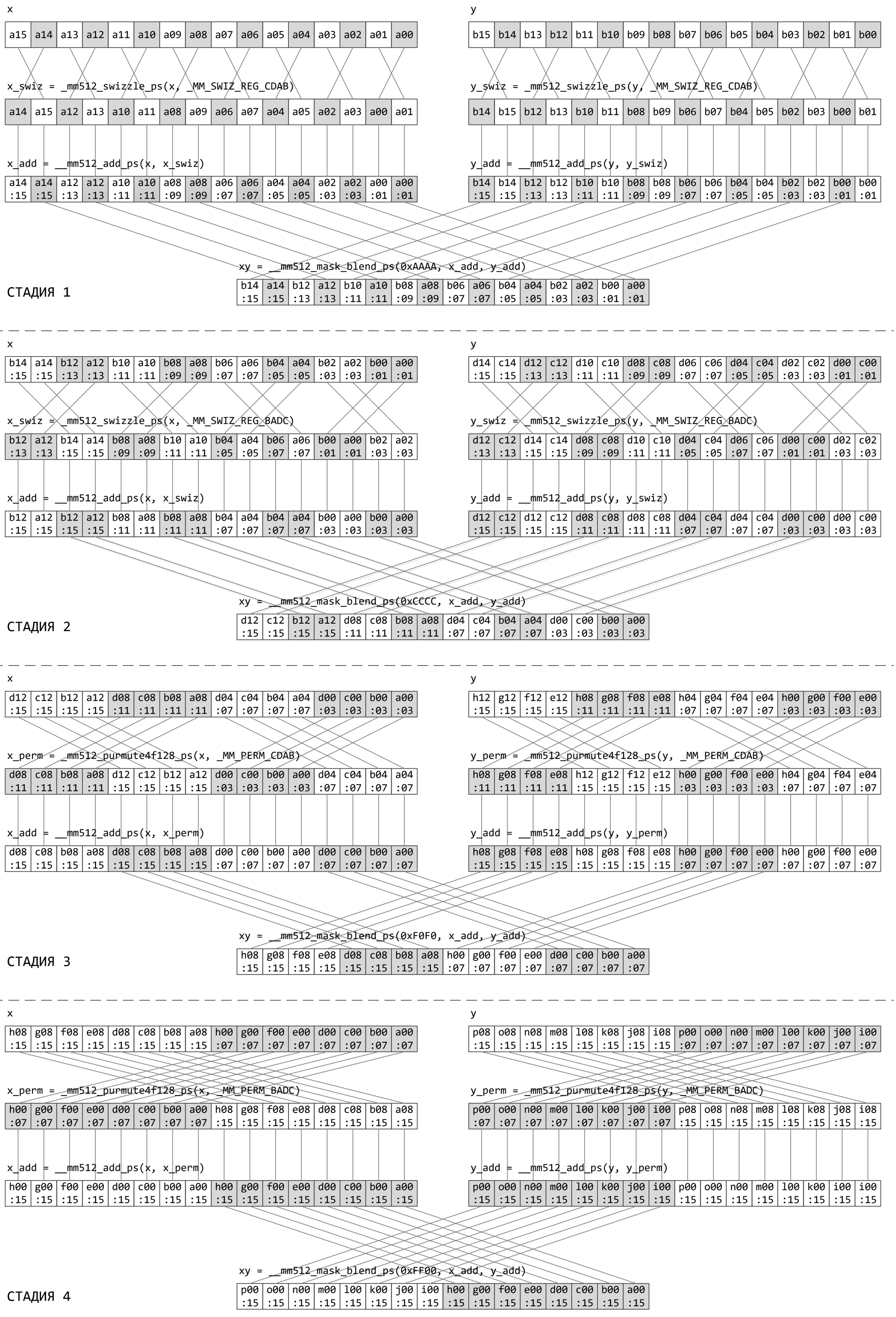
x
a15 a14 a13 a12 a11 a10 a09 a08 a07 a06 a05 a04 a03 a02 a01 a00
y
b15 b14 b13 b12 b11 b10 b09 b08 b07 b06 b05 b04 b03 b02 b01 b00
x_swiz = _mm512_swizzle_ps(x, _MM_SWIZ_REG_CDAB)
a14 a15 a12 a13 a10 a11 a08 a09 a06 a07 a04 a05 a02 a03 a00 a01
y_swiz = _mm512_swizzle_ps(y, _MM_SWIZ_REG_CDAB)
b14 b15 b12 b13 b10 b11 b08 b09 b06 b07 b04 b05 b02 b03 b00 b01
x_add = __mm512_add_ps(x, x_swiz)
a14:15 a14:15 a12:13 a12:13 a10:11 a10:11 a08:09 a08:09 a06:07 a06:07 a04:05 a04:05 a02:03 a02:03 a00:01 a00:01
y_add = __mm512_add_ps(y, y_swiz)
b14:15 b14:15 b12:13 b12:13 b10:11 b10:11 b08:09 b08:09 b06:07 b06:07 b04:05 b04:05 b02:03 b02:03 b00:01 b00:01
xy = __mm512_mask_blend_ps(0xAAAA, x_add, y_add)
b14:15 a14:15 b12:13 a12:13 b10:11 a10:11 b08:09 a08:09 b06:07 a06:07 b04:05 a04:05 b02:03 a02:03 b00:01 a00:01
СТАДИЯ 1
x
b14:15 a14:15 b12:13 a12:13 b10:11 a10:11 b08:09 a08:09 b06:07 a06:07 b04:05 a04:05 b02:03 a02:03 b00:01 a00:01
y
d14:15 c14:15 d12:13 c12:13 d10:11 c10:11 d08:09 c08:09 d06:07 c06:07 d04:05 c04:05 d02:03 c02:03 d00:01 c00:01
x_swiz = _mm512_swizzle_ps(x, _MM_SWIZ_REG_BADC)
b12:13 a12:13 b14:15 a14:15 b08:09 a08:09 b10:11 a10:11 b04:05 a04:05 b06:07 a06:07 b00:01 a00:01 b02:03 a02:03
y_swiz = _mm512_swizzle_ps(y, _MM_SWIZ_REG_BADC)
d12:13 c12:13 d14:15 c14:15 d08:09 c08:09 d10:11 c10:11 d04:05 c04:05 d06:07 c06:07 d00:01 c00:01 d02:03 c02:03
x_add = __mm512_add_ps(x, x_swiz)
b12:15 a12:15 b12:15 a12:15 b08:11 a08:11 b08:11 a08:11 b04:07 a04:07 b04:07 a04:07 b00:03 a00:03 b00:03 a00:03
y_add = __mm512_add_ps(y, y_swiz)
d12:15 c12:15 d12:15 c12:15 d08:11 c08:11 d08:11 c08:11 d04:07 c04:07 d04:07 c04:07 d00:03 c00:03 d00:03 c00:03
xy = __mm512_mask_blend_ps(0xCCCC, x_add, y_add)
d12:15 c12:15 b12:15 a12:15 d08:11 c08:11 b08:11 a08:11 d04:07 c04:07 b04:07 a04:07 d00:03 c00:03 b00:03 a00:03
СТАДИЯ 2
x
d12:15 c12:15 b12:15 a12:15 d08:11 c08:11 b08:11 a08:11 d04:07 c04:07 b04:07 a04:07 d00:03 c00:03 b00:03 a00:03
y
h12:15 g12:15 f12:15 e12:15 h08:11 g08:11 f08:11 e08:11 h04:07 g04:07 f04:07 e04:07 h00:03 g00:03 f00:03 e00:03
x_perm = _mm512_purmute4f128_ps(x, _MM_PERM_CDAB)
d08:11 c08:11 b08:11 a08:11 d12:15 c12:15 b12:15 a12:15 d00:03 c00:03 b00:03 a00:03 d04:07 c04:07 b04:07 a04:07
y_perm = _mm512_purmute4f128_ps(y, _MM_PERM_CDAB)
h08:11 g08:11 f08:11 e08:11 h12:15 g12:15 f12:15 e12:15 h00:03 g00:03 f00:03 e00:03 h04:07 g04:07 f04:07 e04:07
x_add = __mm512_add_ps(x, x_perm)
d08:15 c08:15 b08:15 a08:15 d08:15 c08:15 b08:15 a08:15 d00:07 c00:07 b00:07 a00:07 d00:07 c00:07 b00:07 a00:07
y_add = __mm512_add_ps(y, y_perm)
h08:15 g08:15 f08:15 e08:15 h08:15 g08:15 f08:15 e08:15 h00:07 g00:07 f00:07 e00:07 h00:07 g00:07 f00:07 e00:07
xy = __mm512_mask_blend_ps(0xF0F0, x_add, y_add)
h08:15 g08:15 f08:15 e08:15 d08:15 c08:15 b08:15 a08:15 h00:07 g00:07 f00:07 e00:07 d00:07 c00:07 b00:07 a00:07
СТАДИЯ 3
x
h08:15 g08:15 f08:15 e08:15 d08:15 c08:15 b08:15 a08:15 h00:07 g00:07 f00:07 e00:07 d00:07 c00:07 b00:07 a00:07
y
p08:15 o08:15 n08:15 m08:15 l08:15 k08:15 j08:15 i08:15 p00:07 o00:07 n00:07 m00:07 l00:07 k00:07 j00:07 i00:07
x_perm = _mm512_purmute4f128_ps(x, _MM_PERM_BADC)
h00:07 g00:07 f00:07 e00:07 d00:07 c00:07 b00:07 a00:07 h08:15 g08:15 f08:15 e08:15 d08:15 c08:15 b08:15 a08:15
y_perm = _mm512_purmute4f128_ps(y, _MM_PERM_BADC)
p00:07 o00:07 n00:07 m00:07 l00:07 k00:07 j00:07 i00:07 p08:15 o08:15 n08:15 m08:15 l08:15 k08:15 j08:15 i08:15
x_add = __mm512_add_ps(x, x_perm)
h00:15 g00:15 f00:15 e00:15 d00:15 c00:15 b00:15 a00:15 h00:15 g00:15 f00:15 e00:15 d00:15 c00:15 b00:15 a00:15
y_add = __mm512_add_ps(y, y_perm)
p00:15 o00:15 n00:15 m00:15 l00:15 k00:15 j00:15 i00:15 p00:15 o00:15 n00:15 m00:15 l00:15 k00:15 i00:15 i00:15
xy = __mm512_mask_blend_ps(0xFF00, x_add, y_add)
p00:15 o00:15 n00:15 m00:15 l00:15 k00:15 j00:15 i00:15 h00:15 g00:15 f00:15 e00:15 d00:15 c00:15 b00:15 a00:15
СТАДИЯ 4