

Bit number				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
ID				B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A	A
Reset 0x00000003				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
ID	R/W	Field	Value ID	Value				Description																											
A	R	MODE						Mode																											
			CLIC	3				Core Local Interrupt Controller (CLIC) interrupt handling mode																											
B	RW	BASE						Vector base address																											
								The value in the BASE field must always be aligned on a 8-byte boundary																											

8.26.3.4 MTVT

Address offset: 0x307

Machine Trap Vector Table

Holds the base address of the trap vector table, aligned on a 64-byte or greater power-of-two boundary. The actual alignment can be determined by writing ones to the low-order bits then reading them back.

Bit number				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
ID				A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Reset 0x00000000				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ID	R/W	Field	Value ID	Value				Description																											
A	RW	VAL						Machine Trap Vector Table base address value for CLIC vectored interrupts																											

8.26.3.5 MCOUNTINHIBIT

Address offset: 0x320

Machine Counter-Inhibit

Register that controls which of the hardware performance-monitoring counters increment.

Bit number				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																															
ID				B A																															
Reset 0x00000005				0 1 0 1																															
ID	R/W	Field	Value ID	Value				Description																											
A	RW	CY	INCREMENT	0x0				MCYCLE increments as usual																											
			INHIBIT	0x1				MCYCLE doesn't increment																											
B	RW	IR	INCREMENT	0x0				MINSTRET increments as usual																											
			INHIBIT	0x1				MINSTRET doesn't increment																											

8.26.3.6 MSCRATCH

Address offset: 0x340

Machine Scratch

Register dedicated for use by machine mode. Typically, it is used to hold a pointer to a machine-mode hart-local context space and swapped with a user register upon entry to an M-mode trap handler.