

Sheet1

Legend:

Aligned – both source and destination buffers are aligned

DstUnalig – destination buffer is not aligned, source is aligned

SrcUnalig – source buffer is not aligned, destination is aligned

Unaligned – both source and destination are not aligned, and, what's more, they have different offset

Mask/NoMask – shows whether the mask buffer is used

{Src,Dst}Rand – alpha channel of the pixels is initialized with random values

{Src,Dst}Zero – alpha channel of the pixels is initialized with 0 values

{Src,Dst}Unit – alpha channel of the pixels is initialized with 255 values

ALPHA_DARKEN	Legacy, ms	Vector, ms	Speed Gain, old/new
Aligned Mask SrcRand DstRand	41	28	1.46
DstUnalig Mask SrcRand DstRand	41	31	1.32
SrcUnalig Mask SrcRand DstRand	41	33	1.24
Unaligned Mask SrcRand DstRand	42	33	1.27
Aligned NoMask SrcRand DstRand	35	21	1.67
Aligned NoMask SrcZero DstRand	36	8	4.50
Aligned NoMask SrcUnit DstRand	37	15	2.47
Aligned NoMask SrcRand DstZero	22	15	1.47
Aligned NoMask SrcZero DstZero	23	9	2.56
Aligned NoMask SrcUnit DstZero	23	15	1.53
Aligned NoMask SrcRand DstUnit	32	21	1.52
Aligned NoMask SrcZero DstUnit	32	9	3.56
Aligned NoMask SrcUnit DstUnit	32	10	3.20

OVER	Legacy, ms	Vector, ms	Speed Gain, old/new
Aligned Mask SrcRand DstRand	49	20	2.45
DstUnalig Mask SrcRand DstRand	48	24	2.00
SrcUnalig Mask SrcRand DstRand	48	30	1.60
Unaligned Mask SrcRand DstRand	48	29	1.66
Aligned NoMask SrcRand DstRand	42	19	2.21
Aligned NoMask SrcZero DstRand	6	4	1.50
Aligned NoMask SrcUnit DstRand	27	18	1.50
Aligned NoMask SrcRand DstZero	26	9	2.89
Aligned NoMask SrcZero DstZero	5	4	1.25
Aligned NoMask SrcUnit DstZero	26	8	3.25
Aligned NoMask SrcRand DstUnit	19	18	1.06
Aligned NoMask SrcZero DstUnit	6	3	2.00
Aligned NoMask SrcUnit DstUnit	8	9	0.89

memcpy of the same amount of data: 3ms