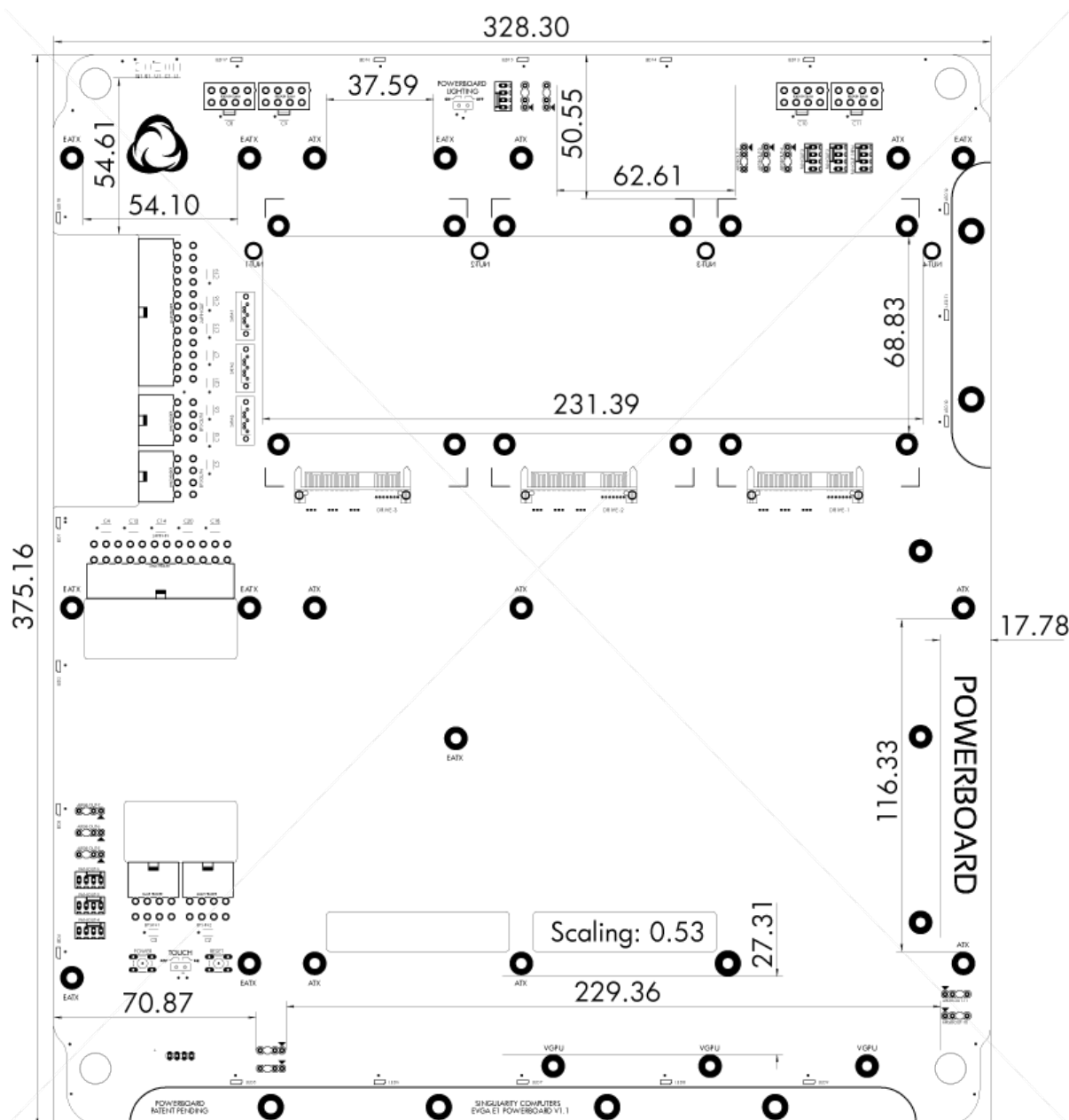
The power supply is secured with 4x #6-32 x 0.25".

The 4 corner pieces use rubber spacers on both sides to protect the PCB:



To remove the stock motherboard tray, loosen all 4 carbon fibre strings until all 3 grub screws become accessible on the parts that they are terminated into, then, only on one side, loosen the grub screws and pull the string out then remove that string from one side of the radiator mount, the motherboard IO plate and from the motherboard tray. After all 4 are done on one side, the tray can be lifted out. Be careful with the metal parts as the carbon fibre strings will flail around with these parts on them and could knock and scratch the paint on the chassis. Follow these steps backwards to install the E1 PowerBoard into the case. This procedure is easier for 2 persons to hold multiple pieces in place, especially to avoid the metal parts from scratching the chassis.

Dimensions



i Dimensions are in millimetres(mm), unless otherwise specified.