

# **Timer IP**

Version 2.0.1

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# File Index

## File List

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# File Documentation

## HAL/inc/altera\_avalon\_timer\_regs.h File Reference

```
#include "timer.h"
```

### Macros

- `#define TIMER_STOP() timer_stop()`
- `#define TIMER_RESET() timer_reset()`
- `#define TIMER_START() timer_start()`
- `#define TIMER_READ() timer_read()`

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### Detailed Description

Drivers for interfacing with Timer component on the DE10-Lite board. Functionality is implemented as macros which wrap non-altera specific implementation.

#### Author

Unknown  
Jens Lind

#### Version

2.0

#### Date

2017-2021

#### Copyright

AGSTU AB

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## HAL/inc/timer.h File Reference

```
#include <stdint.h>
```

### Functions

- void **timer\_start** ()  
*Starts the timer.*

- void **timer\_stop** ()  
*Stops the timer.*
- void **timer\_reset** ()  
*Resets current time value and stops the timer.*
- uint32\_t **timer\_read** ()  
*Reads the current time value from the timer. The time value is updated every system clock tick. The system clock frequency is hardware dependent, but the example(s) provided with this IP component assume 50 MHz.*

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## Detailed Description

Functions for communicating with Timer hardware component.

### Author

Jens Lind

### Version

1.0

### Date

2017-2021

### Copyright

AGSTU AB

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## Function Documentation

### uint32\_t timer\_read ()

Reads the current time value from the timer. The time value is updated every system clock tick. The system clock frequency is hardware dependent, but the example(s) provided with this IP component assume 50 MHz.

### Returns

Time value as number of ticks (32-bit resolution).

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