

Structure - kit01_base.gfx

0x00 - Header
0x30 - Index for Data Chunk
0x3E00 - Data Chunk
0x19A00 - Mesh info Chunk

Header

0x00~0x07 - Header 'GFX2'
0x08~0x0b - FileName Hash
0x0c~0x0f - Size of file
0x10~0x13 - Num of data in order chunk + 1
0x14~0x17 - Absolute address of Data Chunk
0x18~0x1b - Absolute address of Vertex Chunk
0x1c~0x1f - Mesh Chunk Count
0x20~0x2F - 0

Index Chunk

Data Structure:

0x00~0x03 - Name Hash/Indicator
0x04~0x07 - Type ID
0x08~0x0b - Location in Data Chunk
0x0c~0x0f - Size

Type ID:

0x02000xxx - (Count: 0x14A)
 0x02000000 - Bone related(?) (String_table) (Count: 0x149)
 0x02000B01 - root (Count: 0x01)

0x0800xxxx - Material (String_table & DRVK) (Count: 0xC)
 0x08000102 - (size: 0x10)
 0x08002202 - (size: 0x1B0)
 0x08002402 - (size: 0xE0)

0x0900xxxx - (Count: 0x28)

0x09000000 - Texture FX (String_table)(size:0x10)(Count: 0x27)
("detail", "decal", "reflection")

0x09001201 - (size:0x30)(Count: 0x01) ("/file6")

0x11000000 - Texture file(size:0x30)(count:0x0f)

0x34000000 - Null Divider(size:0x10)(count:0x14)

0x31000000 - Unknown(size:0x10)(count:0x06)

0x37000000 - Unknown(size:0x10)(count:0x02)

0x04000000 - Mesh related (meshShape) (String_table)(size:0xB0~0xD0)(count:0x37)

0x05000000 - Mesh Info(size:0x20)(count:0x37)

0x06000000 - Mesh related (size:0x30/0x40)(count:0x4A)

0x0F000000 - Unknown(size:0x10)(count:0x37)

0x10000000 - Indexes (Variable Size)(count:0x37)

0x2B000000 - Unknown(size:0x40)(count:0x07)

0x0300xxxx - Mesh Index(size:0x10) (count:0x104)

0x03000101 - Linked to 0x050000x0 (count:0x37) - vertex data

0x03000201 - Linked to 0x060000x0 (count:0x4A) - face data

0x03000A01 - Linked to 0x0F000000 (count:0x37)

0x03001401 - Linked to 0x10000000(count:0x37)

0x03001501 - Linked to 0x2B000000 (count:0x07)

0x03001601 - Linked to 0x2B000000(?) (count:0x07)

0x03001701 - Linked to 0x2B000000(?) (count:0x07)

(Not in Kit01):

0x2D000000 - Decal(Length 0x40)

0x12000000 - External LOD file name (cc_a_root)(variable size - based on string length)

0x14000000 - Unknown (cc_a_root)(size:0x20)

Overall Structure:

0x02000000 + 0x02000B0 Chunk *Model structure

*Material

Repeat of following chunk

0x0800xxxx

0x09000000 + 0x11000000 (random combination) chunk

0x34000000 * 2 (Some file doesn't have it in the last chunk)

0x31000000 + 0x37000000 (random combination) chunk (Only in Kit)(?)

*Mesh Related

0x04000000 Chunk

0x05000000 + 0x060000 (Might have multiple) Chunk

0x0f000000 + 0x100000 Chunk (Weight Related?)

0x2b000000 Chunk

0x0300xxxx - Mesh Index Chunk

0x03000101 - vertex Chunk

0x03000201 - face Chunk

Data Chunk

0x02000000

Vector4f - Rotation

Vector3f - Translation

Vector3f - Scale

Parent Index - (bool)isBone + # of child- 0 - NameHash

Child indexes

0x08002002 - occ

No texture

0x08002202 - /kit01_face_g2SG

Unknown (3/7) - child 0x0900 Chunk Index1 - child 0x0900 Chunk Index2 - child 0x0900 Chunk Index3...

... child 0x3400 Chunk Index1 - child 0x3400 Chunk Index2

/kit01_heavySG and /G2_CH_Main1SG has 0x00~0x03 as 0x07

0x08002302 Main

2/4 - 4 - 'Metal'/'Wood'

Similar to 08002202 but unknown value is 2 index start at 0x1c

02

Texture 1 - Color

Texture 2 - Normal

Texture 3 - Specular

Texture 4 - Color 2

Texture 5 - Normal 2

Value:

1 - Primary Metallic

2 - Primary Roughness

3 - Primary Transparency ?

4 - Primary Glow

5 - Primary Parallax ?

6 - Secondary Metallic

7 - Secondary Roughness

8 - Secondary Transparency ?

9 - Secondary Glow ?

10 - Secondary Parallax ?

11 - Primary Albedo R

12 - Primary Albedo G

13 - Primary Albedo B

14 - Secondary Albedo R

15 - Secondary Albedo G

16 - Secondary Albedo B

17 - Primary Alpha Cutout

0x08002402 - "/G2_EF_Main1SG1" (Effect texture?) (Inner effect)

0 - Unknown index

(Doesn't have a following 2x0x3400chunk)

0x08002502 /G2_EN_Main2SG (NVBMM01_Base)

0x08002802 - Leaf (Garden_01)

Length: 0xA0

0 - 1.0 - 1.0 - 1.0

1.0 - 1.0 - 1.0 - int

0 - 0 - float - 1.0

Float - (1- previous float) - 0 - float

Float - float - 3 - float

(1- previous float) - 0 - float - same float as previous

same float as previous - index of following 0x0900 chunk - float - float

Float - 1.0 - 1.0 - 1.0

Float - 0 - 1.0 - 2

2 - 0 - 0 - 0

0x08002902

0x08002A02 - TV

0x08002B02 - Grass/Soil (g1_base_cc_g_road)

0 - Unknown index

(Doesn't have a following 2x0x3400chunk)

0x08002C02 - Window (Window_kk_01_2)

0 - 0 - texture_index - normal_index

Interior_cubemap_index - overlay_index - ? - ?

? - ? - ? - ?

? - ? - ? - ?

? - ? - ? - ?

0 - 0 - 0 - 0

0x08002D02 - Water related

0x08002E02 - Glass

0x08003002 Gem(go_crystal_a)

0x08003102 kit09_glass2SG (Kit09)

0x08003202 (gry01_base) "G2_CH_Interior1SG"

0x08003302

0x08000102 - "/initialShadingGroup" (Inner texture?)

0x01020000 - child 0x0900 Chunk Index1 - child 0x0900 Chunk Index2
(Doesn't have a following 2x0x3400chunk)

0x09000000 -

"/face", "/filexx", "kit01_base/initialShadingGroup/color"

Could be complete empty if there's no following 0x1100 Chunk

Index of following 0x1100 Chunk - 0 - 0 - 0

Or

0 - FFFFFFFF/FF8080FF - 0 - 0

(Could be 0x30 length, Atlas related)

Same first 16 bytes

70 - 0 - 0 - 0

Offset X - Offset Y - Source X - Source Y

0x11000000

Texture Name Hash - Unknown Name Hash - 0x03000701 - Length of String
String

0x12000000 (g1_base_cc_g_road) External LOD Refence

StringHash - UnknownHash - StringHash - 00 -Stringsize(Ushort)

String

0x? - Plant related (Garden_01)

0x19000000 - G2RendererGlobal

0x2A000000 - (sky_cc_a_root)

Pointer to first 03001301 - Pointer to second 03001301 - 0 - 0

0x2D000000 Decal

0 - texture - normal - 1

1 - 1 - 1 - 1

1 - 0.7 - 0.3 - 0

0 - 0 - 0 - 0

0x2E000000 ?? (tree_sk_03)

? - ? - 0 - 0

0x32000000 - G2EnviromentProbe

1 - 1.0 - pointer to 0x0900 rem map - pointer to 0x0900 iem map

0x33000000 - G2Skybox

0 - 1.0 - pointer to 0x0900 skybox map - pointer to 0x0900 cloud map

0x34000000

00000000000000000000000000000000 (Divider?)

0x31000000 - Effect related

(Child of G2EffectorLocatorX)

0 - CD4E81E3 - 0000C842 - 3333333F

(Only in kit)

0x37000000 - Occluder related

(Child of G2OccluderLocatorX)

00000000000000000000000000000000 (Divider?)

(Only in kit)

0x04000000 - meshShape

Numbers of child 0x0600 chunk + **Unknown** - 1 - parent index - **unknown** + size of (header + subchunk1 + child index chunk)

Subchunk 1: (Size 0x20)

Index of child 0x0500 chunk - 0 - 0 - 0

0 - 0 - 0 - 0

Child index of 0x0600 chunk1 ... chunk2

Subchunk2:(size: 0x70)

Float(?) Most of them are 0 - Float - Float - (Float)1

Float - Float - Float - 0

Float - Float - Float - Float

Float - Float - Float - Float

Float - Float - Float - Float

Float - 0 - 0 - 0

Float - Float - Float - 0

0x05000000 - Mesh Vertex Info

Vert count - # of element in struct - "0x03000101 Chunk" Index - 0

83 = 12Bytes - 00 - Vertex Ruler XYZ (or ZYX, doesn't really matter)

84 = 16Bytes - 00 - Vertex XYZW

A1 = 4Bytes - 02 - Normal 10-11-11 float

9C = 4Bytes - 03 - Texture Weight / Vertex Color

9E = 4Bytes - 08,09,0A - UV

88 = 8Bytes - 0C,0E - Tangent XYZW
87 = 8Bytes - 0F - Bit tangent 4x half float

20 Bytes

Type 1: 83 A1 9E 00 00 00 00 00 02 08 00 00 00 00 00 (az4_boss_wall_a_brk)

24 Bytes

Type 1: 83 A1 9C 9E 00 00 00 00 00 02 03 08 00 00 00 00 (az4_boss_wall_a_brk)

28 Bytes

Type 1: 83 A1 9E 88 00 00 00 00 00 02 08 0E 00 00 00 00 (brd01)

32Bytes

Type 1: 83 A1 9C 9E 88 00 00 00 00 02 03 08 0E 00 00 00

36 Bytes

Type 1: 83 A1 9C 9E 9E 88 00 00 00 02 03 08 09 0E 00 00

Type 2: 83 A1 9E 9E 9E 88 00 00 00 02 08 09 0A 0C 00 00
(found in bk_nvtr04rock03, Mesh01 0xD80)

Type 3: 83 A1 9E 88 87 00 00 00 00 02 08 0E 0F 00 00 00
(found in kit21_base, Mesh01 0x6980)

40 Bytes

Type 1: 83 A1 9C 9E 88 87 00 00 00 02 03 08 0E 0F 00 00

0x08000102 will need a 0x87 data

0x08002402 = 2x 0x9E

0x08003302 = 3x 0x9E

Trigger for 0x88 is unknown

Trigger for 0x9C is unknown

0x06000000 - Mesh Face Info

“0x0800 Chunk” Index - “0x03000201 Chunk” Index - <Face count> + 0500 - **Data size? (1/3)**

Linked to 0800 chunk type (1 if linked to 0x08000102/1201/2402, 3 if 0x08002202)

(Data size - 1)(Chunk size: 0x30)

0000<Face Index> - 00000000 - 00000000 - 00000000

<Face Index>0000 - 00000000 - 00000000 - 00000000

(Data size - 3)(Chunk size: 0x40)

0000<Face Index> - 00000000 - <Face Index><Face Index*2> - 00000000

<Face Index>0000 - 00000000 - 00000000 - <Face Index>0000

<Face Index*2>0000 - 00000000 - 00000000 - 00000000

0x0f000000

00000000 - 01000000 - "0x1000 Chunk" Index - 00000000

0x1000000 - BoneMap

of bone - vert count of mesh - Parrent 0x0400 Chunk Index - Child 0x03001401 Chunk Index
Child 0x03000A01 Chunk Index - bone index1 - bone index2 -bone index3...

0x14000303 - Point light

(float)Intensity - (float)R - (float)G - (float)B
0 - (float)Fall out - 0 - 0

0x2B000000

of data in 0x1500 mesh chunk- # of data in 0x1600 chunk- # of data in 0x1700 chunk - float
0 - Float - 0 - Float
0 - Float - Parrent 0x0400 Chunk Index - index of 0x30001500
index of 0x30001600- index of 0x30001700 8 - 0 - 0

0x2D000000

0 - Index1 - Index2 - float
Float - float - float - float
Float - float - float - 0
0 - 0 - 0 - 0

0x2F000000 - Effect

0x0300xxxx - Mesh pointer

Filename_hash - type(last 4 byte from type id) - offset from Vertex Chunk - size

Mesh Information Data

Vertex Chunk (0x00000101)

Vertices come in multiple sizes. Kit01_base.gfx consists of 32-, 36-, and 40-byte vertices but in some files, there could be different types.

20-Byte

(ex: *antenna_mk_01.gfx, mesh05 0x1a300*)

0x00~0x03 - Coordinate Z [Float]
0x04~0x07 - Coordinate Y [Float]
0x08~0x0B - Coordinate X [Float]
0x0C~0x0F - unknown value(s)
0x10~0x11 - UV Coord X [Short]
0x12~0x13 - UV Coord -Y [Short]

24-Byte

(ex: *antenna_mk_01.gfx, mesh11 0x24500*)(Low model)

0x00~0x03 - Coordinate Z [Float]
0x04~0x07 - Coordinate Y [Float]
0x08~0x0B - Coordinate X [Float]
0x0C~0x0F - unknown value(s)
0x10~0x11 - UV Coord X [Short]
0x12~0x13 - UV Coord -Y [Short]
0x14~0x17 - unknown values
0x17 - end of vertex

28-Byte

(ex: *airconditioner_kk_01.gfx, mesh 0 0x700*)

0x00~0x03 - Coordinate Z [Float]
0x04~0x07 - Coordinate Y [Float]
0x08~0x0B - Coordinate X [Float]
0x0C~0x0F - unknown value(s)
0x10~0x11 - UV Coord X [Short]
0x12~0x13 - UV Coord -Y [Short]
0x14~0x1C - unknown values
0x1C - end of vertex

32-Byte

0x00~0x03 - Coordinate Z [Float]
0x04~0x07 - Coordinate Y [Float]
0x08~0x0B - Coordinate X [Float]
0x0C~0x13 - unknown values
0x14~0x15 - UV Coord X [Short]
0x16~0x17 - UV Coord -Y [Short]
0x18~0x1B - unknown values
0x1C~0x1D - unknown short
0x1E~0x1F - End of Vertex (0x00BC)

36-Byte

(i.e. 0x810e00)

0x00~0x03 - Coordinate Z [Float]
0x04~0x07 - Coordinate Y [Float]
0x08~0x0B - Coordinate X [Float]
0x0C~0x13 - unknown values
0x14~0x15 - UV Coord X [Short]
0x16~0x17 - UV Coord -Y [Short]
0x18~0x23 - unknown values
0x23 - End of Vertex

40-Byte

(typically used for character LOD's i.e. 0x929D80)

0x00~0x03 - Coordinate Z [Float]
0x04~0x07 - Coordinate Y [Float]
0x08~0x0B - Coordinate X [Float]
0x0C~0x13 - unknown values
0x14~0x15 - UV Coord X [Short]
0x16~0x17 - UV Coord -Y [Short]
0x18~0x1F - unknown values
0x1F - End of Vertex

Face Chunk (0x00000201)

Each face is marked by a series of 3 unsigned shorts. This data is repeated at least 3 times, each connecting vertices in different orders. There could be a good reason for this, like detriangulation, but it's enough to use the first set that appears.

The mesh's face data ends with padding, followed by the next mesh's vertex data.

Reverse Binding Chunk (0x00000A01)

Size = # data in chunk 0x1000000 * 0x40

Unknown Lighting Chunk (0x00001301)

80AE/20AT/60SE/30St (Edge animation)

Weight Chunk (0x00001401)

Size = vert of mesh (in chunk 0x05000000 or chunk 0x10000000) * 0x10

0x00~0x07 Sectioned by 0x02

(Half float)weight1 - weight 2- weight 3 - weight 4 -

0x00~0x07 Sectioned by 0x02

bone Index 1 (index of listed bones in 0x1000 chunk) - bone Index 2 - bone Index 3 - bone Index 4

SUnknown Mesh Chunk (0x00001501)

Size = 0x00~0x03 of 0x2B00 Chunk * 0x08

Unknown Mesh Chunk (0x00001601)

Size = 0x04~0x07 of 0x2B00 Chunk * 0x04

Unknown Mesh Chunk (0x00001701)

Se = 0x08~0x0B of 0x2B00 Chunk * 0x02

Leaf Chunk (0x00001a01)

First one is first leaf base,

Second one is second leaf base & first leaf tail

Third one is second leaf tail

... loop

Grass Chunk (0x00001b01)

Relation Chain

Chain 1

0x0200 Chunk's Child >

0x0400 MeshShape's reference >

0x0500 chunk >

0x03000101 mesh pointer > 0x0101 vertex chunk

0x0600 chunk >

0x0800 Chunk > (Material)

0x0900 Chunk > 0x1100 Chunk

0x3400 Chunk

0x03000201 mesh pointer > 0x0201 face chunk

0x3100 Chunk

0x3700 Chunk

Chain 2

0x0f00's index >

0x1000's index >

Index > 0x30001401 MeshPointerr > 0x1401 mesh chunk

Index-1 > 0x30000A01 MeshPointerr > 0x0A01 mesh chunk

Chain 3

0x2B00's reference index 1/2 >

Index2-1 > 0x03001501 MeshPointer > 0x1501 mesh chunk

Index2-2 > 0x03001601 MeshPointer > 0x1601 mesh chunk

Index2-3 > 0x03001701 MeshPointer > 0x1701 mesh chunk

0x2b00 index 1 reference list in kit 01

/kit01_root/model_top/kit01_h/obj_body_01_h/obj_body_01_hShape

/kit01_root/model_top/kit01_h/obj_body_04_h/obj_body_04_hShape

/kit01_root/model_top/kit01_h/obj_body_05_h/obj_body_05_hShape

/kit01_root/model_top/kit01_h/obj_body_02_h/obj_body_02_hShape

/kit01_root/model_top/kit01_h/obj_scarf_01_h/obj_scarf_01_hShape

/kit01_root/model_top/obj_l_armor_h/obj_l_armor_hShape

/kit01_root/model_top/obj_h_armor_h/obj_h_armor_hShape

Extra Note

Some mesh have multiple texture so there's multiple UV (multiple 9E in vertex struct)

Material Parameter

Type 23:

Header 1, Header2, Material type, parameters...

Material#0x8 - G2_BG_Main6SG - Type 23
Parameters: 2, 4, unknown, 0.7, 0.3, 0.0, 0.0, 0.0, 0.7, 0.3, 0.0, 0.0, 0.0, 1.0, 0.907, 0.392, 1.0, 1.0, 1.0, 0.0, 0.0, 0.0, 0.0,
metal_vi_ljj_01_c, 0x0, 0x0, 0x0,
metal_vi_ljj_01_n, 0x0, 0x0, 0x0,
No Texture, 0xffffffff, 0x0, 0x0,
No Texture, 0xffffffff00, 0x0, 0x10000,
No Texture, 0xff8080ff, 0x0, 0x0,

Material#0x10 - G2_BG_Main4SG - Type 23
Parameters: 2, 4, unknown, 0.7, 0.3, 0.0, 0.0, 0.0, 0.7, 0.3, 0.0, 0.0, 0.0, 0.652, 0.557, 0.128, 1.0, 1.0, 1.0, 0.0, 0.0, 0.0, 0.0,
metal_vi_ljj_01_c, 0x0, 0x0, 0x0,
metal_vi_ljj_01_n, 0x0, 0x0, 0x0,
No Texture, 0xffffffff, 0x0, 0x0,
No Texture, 0xffffffff00, 0x0, 0x10000,
No Texture, 0xff8080ff, 0x0, 0x0,

Material#0x14 - G2_BG_Main5SG - Type 23
Parameters: 2, 4, unknown, 0.7, 0.3, 0.0, 0.0, 0.0, 0.7, 0.3, 0.0, 0.0, 0.0, 1.0, 1.0, 1.0, 1.0, 1.0, 0.0, 0.0, 0.0, 0.0,
metal_nt_23_c, 0x0, 0x0, 0x0,
metal_nt_23_n, 0x0, 0x0, 0x0,
No Texture, 0xffffffff, 0x0, 0x0,
No Texture, 0xffffffff00, 0x0, 0x10000,
No Texture, 0xff8080ff, 0x0, 0x0,

Material#0x1c - pasted__G2_BG_Main1SG - Type 23
Parameters: 2, 4, metal, 0.7, 0.3, 0.0, 0.0, 0.0, 0.7, 0.3, 0.0, 0.0, 0.0, 1.0, 1.0, 1.0, 1.0, 1.0, 0.0, 0.0, 0.0, 0.0,
metal_mk_20_c, 0x0, 0x0, 0x0,
metal_mk_20_n, 0x0, 0x0, 0x0,
No Texture, 0xffffffff, 0x0, 0x0,
No Texture, 0xffffffff00, 0x0, 0x10000,
No Texture, 0xff8080ff, 0x0, 0x0,

Material#0x24 - G2_BG_Main8SG - Type 23
Parameters: 2, 4, unknown, 0.7, 0.3, 0.0, 0.0, 0.0, 0.7, 0.3, 0.0, 0.0, 0.0, 0.98, 0.639, 0.135, 1.0, 1.0, 1.0, 0.0, 0.0, 0.0, 0.0,
rusted_vi_zxy_01_c, 0x0, 0x0, 0x0,
rusted_vi_zxy_01_n, 0x0, 0x0, 0x0,
No Texture, 0xffffffff, 0x0, 0x0,
No Texture, 0xffffffff00, 0x0, 0x10000,
No Texture, 0xff8080ff, 0x0, 0x0,

Material#0x2c - G2_BG_Main2SG - Type 23
Parameters: 2, 4, unknown, 0.7, 0.3, 0.0, 0.0, 0.0, 0.7, 0.3, 0.0, 0.0, 0.0, 0.431, 0.431, 0.431, 1.0, 1.0, 1.0, 0.0, 0.0, 0.0, 0.0,
metal_vi_zhx_05_c, 0x0, 0x0, 0x0,
metal_vi_zhx_05_n, 0x0, 0x0, 0x0,
No Texture, 0xffffffff, 0x0, 0x0,
No Texture, 0xffffffff00, 0x0, 0x10000,
No Texture, 0xff8080ff, 0x0, 0x0,

Material#0x34 - G2_BG_Main7SG - Type 23
Parameters: 2, 4, unknown, 0.7, 0.3, 0.0, 0.0, 0.0, 0.7, 0.3, 0.0, 0.0, 0.0, 0.97, 1.0, 0.804, 1.0, 1.0, 1.0, 0.0, 0.0, 0.0, 0.0,
rusted_vi_zxy_01_c, 0x0, 0x0, 0x0,
rusted_vi_zxy_01_n, 0x0, 0x0, 0x0,
No Texture, 0xffffffff, 0x0, 0x0,
No Texture, 0xffffffff00, 0x0, 0x10000,
No Texture, 0xff8080ff, 0x0, 0x0,

Material#0x38 - glass:pasted__G2_BG_Main2SG - Type 2E
No Texture, 0xff8080ff, 0x0, 0x0,

Material#0x3a - G2_BG_Main_SG1 - Type 23
Parameters: 2, 4, unknown, 0.7, 0.3, 0.0, 0.0, 0.0, 0.7, 0.3, 0.0, 0.0, 0.0, 1.0, 1.0, 1.0, 1.0, 1.0, 0.0, 0.0, 0.0, 0.0,

Known Parameter:

4 is glow

11,12,13 are base color

Special Case 1

```
Material#0x284 - G2_BG_Main_roof_sk_02_cSG - Type 23
Parameters: 2, 4, unknown, 0.7, 0.3, 0.0, 0.0, 0.08, 0.7, 0.3, 0.0, 0.0, 0.0, 0.992, 0.992, 0.992, 0.246, 0.246, 0.246, 0.0, 0.0, 0.0, 0.0,
roof_kk_19_c, 0x0, 0x0, 0x0,
roof_kk_19_n, 0x0, 0x0, 0x0,
No Texture, 0xffffffff, 0x0, 0x0,
ground_sk_19_c, 0x0, 0x0, 0x0,
No Texture, 0xff8080ff, 0x0, 0x0,
```

Unknown value 5

14,15,16 are not 1

Special Case 2

```
Material#0x294 - G2_BG_Main_mi_window_glass_vj_syc_01_cSG - Type 23
Parameters: 2, 4, unknown, 0.0, 1.0, 0.0, 1.0, 0.0, 0.7, 0.3, 0.0, 0.0, 0.0, 0.246, 0.183, 0.068, 1.0, 1.0, 1.0, 0.0, 0.0, 0.0, 0.0,
glass_oc_04_c, 0x0, 0x0, 0x0,
No Texture, 0xff8080ff, 0x0, 0x0,
No Texture, 0xffffffff, 0x0, 0x0,
No Texture, 0xffffffff00, 0x0, 0x10000,
No Texture, 0xff8080ff, 0x0, 0x0,
```

1 is 0.0

4 is 1.0

Special Case 3

```
Material#0x29b - G2_BG_Main_neon_yj_01_cSG - Type 23
Parameters: 0, 4, unknown, 1.0, 1.0, 0.0, 5.0, 0.0, 0.7, 0.3, 0.0, 3.474, 0.0, 1.0, 0.826, 0.0, 1.0, 1.0, 1.0, 0.0, 0.0, 0.0, 0.0,
neon_yj_01_c, 0x0, 0x0, 0x0,
No Texture, 0xff8080ff, 0x0, 0x0,
neon_yj_01_m, 0x0, 0x0, 0x0,
No Texture, 0xffffffff00, 0x0, 0x10000,
No Texture, 0xff8080ff, 0x0, 0x0,
```

Header 1 is 0

1, 2 are both 1.0

4,9 related to glow?

Unchanged parameter, 3, 6,7,8,10,17,18,19,20