`$Id: registers.mm,v 1.69 2021-05-04 11:55:59-07 - - $`

Register	quad	long	word	byte	Callee Saved	Usage
0	`%rax`	`%eax`	`%ax`	`%al`		1st return register used in **`idiv`** and **`imul`** instructions **`<cstdarg>`** vector register argument count
1	`%rcx`	`%ecx`	`%cx`	`%cl`		4th argument register
2	`%rdx`	`%edx`	`%dx`	`%dl`		3rd argument register 2nd return register used in **`idiv`** and **`imul`** instructions
3	`%rbx`	`%ebx`	`%bx`	`%dl`	Yes	
4	`%rsp`	`%esp`	`%sp`	`%spl`	Yes	stack pointer
5	`%rbp`	`%ebp`	`%bp`	`%bpl`	Yes	frame pointer (optional)
6	`%rsi`	`%esi`	`%si`	`%sil`		2nd argument register
7	`%rdi`	`%edi`	`%di`	`%dil`		1st argument register
8	`%r8`	`%r8d`	`%r8w`	`%r8b`		5th argument register
9	`%r9`	`%r9d`	`%r9w`	`%r9b`		6th argument register
10	`%r10`	`%r10d`	`%r10w`	`%r10b`		static chain pointer (optional)
11	`%r11`	`%r11d`	`%r11w`	`%r11b`		
12	`%r12`	`%r12d`	`%r12w`	`%r12b`	Yes	
13	`%r13`	`%r13d`	`%r13w`	`%r13b`	Yes	
14	`%r14`	`%r14d`	`%r14w`	`%r14b`	Yes	
15	`%r15`	`%r15d`	`%r15w`	`%r15b`	Yes	global offset table (GOT) pointer (optional)

Second byte of arithmetic registers (8086 compatibility): **`%ah`**, **`%bh`**, **`%ch`**, **`%dh`**.

Function prolog	**`pushq`**	**`%rpb`**
	`movq`	**`%rsp, %rbp`**
	`subq`	**`$N, %rsp`**
Function epilog	**`movq`**	**`%rpb, %rsp`**
	`popq`	**`%rbp`**
	`ret`	