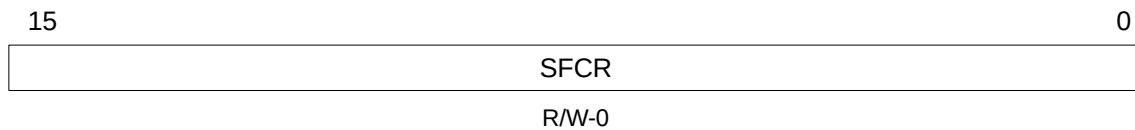Аппаратный генератор углов v0.01.
Техническое справочное руководство.

Suppression Filter Compare Register (HWASFCR)

Offset = **00h**
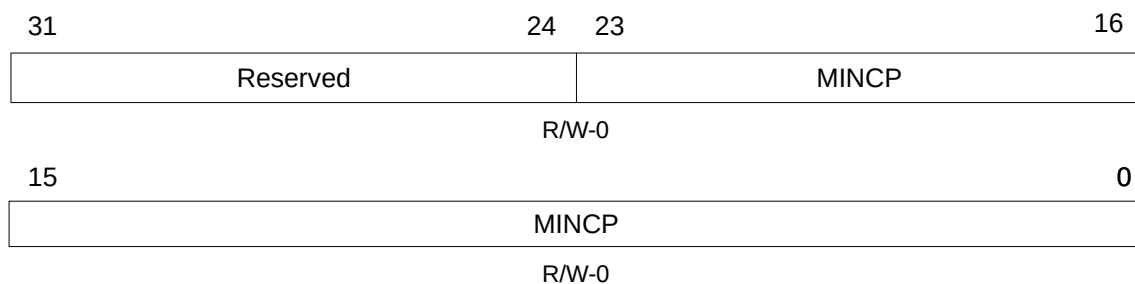
Suppression Filter Compare Register (HWASFCR)

15	0
SFCR	

R/W-0

LEGEND: R/W = Read/Write; -n = value after reset

Bit	Field	Value	Description
15-0	SFCR		Counter Compare Value

Minimum Capture Period Register (HWAMINCPR)

Offset = **02h (15:0),** Offset **= 04h (31:16)**

Minimum Capture Period Register (HWAMINCPR)

31	24	23	16
Reserved		MINCP	

R/W-0

15	0
MINCP	

R/W-0

LEGEND: R/W = Read/Write; -n = value after reset

Bit	Field	Value	Description
31-24	Reserved		
23-0	MINCP	0-FFFFFFh	Minimum Capture Period Value

Maximum Capture Period Register (HWAMAXCPR)

Offset = **06h (15:0),** Offset **= 08h (31:16)**

Maximum Capture Period Register (HWAMAXCPR)

31	24	23	16
Reserved		MAXCP	

R/W-0

15	0
MAXCP	

R/W-0
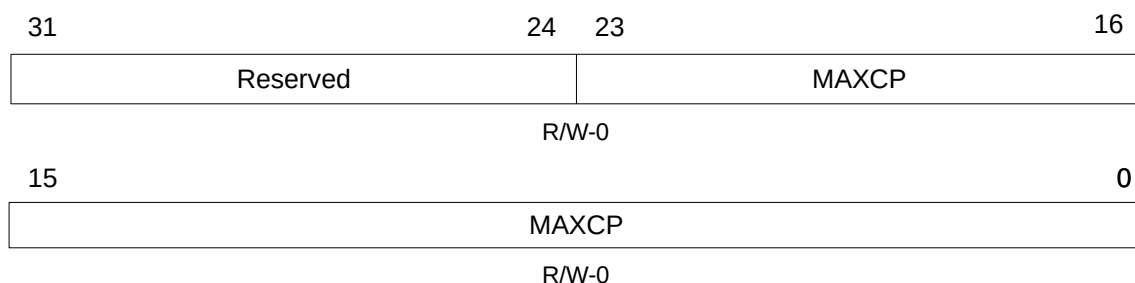
LEGEND: R/W = Read/Write; -n = value after reset

Bit	Field	Value	Description
31-24	Reserved		
23-0	MAXCP	0-FFFFFFh	Minimum Capture Period Value

Global Configuration Set Register 0 (HWAGCSR0)

Offset = **80h**

Global Configuration Set Register 0 (HWAGCSR0)

7	6	5	4	3	2	1	0
					SFLTE	EDGES	CAPE
R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0

LEGEND: R/W = Read/Write; -n = value after reset

Bit	Field	Value	Description
2	SFLTE	0 1	Suppression Filter Enable. Read: Suppression Filter is disabled. Write: Writes have no effect. Read: Suppression Filter is enabled. Write: Suppression Filter is enabled.
1	EDGES	0 1	Edge Select. Read: Rise edge selected. Write: Writes have no effect. Read: Fall edge selected. Write: Fall edge selected.
0	CAPE	0 1	Capture Enable. Read: Capture disabled. Write: Writes have no effect. Read: Capture enabled. Write: Capture enabled.

Global Configuration Clear Register 0 (HWAGCCR0)

Offset = **82h**

Global Configuration Clear Register 0 (HWAGCCR0)

7	6	5	4	3	2	1	0
					SFLTE	EDGES	CAPE
R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0

LEGEND: R/W = Read/Write; -n = value after reset

Bit	Field	Value	Description
2	SFLTE	0	Suppression Filter Enable. Read: Suppression Filter is disabled. Write: Writes have no effect.
		1	Read: Suppression Filter is enabled. Write: Suppression Filter is disabled.
1	EDGES	0	Edge Select. Read: Rise edge selected. Write: Writes have no effect.
		1	Read: Fall edge selected. Write: Rise edge selected.
0	CAPE	0	Capture Enable. Read: Capture disabled. Write: Writes have no effect.
		1	Read: Capture enabled. Write: Capture disabled.

Interrupt Enable Set Register (HWAIESR)

Offset = **84h**

Interrupt Enable Set Register (HWAIESR)

7	6	5	4	3	2	1	0
						POVFIE	CAPIE
R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0

LEGEND: R/W = Read/Write; -n = value after reset

Bit	Field	Value	Description
2		0	Read: Write: Writes have no effect.
		1	Read: Write:
1	POVFIE	0	Period counter overflow interrupt enable. Read: Period counter overflow interrupt disabled. Write: Writes have no effect.
		1	Read: Period counter overflow interrupt enabled. Write: Period counter overflow interrupt enabled.
0	CAPIE	0	Capture Interrupt Enable. Read: Capture Interrupt disabled. Write: Writes have no effect.
		1	Read: Capture Interrupt enabled. Write: Capture Interrupt enabled.

Interrupt Enable Clear Register (HWAIECR)

Offset = **86h**

Interrupt Enable Clear Register (HWAIECR)

7	6	5	4	3	2	1	0
						POVFIE	CAPIE
R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0

LEGEND: R/W = Read/Write; -n = value after reset

Bit	Field	Value	Description
2		0	Read: Write: Writes have no effect.
		1	Read: Write:
1	POVFIE	0	Period counter overflow interrupt enable. Read: Period counter overflow interrupt disabled. Write: Writes have no effect.
		1	Read: Period counter overflow interrupt enabled. Write: Period counter overflow interrupt disabled.
0	CAPIE	0	Capture Interrupt Enable. Read: Capture Interrupt disabled. Write: Writes have no effect.
		1	Read: Capture Interrupt enabled. Write: Capture Interrupt disabled.

Interrupt Flag Register (HWAIFR)

Offset = **88h**

Interrupt Flag Register (HWAIFR)

7	6	5	4	3	2	1	0
						POVFIF	CAPIF
R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0	R/W-0

LEGEND: R/W = Read/Write; -n = value after reset

Bit	Field	Value	Description
2		0	Read: Write: Writes have no effect.
		1	Read: Write:
1	POVFIF	0	Period counter Overflow Interrupt Flag. Read: No interrupt is pending. Write: Writes have no effect.
		1	Read: Period counter Overflow Interrupt is pending. Write: Clear Period counter Overflow Interrupt Flag.
0	CAPIF	0	Capture Interrupt Flag. Read: No interrupt is pending. Write: Writes have no effect.
		1	Read: Capture Interrupt is pending. Write: Clear capture interrupt flag.

HWAG Previous Tooth Period Value Register (HWAPCNT1)

Offset = **8Ah (15:0),** Offset = **8Ch (31:16)**

HWAG Previous Tooth Period Value Register (HWAPCNT1)

31	24	23	16
Reserved		PCNT(n-1)	
R-0		R-0	

15	0
PCNT(n-1)	
R-0	
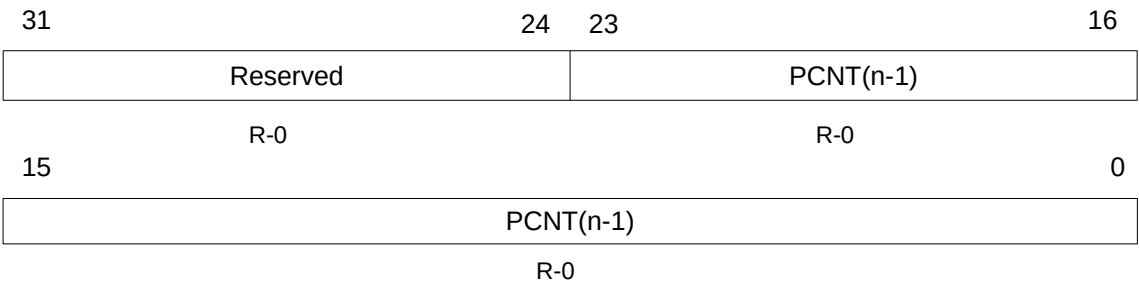
LEGEND: R = Read; -n = value after reset

Bit	Field	Value	Description
31-24	Reserved	0	Reads return 0.
23-0	PCNT(n-1)	0-FFFFFFh	Period (n-1) Value. Gives the period value of the previous tooth.