Qword (64)	Dword (32)	Word (16)	Byte (8)		uses	calle saved
			low	high		
rax	eax	ax	al	ah	return val	no
rbx	ebx	bx	bl	bh	-	yes
rcx	ecx	cx	cl	ch	4th func arg	no
rdx	edx	dx	dl	dh	3rd func arg	no
rsi	esi	si	sil		2nd func arg	no
rdi	edi	di	dil		1st func arg	no
r8	r8d	r8w	r8b		5th func arg	no
r9	r9d	r9w	r9b		6th func arg	no
r10	r10d	r10w	r10b		-	no
r11	r11d	r11w	r11b		-	no
r12	r12d	r12w	r12b		-	yes
r13	r13d	r13w	r13b		-	yes
r14	r14d	r14w	r14b		-	yes
r15	r15d	r15w	r15b		-	yes
rsp	esp	sp	spl		stack pointer	
rbp	ebp	bp	bpl		base pointer	
rip	eip	ip			instruction pointer	
rflags	eflags				Flags & cond	

SIMD						
avx 512	ymm	xmm	mmx	uses	uses (mmx)	
zmm0	ymm0	xmm0	mmx0	1st arg, or ret	Integer / fixed point	
zmm1	ymm1	xmm1	mmx1	2nd arg	arg / general	
zmm2	ymm2	xmm2	mmx2	3rd arg	arg / general	
zmm3	ymm3	xmm3	mmx3	4th arg	arg / general	
zmm4	ymm4	xmm4	mmx4	5th arg	arg / general	
zmm5	ymm5	xmm5	mmx5	6th arg	arg / general	
zmm6	ymm6	xmm6	mmx6	7th arg	arg / general	
zmm7	ymm7	xmm7	mmx7	8th arg	arg / general	
zmm8	ymm8	xmm8		general use		
zmm9	ymm9	xmm9		general use		
zmm10	ymm10	xmm10		general use		
zmm11	ymm11	xmm11		general use		
zmm12	ymm12	xmm12		general use		
zmm13	ymm13	xmm13		general use		
zmm14	ymm14	xmm14		general use		
zmm15	ymm15	xmm15		general use		

eflags register

0	0	0	0	0	0	0	0	0	0	ID	VIP	VIF	AC	VM	RF	0	NT	IOPL	OF	DF	IF	TF	SF	ZF	0	AF	0	PF	1	CF
31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13 12	11	10	9	8	7	6	5	4	3	2	1	0
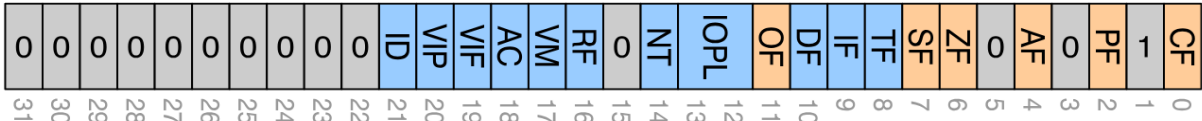
☐ Reserved flags   ☐ System flags   ☐ Arithmetic flags