Projector Ortho Lit Standard

Descripción

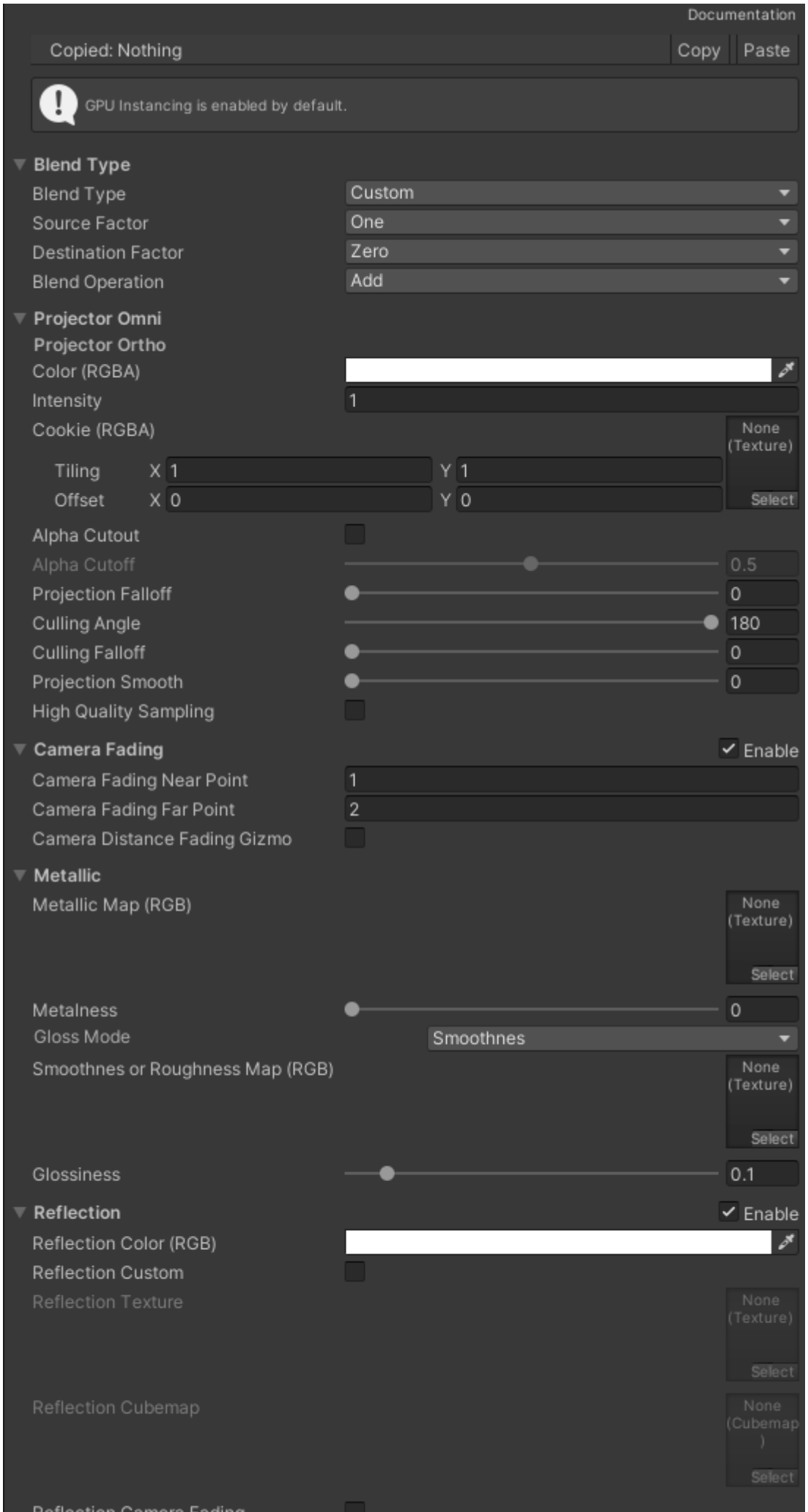


Files: ProjectorOrthoLitStandard.shader
Path: “CGF/Shaders/Lit/VFX”
Shader menu: “CG Framework/Unlit/VFX/Projector Ortho Lit Standard”
Asset Store

Description

Projector system to project light, shadows or decals at a low GPU cost.

Reference


Documentation
Copied: Nothing
Copy
Paste
GPU Instancing is enabled by default.
Blend Type
Blend Type
Custom
Source Factor
One
Destination Factor
Zero
Blend Operation
Add
Projector Omni
Projector Ortho
Color (RGBA)
Intensity
1
Cookie (RGBA)
None (Texture)
Tiling X 1 Y 1
Offset X 0 Y 0
Select
Alpha Cutout
Alpha Cutoff
0.5
Projection Falloff
0
Culling Angle
180
Culling Falloff
0
Projection Smooth
0
High Quality Sampling
Camera Fading
Enable
Camera Fading Near Point
1
Camera Fading Far Point
2
Camera Distance Fading Gizmo
Metallic
Metallic Map (RGB)
None (Texture)
Select
Metalness
0
Gloss Mode
Smoothnes
Smoothnes or Roughness Map (RGB)
None (Texture)
Select
Glossiness
0.1
Reflection
Enable
Reflection Color (RGB)
Reflection Custom
Reflection Texture
None (Texture)
Select
Reflection Cubemap
None (Cubemap)
Select

- **Blend Type** – Manages the blending type.
- **Projector**
  - **Color** – Color of the projection.
  - **Cookie Fill Color** – Fill the cookie with color.
  - **Intensity** – Projection level intensity.
  - **Cookie** – Projection texture.
  - **Alpha cutout** – If enabled, cutout the alpha channel.
  - **Alpha cutoff** – Alpha Cutoff value.
  - **Projection Falloff** – Falloff of the projection.
  - **Culling Falloff** – Smoothing of the occlusion for the projection based on the projection forward direction.
  - **Projection Smooth** – Edge smoothing of the projection.
  - **High Quality Sampling** – Avoid edge artifacts but increase the graphic consumption.
- **Camera Fading** – Alpha fading by the camera distance and the object surface.
- **Metallic** – Metallic look.
- **Reflection** – Reflective surface.
- **Normal** – Normal mapping.
- **Ambient Occlusion** – Ambiental occlusion static effect.
- **Emission** – Emission color.
- **UV Scroll** – Scroll and Flip the UVs from a texture.
- **LOD Fade Mode** – Manages the Level Of Detail fading mode.
- **Stencil Options** – Stencil options configuration.

Use

Create a material with this shader and assign the material to the Material property of MeshRenderer component and add the CGFProjectorBehavior component to set the Projection mode (Orthographic or directional and Omni or point.) and the Lighting model type (Unlit, PBR (Standard) and PBR-like Blinn-Phong (Lit Legacy)).

To prevent to project onto some surfaces you can use the stencil options:

1. On the projector material set the Stencil options like these:
   - Stencil ZFail Operation to Keep
   - Stencil Reference to 0
   - Stencil Read Mask to 1
   - Stencil Write Mask to 255
   - Stencil Compare Function to Equal
2. On the material that should avoid the projection set the Stencil options like these:
   - Stencil Compare Function to Equal
   - Stencil Reference to 1
   - Stencil Read Mask to 255
   - Stencil Write Mask to 255
   - Stencil Comparison Function to Always
   - Stencil Pass Operation to Replace
   - Stencil Fail Operationto to Replace