

const uint8x8x3_t rgb = vld3_u8(&RGB[indexRGB]);																...
Byte	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
const uint8x8_t &r8 = rgb.val[0];									0	255	0	0	255	255	0	255
const uint8x8_t &g8 = rgb.val[1];									0	0	255	0	255	0	255	255
const uint8x8_t &b8 = rgb.val[2];									0	0	0	255	0	255	255	255
const auto R16 = vreinterpretq_s16_u16(vmovl_u8(r8));	0		255		0		0		255		255		0		255	
const auto G16 = vreinterpretq_s16_u16(vmovl_u8(g8));	0		0		255		0		255		0		255		255	
const auto B16 = vreinterpretq_s16_u16(vmovl_u8(b8));	0		0		0		255		0		255		255		255	
auto Y16 = int16x8_t{64,64,64,64,64,64,64,64};\	64		64		64		64		64		64		64		64	
auto c = int16x8_t{c1,c1,c1,c1,c1,c1,c1,c1};\	33		33		33		33		33		33		33		33	
Y16=vmlaq_s16(Y16, c, R);\	64		8479		64		64		8479		8479		64		8479	
c = int16x8_t{c2,c2,c2,c2,c2,c2,c2,c2};\	65		65		65		65		65		65		65		65	
Y16=vmlaq_s16(Y16, c, G);\	64		8479		16639		64		25054		8479		16639		25054	
c = int16x8_t{c3,c3,c3,c3,c3,c3,c3,c3};\	13		13		13		13		13		13		13		13	
Y16=vmlaq_s16(Y16, c, B);\	64		8479		16639		3379		25054		11794		19954		28369	
Y16 = vshrq_n_s16 (Y16, 7);\	0		66		129		26		195		92		155		221	
c = int16x8_t{c4,c4,c4,c4,c4,c4,c4,c4};\	16		16		16		16		16		16		16		16	
Y16 = vaddq_s16(Y16, c);\	16		82		145		42		211		108		171		237	
auto y8 = vreinterpret_u8_s8(vmovn_s16(Y16));\									16	82	145	42	211	108	171	237
vst1_u8(S,y8);\}									16	82	145	42	211	108	171	237
auto Y16 = int16x8_t{64,64,64,64,64,64,64,64};\	64		64		64		64		64		64		64		64	
auto c = int16x8_t{c1,c1,c1,c1,c1,c1,c1,c1};\	-19		-19		-19		-19		-19		-19		-19		-19	
Y16=vmlaq_s16(Y16, c, R);\	64		-4781		64		64		-4781		-4781		64		-4781	
c = int16x8_t{c2,c2,c2,c2,c2,c2,c2,c2};\	-37		-37		-37		-37		-37		-37		-37		-37	
Y16=vmlaq_s16(Y16, c, G);\	64		-4781		-9371		64		-14216		-4781		-9371		-14216	
c = int16x8_t{c3,c3,c3,c3,c3,c3,c3,c3};\	56		56		56		56		56		56		56		56	
Y16=vmlaq_s16(Y16, c, B);\	64		-4781		-9371		14344		-14216		9499		4909		64	
Y16 = vshrq_n_s16 (Y16, 7);\	0		-38		-74		112		-112		74		38		0	
c = int16x8_t{c4,c4,c4,c4,c4,c4,c4,c4};\	128		128		128		128		128		128		128		128	
Y16 = vaddq_s16(Y16, c);\	128		90		54		240		16		202		166		128	
auto y8 = vreinterpret_u8_s8(vmovn_s16(Y16));\									128	90	54	240	16	202	166	128
vst1_u8(S,y8);\}									128	90	54	240	16	202	166	128
auto Y16 = int16x8_t{64,64,64,64,64,64,64,64};\	64		64		64		64		64		64		64		64	
auto c = int16x8_t{c1,c1,c1,c1,c1,c1,c1,c1};\	56		56		56		56		56		56		56		56	
Y16=vmlaq_s16(Y16, c, R);\	64		14344		64		64		14344		14344		64		14344	
c = int16x8_t{c2,c2,c2,c2,c2,c2,c2,c2};\	-47		-47		-47		-47		-47		-47		-47		-47	
Y16=vmlaq_s16(Y16, c, G);\	64		14344		-11921		64		2359		14344		-11921		2359	
c = int16x8_t{c3,c3,c3,c3,c3,c3,c3,c3};\	-9		-9		-9		-9		-9		-9		-9		-9	
Y16=vmlaq_s16(Y16, c, B);\	64		14344		-11921		-2231		2359		12049		-14216		64	
Y16 = vshrq_n_s16 (Y16, 7);\	0		112		-94		-18		18		94		-112		0	
c = int16x8_t{c4,c4,c4,c4,c4,c4,c4,c4};\	128		128		128		128		128		128		128		128	
Y16 = vaddq_s16(Y16, c);\	128		240		34		110		146		222		16		128	
auto y8 = vreinterpret_u8_s8(vmovn_s16(Y16));\									128	240	34	110	146	222	16	128
vst1_u8(S,y8);\}									128	240	34	110	146	222	16	128