Blend Mode Mapping

Following are the mapping from OpenGLES blend mode to NXP-RT supported blend modes.

VG Image blend mode mapping (VGLite API 3.x, available only in BSP version 25.06):

1. OPENVG_BLEND_SRC_OVER : sF=SourceAlpha, dF=InverseSourceAlpha, sAF=One, dAF =InverseSourceAlpha
2. OPENVG_BLEND_DST_OVER : sF=InverseDestAlpha, dF=One, sAF=InverseDestAlpha, dAF =One
3. OPENVG_BLEND_SRC_IN : sF=DestAlpha, dF=Zero, sAF=DestAlpha, dAF=Zero
4. OPENVG_BLEND_DST_IN : sF=Zero, dF=SourceAlpha, sAF=Zero, dAF=SourceAlpha
5. OPENVG_BLEND_MULTIPLY : sF=DestColor, dF=Zero, sAF=DestAlpha, dAF=Zero
6. OPENVG_BLEND_SCREEN : sF=One, dF=InverseSourceColor, sAF=One, dAF =InverseSourceColor
7. OPENVG_BLEND_ADDITIVE : sF=One, dF=One, sAF=One, dAF=One

VG Image blend mode mapping (VGLite API 2.x, available only in BSP version 2.16):

1. VG_LITE_BLEND_NONE : sAF=One, dAF=Zero
2. VG_LITE_BLEND_DST_IN : sAF=Zero, dAF=SourceAlpha
3. VG_LITE_BLEND_SRC_OVER : sAF=One, dAF=InverseSourceAlpha
4. VG_LITE_BLEND_SRC_IN : sAF=DestAlpha, dAF=Zero
5. VG_LITE_BLEND_DST_OVER : sAF=InverseDestAlpha, dAF=One
6. VG_LITE_BLEND_MULTIPLY : sF=DestColor, dF=Zero, sAF=One, dAF=InverseSourceAlpha
7. VG_LITE_BLEND_SUBTRACT : sF=InverseSourceColor, dF=One, sAF=One, dAF=One
8. VG_LITE_BLEND_SCREEN : sF=One, dF=InverseSourceColor, sAF=One, dAF =InverseSourceColor
9. VG_LITE_BLEND_ADDITIVE : sF=One, dF=One, sAF=One, dAF=One

PXP Image blend mode mapping:

1. kPXP_PorterDuffSrc : sAF=One, dAF=Zero
2. kPXP_PorterDuffAtop : sAF=DestAlpha, dAF=InverseSourceAlpha
3. kPXP_PorterDuffOver : sAF=One, dAF=InverseSourceAlpha \n
4. kPXP_PorterDuffIn : sAF=DestAlpha, dAF=Zero \n
5. kPXP_PorterDuffOut : sAF=InverseDestAlpha, dAF=Zero \n
6. kPXP_PorterDuffDst : sAF=Zero, dAF=One \n

7. kPXP_PorterDuffDstAtop : sAF=InverseDestAlpha, dAF=SourceAlpha \n
8. kPXP_PorterDuffDstOver : sAF=InverseDestAlpha, dAF=One \n
9. kPXP_PorterDuffDstIn : sAF=Zero, dAF=SourceAlpha \n
10. kPXP_PorterDuffDstOut : sAF=Zero, dAF=InverseSourceAlpha \n
11. kPXP_PorterDuffXor : sAF=InverseDestAlpha, dAF=InverseSourceAlpha \n
12. kPXP_PorterDuffClear : sAF=Zero, dAF=Zero \n
13. kPXP_PorterDuffMax : sAF=One, dAF=One \n\

Revision #3
Created 2025-11-06 10:39:36 UTC by Baliga Sriram
Updated 2025-11-18 06:56:07 UTC by Kanai Tomoaki