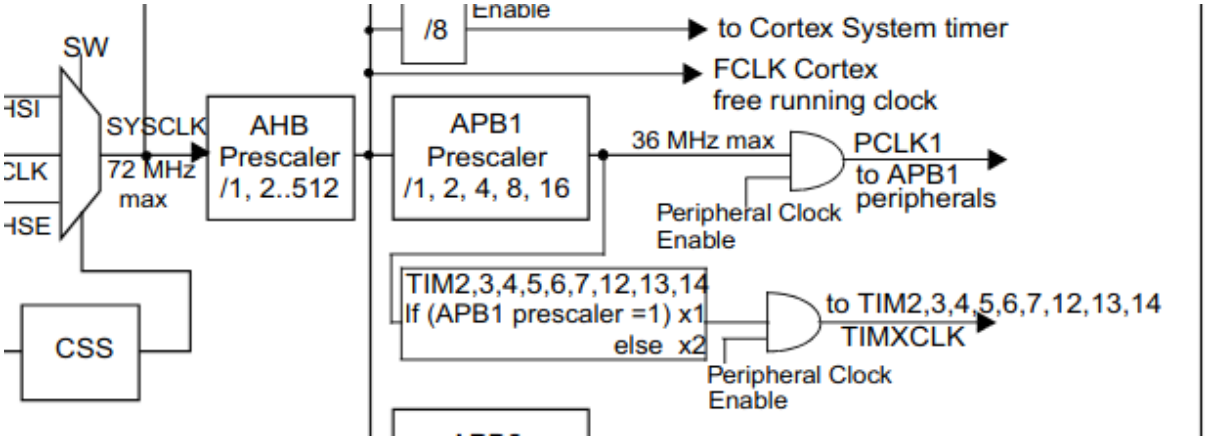
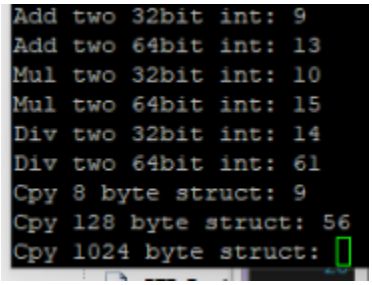




All timing was done BEFORE `timer_start()` then AFTER `timer_stop(start)`. This should result in very similar times since the timer code can take relatively substantial time.

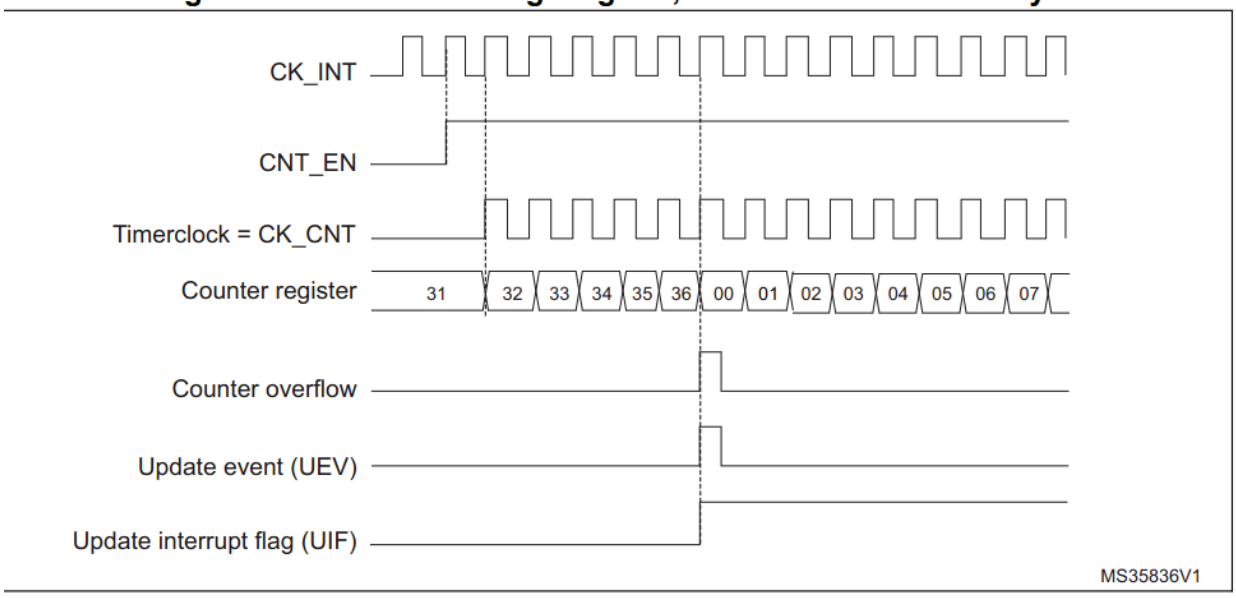
TIM3 is on APB1. `TIM3->PSC=1;`Therefore TIM runs at 36MHz. Each tick is 1/36MHz = 0.0277 microseconds per tick.

TIM measurement	test	Adalm measurement	
9 ticks * 0.0277us/tick = 0.24us	Add 32 bit int	1.1 us	

10 ticks * 0.0277 us/tick = 0.277us	Mul 32 bit int	1.2 us	

Both my timings seem to be off by a factor of 4. Not fully sure why, but I suspect it's related to my understanding of the clock tree system. From my understanding of the TIM PSC diagram,

Figure 103. Counter timing diagram, internal clock divided by 1



So the TIM counts should match my clock of 36MHz…