## Uniforms list

|  |  |  |
| --- | --- | --- |
| **Uniforms name** | **Value type** | **About** |
| ViewMatrix | Matrix4x4 | View of camera |
| ProjectionMatrix | Matrix4x4 | Projection of camera |
| WorldMatrix | Matrix4x4 | World transform of rendering’s object |
| TextureExists | Uint (4 bytes)/bitmask (4 bytes) | Using for texture typing (uint ):   * ALBEDO: 00000001 (1) * NORMAL: 00000010 (2) * METALLIC: 00000100 (4) * ROUGHNESS: 00001000 (8) * EMISSION: 00010000 (16) * OCCLUSION: 00100000 (32) * USER\_TEXTURE: 01000000 (64) |
| ALBEDO | Sampler2D (GLSL) / Vulkan type | Albedo texture (SLOT = 0) |
| NORMAL | Sampler2D (GLSL) / Vulkan type | Normal texture (SLOT = 1) |
| METALLIC | Sampler2D (GLSL) / Vulkan type | Metallic texture (SLOT = 2) |
| ROUGHNESS | Sampler2D (GLSL) / Vulkan type | Roughness texture (SLOT = 3) |
| EMISSION | Sampler2D (GLSL) / Vulkan type | Emission texture (SLOT = 4) |
| OCCLUSION | Sampler2D (GLSL) / Vulkan type | Occlusion texture (SLOT = 5) |
| BaseColor | Vector3 | Base color of object |

## Mesh layouts

|  |  |  |
| --- | --- | --- |
| **Layout number** | **Value type** | **What does mean?** |
| 0 | Vector3 | Position of vertex |
| 1 | Vector3 | Normal of vertex |
| 2 | Vector2 | Texture coordinates of vertex |
| 3 | Vector3 | Tangent of vertex |
| 4 | Vector3 | Bitangent of vertex |