External Graphics Development Kit

Release Notes v1.0

The External Graphics Development Kit includes everything you need to start optimizing advanced VR and 3D apps for external graphics processors with macOS High Sierra. It includes:

- Sonnet external GPU chassis with Thunderbolt 3 and 350W power supply
- AMD Radeon RX 580 8GB graphics card
- Belkin USB-C to 4-port USB-A hub
- Promo code for $100 towards the purchase of HTC Vive VR headset *

* Limited availability. Distribution is on a first-come, first-served basis.

Supported Configurations

The External Graphics Development Kit is designed for testing high-performance Metal and VR applications on Mac computers running macOS High Sierra beta. It can be connected to any Thunderbolt 3 enabled Mac with the included cable, such as MacBook Pro with Thunderbolt 3 and iMac with Thunderbolt 3. The kit may work with Thunderbolt 2-enabled Mac computers via a Thunderbolt 2 to Thunderbolt 3 adapter, but this is an unsupported configuration. Boot Camp is not supported by the External Graphics Development Kit.

The External Graphics Development Kit supports the AMD Radeon RX 580 8GB graphics card that is supplied with the kit. Other graphics cards are unsupported in the External Graphics Development Kit. The Sonnet external GPU chassis is designed to work with graphics cards up to 250W with a single 8-pin power connector.

In order to charge your MacBook Pro while using the External Graphics Development Kit, the kit supports 60W USB-PD charging. It does not support charging at 87W, so 15-inch MacBook Pro computers may not charge at full speed in all situations. Please use the included Thunderbolt 3 cable with the External Graphics Development Kit, or another Thunderbolt 3 cable capable of 40Gbps. Thunderbolt 2 cables are not supported.

The External Graphics Development Kit is designed to support one VR headset and/or one external monitor. The VR headset supported by the kit is the HTC Vive. External monitors with HDMI or DisplayPort are supported. Thunderbolt or USB-C displays are not supported at this time.

macOS High Sierra Developer Beta
When using the External Graphics Development Kit with macOS 10.13 beta (17A264c), the following additional restrictions apply:

- Mirroring to a display attached the the External Graphics Developer Kit is not yet supported; please use extended display mode.

- "Closed-Clamshell" mode is not yet supported.

- HDMI audio is not yet supported on the External Graphics Development Kit HDMI ports

- AutoLogin will not work if the External Graphics Development Kit is attached at the time the system is booted / restarted.

- Hot-plug and un-plug of the External Graphics Development Kit require returning to the Login screen.

- The External Graphics Development Kit does not accelerate the internal display on iMac or MacBook Pro.

- The External Graphics Development Kit prevents the Mac from entering sleep mode. Display sleep is still available.

Setup Instructions
The External Graphics Development Kit requires some assembly. Inside the box you'll find a Quick Start Guide that walks you through the steps to install the Radeon RX 580 graphics card into the Sonnet external GPU chassis.

The included Belkin USB-C to 4-port USB-A hub has been tested with VR headsets. It is designed to plug directly into a Thunderbolt 3 (USB-C) port on your Mac computer.

Plug your VR headset directly into the HDMI port on back of external Development Graphics Kit

In order to use the External Graphics Development Kit, you'll need the latest beta version of macOS High Sierra installed.

In order to use a HTC Vive VR headset, you'll need to download the latest beta of SteamVR for the Mac.

If you need to ship the External Graphics Development Kit, you must remove the GPU card from the enclosure first, as the original packing materials are not designed to protect the enclosure with a card installed.

Getting Support

If you encounter an issue with your External Graphics Development Kit, please use http://bugreport.apple.com to report the issue to Apple.

You can ask questions and discuss issues with other developers using the External Graphics Development Kit on the Developer Forums at https://forums.developer.apple.com/

For issues related to the hardware in the External Graphics Development Kit, please contact Sonnet Technologies (http://www.sonnettech.com).