

# AE GPU SDK

## Build Instructions

(10/11/2022)

# Note:

We are excited to introduce you the new AE GPU SDK in 16.0!

Please see **SDK\_Invert\_ProcAmp** in the Effect folder as an example plugin.

More AE GPU SDK API information can be found in After Effects SDK Guide.

# Mac:

## Setup instructions:

1. The plugin uses BOOST to process GPU kernel files, you need to install BOOST on your machine. You can install BOOST through homebrew, or direct download from [boost.org](http://boost.org).
2. Once BOOST is installed, obtain the installation path. Usually BOOST installation path looks like this:  
**`/usr/local/Cellar/boost/1.67.0_1/include`**
3. Open the SDK\_Invert\_ProcAmp project in Xcode and go to Preferences -> Locations -> Custom Paths
4. Add this entry:

Name: **BOOST\_BASE\_PATH**

DisplayName: **BOOST**

Path: **[Your BOOST installation path]**

5. If you see python errors when building, make sure you have python installed for bash (not for zsh).

If you have installed python3 for bash but still seeing "**python command not found**" error, go to **Project Settings -> Build Rules** and try changing the "**python**" keyword to "**python3**"

# Win:

## Set up instructions:

1. Install Boost from [boost.org](http://boost.org)
  - a. Unzip the boost package and run bootstrap.bat
  - b. Then run .\b2 to build boost
2. Install the CUDA SDK from <https://developer.nvidia.com/cuda-downloads>. Please use the same CUDA version that your AE build is using. AE 23.0 currently uses CUDA 10.2.
3. Setup system environment variables:  
CUDA\_SDK\_BASE\_PATH: [CUDA installation path]  
(example: C:\Program Files\NVIDIA GPU Computing Toolkit\CUDA\v10.1)  
BOOST\_BASE\_PATH: [BOOST installation path]  
(example: C:\boost\_1\_80\_0)
4. Modify Microsoft Compiler path in the CUDA kernel custom build steps:
  - a. Open the SDK\_Invert\_ProcAmp solution in Visual Studio
  - b. Go to the Solution Explorer and right click on the "SDK\_Invert\_ProcAmp\_Kernel.cu"
  - c. Select <Properties>
  - d. Go to Custom Build Tool -> General -> Edit the Command Line section
  - e. Change the highlighted section to the actual path on your machine:  
\$(VcInstallDir)Tools/MSVC/14.12.25827/bin/Hostx64/x64  
(You may have a different MSVC version shown on this example.)  
Evaluated path example:  
C:\Program Files (x86)\Microsoft Visual Studio\2019\VC\Tools\MSVC\14.12.25827\bin\Hostx64\x64  
Remember to change this path for both Debug and Release.