

EVGA Thermal Pad Mod Installation Guide

The following instructions and pictures are provided to assist you with the installation of the EVGA GTX 1080/GTX 1070 Thermal Pad Mod. Please be careful when removing the backplate and heatsink; there are several very small screws used, which can be easily stripped. Likewise, please be careful when holding the heatsink; the metal fins may be sharp.

Accessory List:

1x Narrow Thermal Pad



1x Wide Thermal Pad



3x VRAM Thermal Pads



1x Thermal Grease



Required Hardware:

Phillips #1 Screwdriver (not included) – Use to remove and refasten all screws

Small Flat-head Screwdriver (not included) – Use only for Steps 3 and 4

Before You Begin:

This guide is broken into three parts: 1) Installation of the VRAM thermal pads, 2) Installation of the baseplate thermal pad, and 3) Installation of the backplate thermal pad. Because this Thermal Pad Mod is optional, you may choose to do one, two, or all three optional mods. However, some cards, such as the GTX 1070 Black Edition do not have a backplate, and will not require steps involving the backplate or the installation of the backplate thermal pad. For this reason, please see the chart below to determine which steps you will need to follow:

- | | | | |
|------|---------------------------|--------|------------------|
| I. | VRAM Thermal Pad Mod | Steps: | 1-9, 11*, 15 |
| II. | Baseplate Thermal Pad Mod | Steps: | 1-4, 10, 11*, 15 |
| III. | Backplate Thermal Pad Mod | Steps: | 1, 13-15 |

*Denotes the last step for GTX 1070 Black Edition cards.

I. VRAM Thermal Pad Mod

NOTE: This portion of the guide is written primarily with a GTX 1080 ACX 3.0 (08G-P4-6181), but applies to all cards compatible with the VRAM Thermal Pad Mod. Pictures of other cards will be used to show differences, but the installation for all models is nearly identical.

Installation:

- 1) Removing the Backplate: Use a Phillips #1 Screwdriver to remove the green-circled screws around the periphery of the graphics card to remove the backplate. If you have a GTX 1070 Black Edition Card, please skip to step 2.

GTX 1080 Classified



GTX 1080 FTW / GTX 1070 FTW

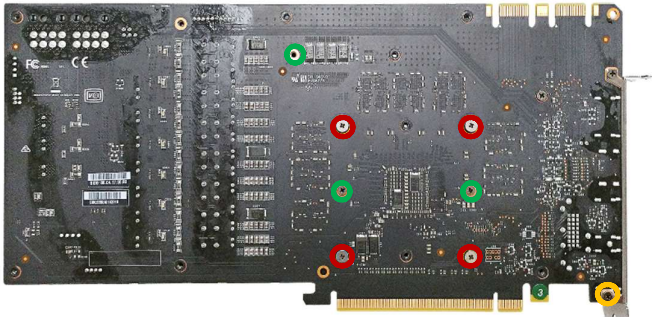


GTX 1080 / GTX 1070

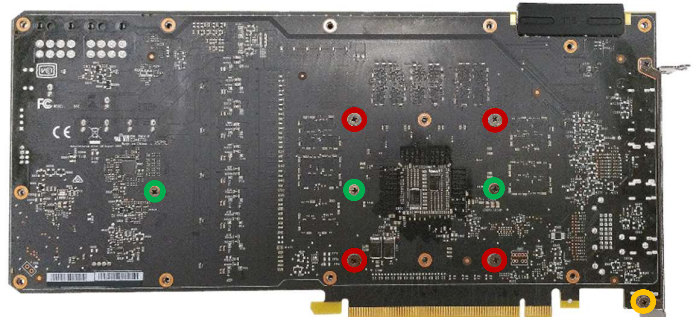


- 2) Remove the remaining screws on the PCB (circled in green), then remove the remaining 4 (four) spring-screws on the back of the card to separate the heatsink from the card. Please do not remove the bottom-right screw, circled in gold. Next, carefully turn the card over:

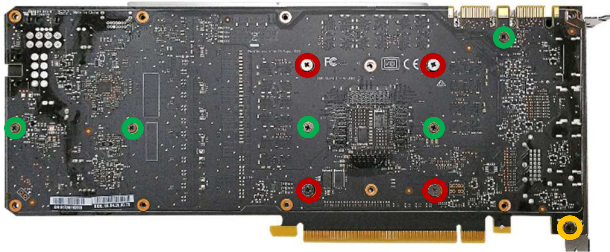
GTX 1080 Classified



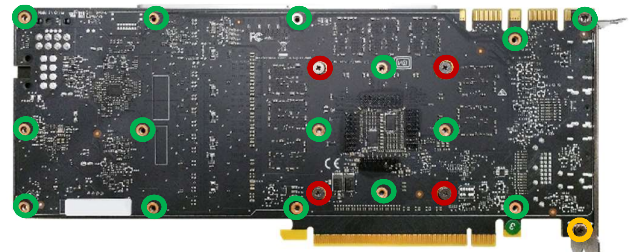
GTX 1080 FTW / GTX 1070 FTW



GTX 1080 / GTX 1070



GTX 1070 Black Edition



- 3) Before removing the heatsink, you must carefully disconnect the LED and fan connectors first. We recommend using a small flat-head screwdriver, but the connectors may also be carefully removed with your fingers by gently rocking the connector side-to-side. However, pulling on the wires may damage the fan wiring and/or connector. Start with the LED connector by inserting the edge of the flat-head screwdriver in the middle of the connector. Gently raise the edge of the screwdriver until it contacts the lip of the header and continue to use gentle pressure. You may need to repeat this step until the connector finally eases loose. The GTX 1080 Classified's header is partially located in the baseplate, so you may need to lift up the baseplate to gain access.

GTX 1080/1070 FTW



GTX 1080/1070



- 4) After removing the LED connector, carefully raise the heatsink away from the LED connector. Use caution, as the metal fins may be sharp. Using the same method as before, remove the fan connector and carefully set aside the heatsink:

GTX 1080/1070 FTW



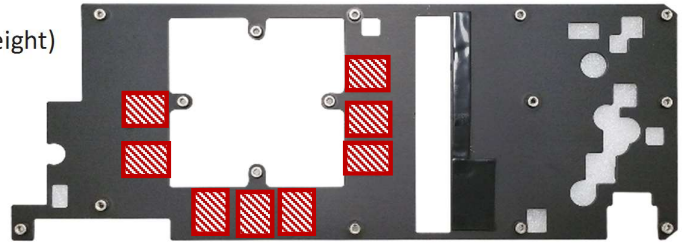
GTX 1080/1070



NOTE: For simplicity's sake, the following images use the GTX 1080 ACX 3.0, with the exception of Step 7. All other graphics cards will follow the same steps to complete the VRAM Thermal Pad Mod.

- 5) Remove the baseplate and set it aside. Peel off the 8 (eight) VRAM thermal pads on the baseplate, outlined in red.

Underside of Baseplate

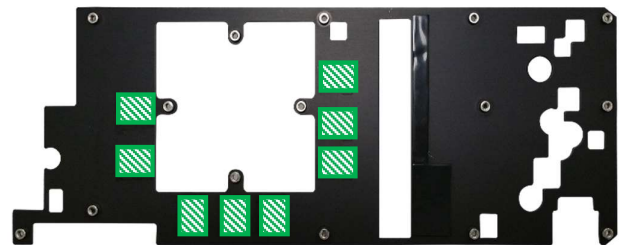


- 6) Using a lint-free cloth and high-percentage Isopropyl Alcohol, gently clean the GPU and VRAM memory chips (left), and baseplate area where the thermal pads were removed (right), outlined in green.

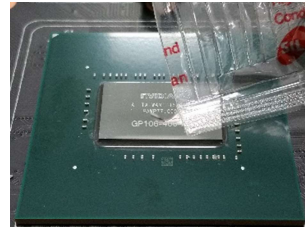
PCB with Baseplate Removed



Underside of Baseplate



- 7) Gently squeeze the thermal grease to distribute the grease in the packet, cut the end of the packet, and place a small amount of thermal paste on the GPU:



- 8) Install the included VRAM thermal pads directly to the memory chips, making sure to remove the plastic on both sides. Next, place the baseplate back on the PCB. The adhesive on the thermal pads should hold the baseplate in place.

PCB with VRAM Thermal Pads Installed



PCB with Baseplate Reinstalled



- 9) At this point, if you do not plan on adding thermal pads to the baseplate or backplate, please skip to Step 11 to complete the VRAM Thermal Pad Mod. This completes the VRAM Thermal Pad Mod section.

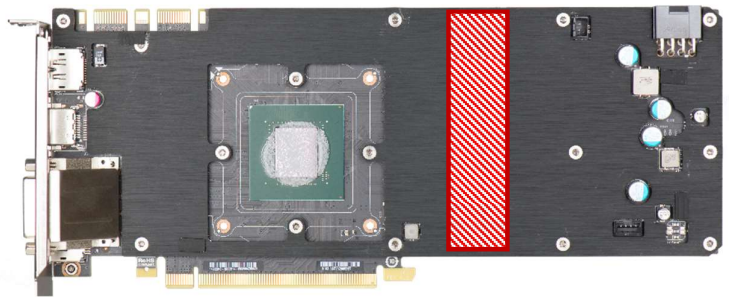
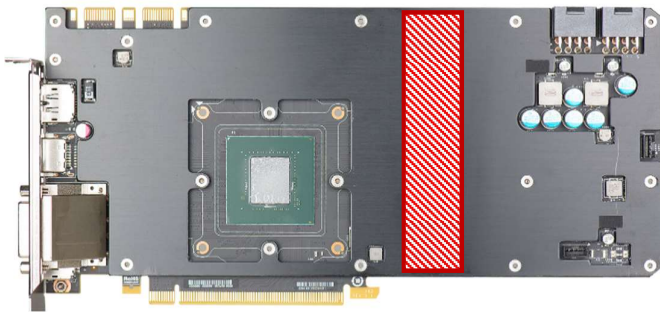
II. Baseplate Thermal Pad Mod

Note: We return to using a GTX 1080/1070 and a GTX 1080 FTW/1070 FTW model for these steps. All cards are represented, but your Thermal Mod Kit will come with the appropriate size thermal pads regardless of model.

- 10) Apply the “Narrow” thermal pad to the area marked in the image. Remove the plastic on one side and place the thermal pad strip over the area outlined in the image. Finally, remove the plastic from the other side of the pad.

GTX 1080/1070 FTW

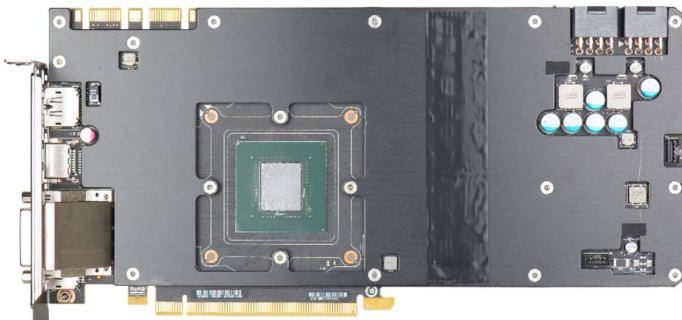
GTX 1080/1070



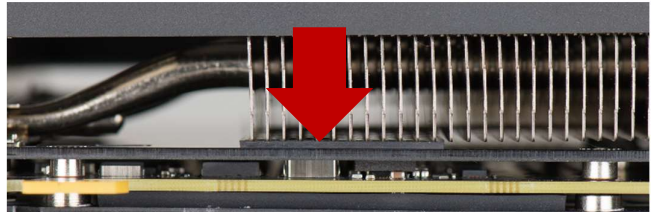
The baseplate should look like this when finished:

GTX 1080/1070 FTW

GTX 1080/1070



Make sure that the thermal pad does not extend beyond the edges of the baseplate:



- 11) After adding the thermal pad, reconnect the fan connector to the PCB, reconnect the LED connector, and then carefully place the heatsink back onto the GPU. Carefully, turn the card over. Again, take care when holding the heatsink, as the fins may be sharp. Reverse Step 2 by refastening the 4 (four) spring screws and any remaining screws, depending on your graphics card model.
- 12) At this point, the Baseplate Thermal Pad Mod is complete. If you choose not to do the Backplate Thermal Pad Mod, then please skip to Step 15.

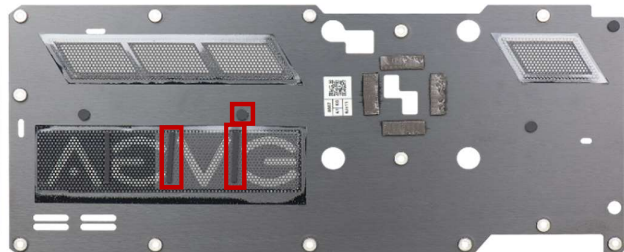
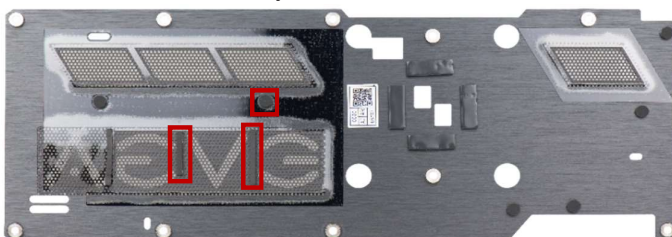
If you have a GTX 1070 Black Edition, your Thermal Mod is complete.

III. Backplate Thermal Pad Mod

- 13) Place the backplate you removed in Step 1 on its back. Remove and discard the outlined rubber standoffs:

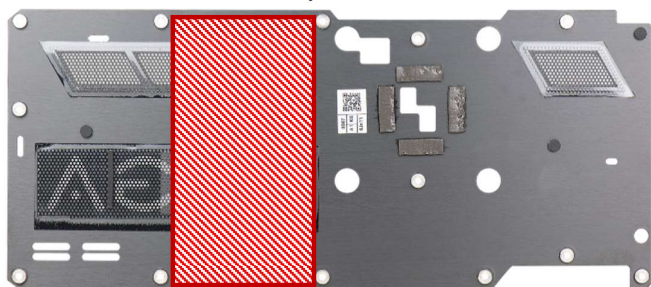
GTX 1080/1070 FTW

GTX 1080/1070

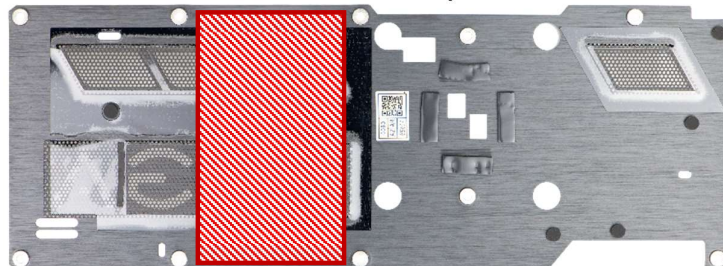


- 14) Next, apply the “Wide” thermal pad to the backplate. Remove the plastic on one side and place the thermal pad strip over the area outlined in the image. Finally, remove the plastic cover from the other side of the pad.

GTX 1080/1070 FTW



GTX 1080/1070

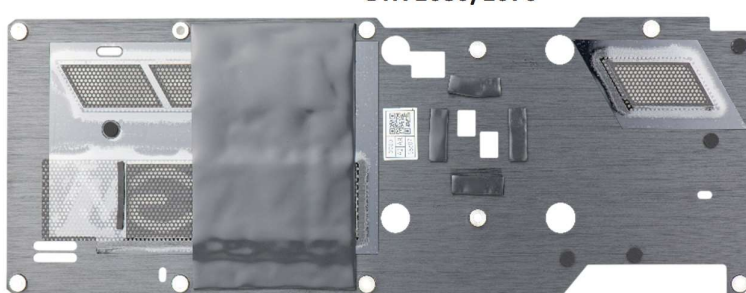


The backplate should look like this when finished:

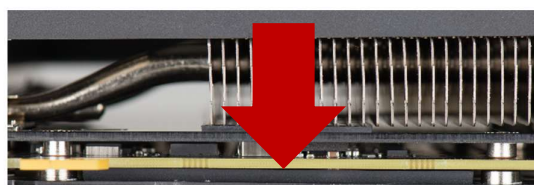
GTX 1080/1070 FTW



GTX 1080/1070



Make sure that the thermal pad does not extend beyond the edges of the backplate:



- 15) Before you reinstall the backplate, make sure you have first reversed Step 2, as noted in Step 11. Now, reverse Step 1 by placing the backplate on the back of the card, and refasten any screws you removed, depending on your card model. This completes the Backplate Thermal Pad Mod.

At this point, the EVGA Thermal Pad Mod is complete for all cards.

Important Information

The EVGA Thermal Pad Mod for selected GTX™ 1080 and GTX™ 1070 graphics cards is an optional cooling configuration intended to improve cooling performance. EVGA maintains that your graphics card will work as originally intended without applying the Thermal Pad Mod, but offers this Thermal Pad Mod free-of-charge and covered under warranty, provided that installation of the Thermal Pad Mod is performed on officially-supported graphics cards and not inconsistent with this manual. Although EVGA has tested the Thermal Pad Mod in a controlled environment with the result of lower temperatures in specific areas of supported graphics cards, EVGA does not guarantee similar results upon successful completion of this Thermal Pad Mod by the recipient of the Thermal Pad Mod kit or a third-party. The EVGA graphics card warranty may be void if the end-user causes intentional physical or water damage to the graphics card during the course of installation of the Thermal Pad Mod; installation of the Thermal Pad Mod, however, will not void your warranty, even in the case of accidental damage, if installation is consistent with this Thermal Pad Mod Installation Guide. EVGA will not be held liable for the physical or water damage of your GTX™ 1080, GTX™ 1070 or any other associated hardware if damage is caused intentionally to the graphics card.