

TIMER Register Map

Created with [Corsair](#) v1.0.4.

Conventions

Access mode	Description
rw	Read and Write
rw1c	Read and Write 1 to Clear
rw1s	Read and Write 1 to Set
ro	Read Only
roc	Read Only to Clear
roll	Read Only / Latch Low
rolh	Read Only / Latch High
wo	Write only
wosc	Write Only / Self Clear

Register map summary

Base address: 0x80000000

Name	Address	Description
Tim_config	0x00000000	Timer configuration register
Tim_prescaler	0x00000004	Prescaler register (divides input clock)
Tim_period	0x00000008	Timer period register
Tim_counter	0x0000000c	Current counter value
Tim_status	0x00000010	Timer status register
Tim_load	0x00000014	Value to load into counter
TPWM_config	0x00000018	PWM configuration register
TPWM_prescaler	0x0000001c	PWM clock divider
TPWM_period1	0x00000020	PWM1 and PWM2 period register
TPWM_period2	0x00000024	PWM3 and PWM4 period register
TPWM_compare1	0x00000028	Compare values for PWM1 and PWM2
TPWM_compare2	0x0000002c	Compare values for PWM3 and PWM4

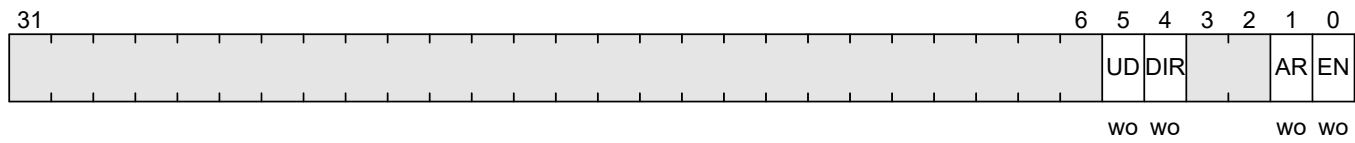
Name	Address	Description
TPWM_counter1	0x00000030	PWM counters for PWM1 and PWM2
TPWM_counter2	0x00000034	PWM counters for PWM3 and PWM4

Tim_config

Timer configuration register

Address offset: 0x00000000

Reset value: 0x00000002



Name	Bits	Mode	Reset	Description
-	31:6	-	0x000000	Reserved
UD	5	wo	0x0	Update counter with load value
DIR	4	wo	0x0	Count direction (0 = up, 1 = down)
-	3:2	-	0x0	Reserved
AR	1	wo	0x1	Auto reload when reaching period
EN	0	wo	0x0	Enable timer

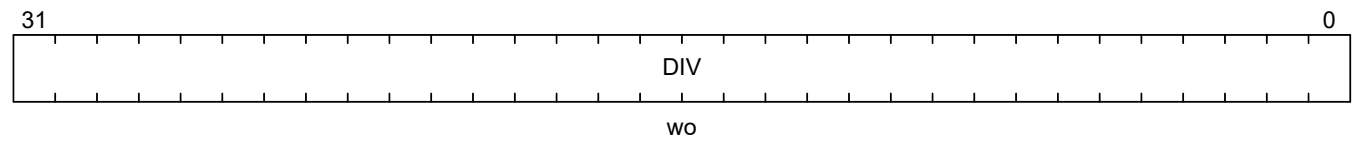
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Tim_prescaler

Prescaler register (divides input clock)

Address offset: 0x00000004

Reset value: 0x0000001b



Name	Bits	Mode	Reset	Description
DIV	31:0	wo	0x0000001b	Clock divider value

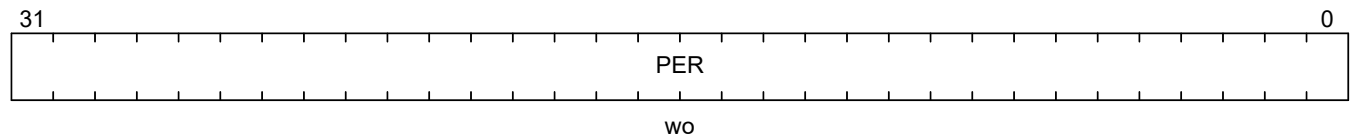
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Tim_period

Timer period register

Address offset: 0x00000008

Reset value: 0x0000ffff



Name	Bits	Mode	Reset	Description
PER	31:0	wo	0x0000ffff	Counter max value

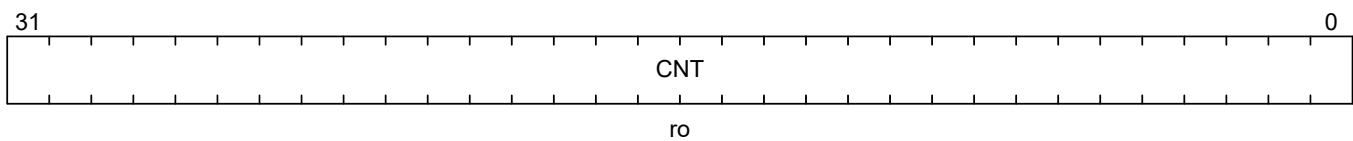
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Tim_counter

Current counter value

Address offset: 0x0000000c

Reset value: 0x00000000



Name	Bits	Mode	Reset	Description
CNT	31:0	ro	0x00000000	Counter current count

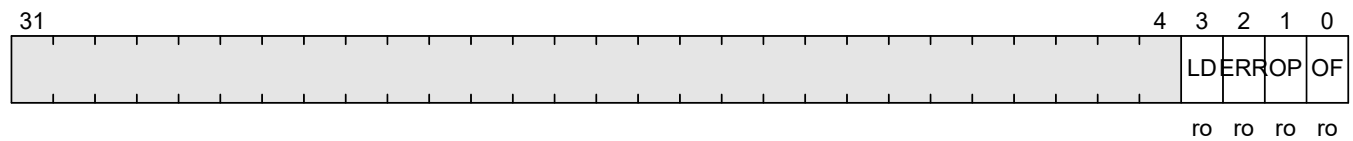
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Tim_status

Timer status register

Address offset: 0x00000010

Reset value: 0x00000000



Name	Bits	Mode	Reset	Description
-	31:4	-	0x00000000	Reserved
LD	3	ro	0x0	Load done flag

Name	Bits	Mode	Reset	Description
ERR	2	ro	0x0	Error flag
OP	1	ro	0x0	Over period flag
OF	0	ro	0x0	Overflow flag

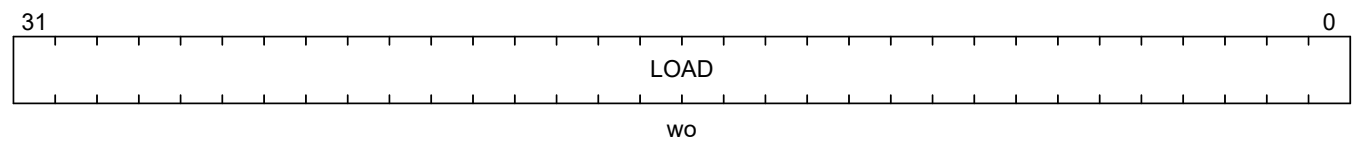
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Tim_load

Value to load into counter

Address offset: 0x00000014

Reset value: 0x00000000



Name	Bits	Mode	Reset	Description
LOAD	31:0	wo	0x00000000	Counter load value

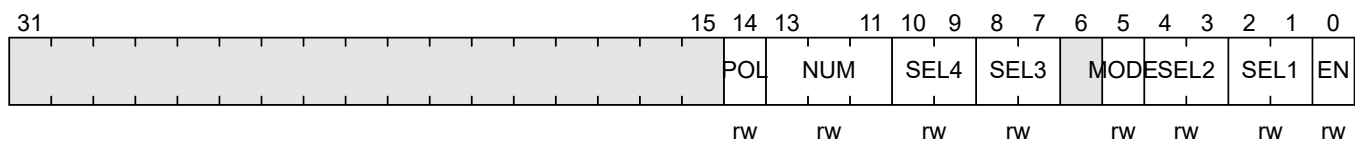
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TPWM_config

PWM configuration register

Address offset: 0x00000018

Reset value: 0x00000000



Name	Bits	Mode	Reset	Description
-	31:15	-	0x0000	Reserved
POL	14	rw	0x0	Polarity of the PWM signal
NUM	13:11	rw	0x0	Number of PWM signals selected
SEL4	10:9	rw	0x0	Output selection for PWM4
SEL3	8:7	rw	0x0	Output selection for PWM3
-	6	-	0x0	Reserved

Name	Bits	Mode	Reset	Description
MODE	5	rw	0x0	mode CAPTURE or PWM
SEL2	4:3	rw	0x0	Output selection for PWM2
SEL1	2:1	rw	0x0	Output selection for PWM1
EN	0	rw	0x0	Enable PWM/CAPTURE operation

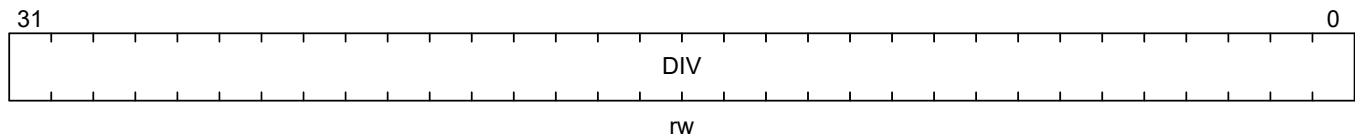
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TPWM_prescaler

PWM clock divider

Address offset: 0x0000001c

Reset value: 0x0000001b



Name	Bits	Mode	Reset	Description
DIV	31:0	rw	0x0000001b	Clock divider value for PWM

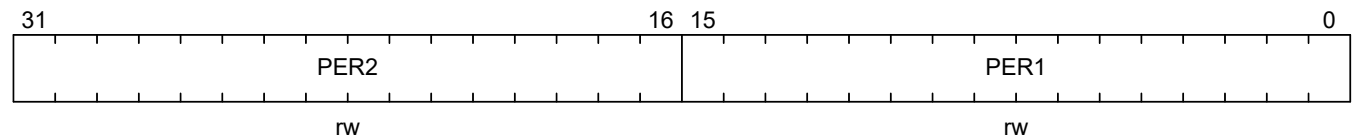
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TPWM_period1

PWM1 and PWM2 period register

Address offset: 0x00000020

Reset value: 0xffffffff



Name	Bits	Mode	Reset	Description
PER2	31:16	rw	0xffff	Period value for PWM2
PER1	15:0	rw	0xffff	Period value for PWM1

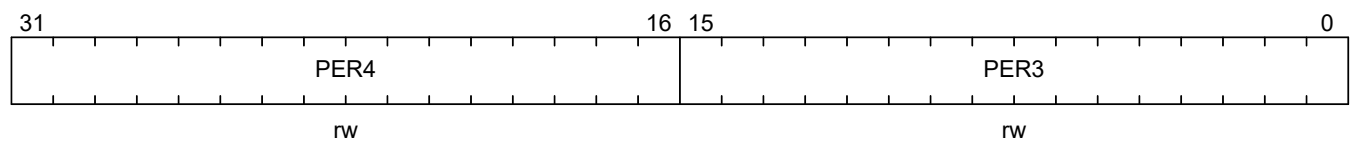
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TPWM_period2

PWM3 and PWM4 period register

Address offset: 0x00000024

Reset value: 0xffffffff



Name	Bits	Mode	Reset	Description
PER4	31:16	rw	0xffff	Period value for PWM4
PER3	15:0	rw	0xffff	Period value for PWM3

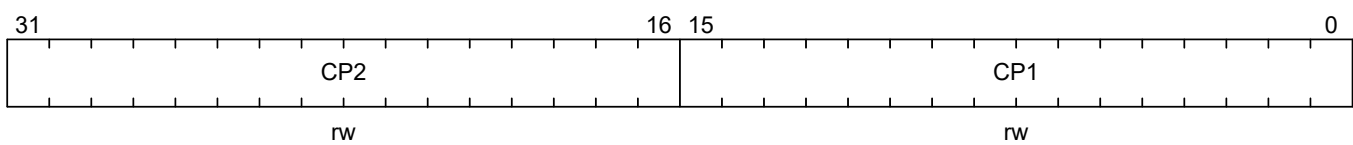
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TPWM_compare1

Compare values for PWM1 and PWM2

Address offset: 0x00000028

Reset value: 0xffffffff



Name	Bits	Mode	Reset	Description
CP2	31:16	rw	0xffff	Compare value for PWM2
CP1	15:0	rw	0xffff	Compare value for PWM1

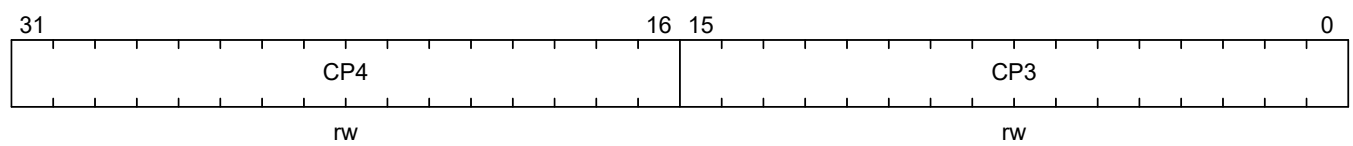
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TPWM_compare2

Compare values for PWM3 and PWM4

Address offset: 0x0000002c

Reset value: 0xffffffff



Name	Bits	Mode	Reset	Description
CP4	31:16	rw	0xffff	Compare value for PWM4

Name	Bits	Mode	Reset	Description
CP3	15:0	rw	0xffff	Compare value for PWM3

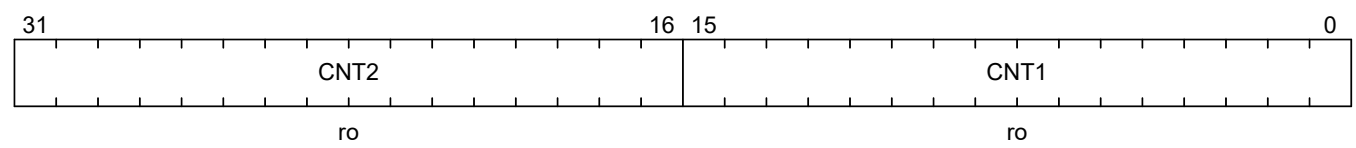
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TPWM_counter1

PWM counters for PWM1 and PWM2

Address offset: 0x00000030

Reset value: 0x00000000



Name	Bits	Mode	Reset	Description
CNT2	31:16	ro	0x0000	Current counter value for PWM2
CNT1	15:0	ro	0x0000	Current counter value for PWM1

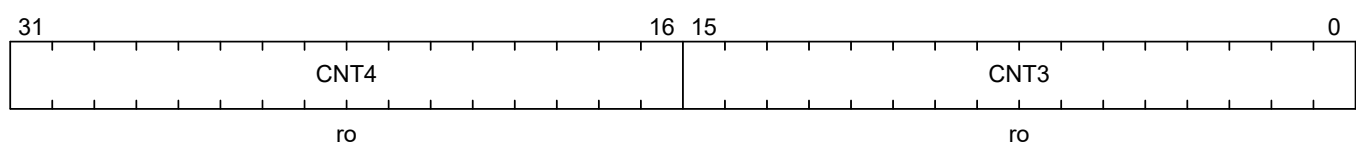
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TPWM_counter2

PWM counters for PWM3 and PWM4

Address offset: 0x00000034

Reset value: 0x00000000



Name	Bits	Mode	Reset	Description
CNT4	31:16	ro	0x0000	Current counter value for PWM4
CNT3	15:0	ro	0x0000	Current counter value for PWM3

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