

# **UMdrvGpt2**

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# File Index

## File List

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# Class Documentation

## ConfigPtr Struct Reference

```
#include <Gpt_Cfg_Extern_Generated.h>
```

### Public Attributes

- uint8\_t [GptChannelID](#)
  - [type GptHwChannel](#) [GptHwChannel](#)
  - [type GptClockReference](#) [GptClockReference](#)
  - uint32\_t [GptClockPrescaler](#)
  - uint32\_t [GptChannelTickValueMax](#)
  - char [GptNotification](#) [30]
- 

### Detailed Description

Definition at line 8 of file Gpt\_Cfg\_Extern\_Generated.h.

---

### Member Data Documentation

#### uint8\_t ConfigPtr::GptChannelID

Definition at line 9 of file Gpt\_Cfg\_Extern\_Generated.h.

#### uint32\_t ConfigPtr::GptChannelTickValueMax

Definition at line 13 of file Gpt\_Cfg\_Extern\_Generated.h.

#### uint32\_t ConfigPtr::GptClockPrescaler

Definition at line 12 of file Gpt\_Cfg\_Extern\_Generated.h.

#### [type GptClockReference](#) ConfigPtr::GptClockReference

Definition at line 11 of file Gpt\_Cfg\_Extern\_Generated.h.

#### [type GptHwChannel](#) ConfigPtr::GptHwChannel

Definition at line 10 of file Gpt\_Cfg\_Extern\_Generated.h.

#### char ConfigPtr::GptNotification[30]

Definition at line 14 of file Gpt\_Cfg\_Extern\_Generated.h.

---

**The documentation for this struct was generated from the following file:**

- C:/Users/39347/Desktop/prova/[Gpt\\_Cfg\\_Extern\\_Generated.h](#)

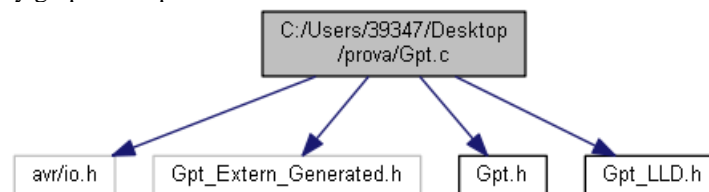


# File Documentation

## C:/Users/39347/Desktop/prova/Gpt.c File Reference

```
#include <avr/io.h>
#include "Gpt_Extern_Generated.h"
#include "Gpt.h"
#include "Gpt_LLD.h"
```

Include dependency graph for Gpt.c:



## Functions

- void [Gpt\\_Init](#) (void)  
*GPT driver initialization function.*
- void [Gpt\\_DeInit](#) (void)
- void [Gpt\\_StartTimer](#) (uint32\_t channel, uint32\_t value)
- void [Gpt\\_EnableNotification](#) (uint32\_t channel)
- uint32\_t [Gpt\\_GetTimeElapsed](#) (uint32\_t channel)
- uint32\_t [Gpt\\_GetTimeRemaining](#) (uint32\_t channel)
- void [Gpt\\_StopTimer](#) (uint32\_t channel)
- void [Gpt\\_DisableNotification](#) (uint32\_t channel)

## Variables

- [type GptDriverModes Gpt\\_DriverModeActual](#) = [MODE\\_UNINITIALIZED](#)
- [type GptTimerChannelStates Gpt\\_TimerChannelStateActual](#) = [STATE\\_TRASH](#)

---

## Function Documentation

### void Gpt\_DeInit (void )

Definition at line 84 of file Gpt.c.

### void Gpt\_DisableNotification (uint32\_t channel)

Definition at line 225 of file Gpt.c.

### void Gpt\_EnableNotification (uint32\_t channel)

Definition at line 138 of file Gpt.c.

### uint32\_t Gpt\_GetTimeElapsed (uint32\_t channel)

Definition at line 160 of file Gpt.c.

**uint32\_t Gpt\_GetTimeRemaining (uint32\_t *channel*)**

Definition at line 182 of file Gpt.c.

**void Gpt\_Init (void )**

GPT driver initialization function.

Service for driver initialization. The Initialization function shall initialize all relevant registers of the configured hardware with the values of the structure referenced by the parameter [ConfigPtr](#). All time units used within the API services of the GPT driver shall be of the unit ticks. This function shall only initialize the configured resources. Resources that are not configured in the configuration file shall not be touched. The following rules regarding initialization of controller registers shall apply to the GPT Driver implementation:

- If the hardware allows for only one usage of the register, the driver module implementing that functionality is responsible for initializing the register
- If the register can affect several hardware modules and if it is an I/O register it shall be initialized by the PORT driver
- If the register can affect several hardware modules and if it is not an I/O register it shall be initialized by the MCU driver
- One-time writable registers that require initialization directly after reset shall be initialized by the startup code
- All other registers shall be initialized by the startup code

#### Parameters

in	<i>configPtr</i>	Pointer to a selected configuration structure
----	------------------	---

@api

Definition at line 55 of file Gpt.c.

**void Gpt\_StartTimer (uint32\_t *channel*, uint32\_t *value*)**

Definition at line 115 of file Gpt.c.

**void Gpt\_StopTimer (uint32\_t *channel*)**

Definition at line 204 of file Gpt.c.

---

## Variable Documentation

**[type\\_GptDriverModes](#) Gpt\_DriverModeActual = [MODE\\_UNINITIALIZED](#)**

Definition at line 26 of file Gpt.c.

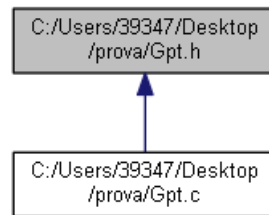
**[type\\_GptTimerChannelStates](#) Gpt\_TimerChannelStateActual = [STATE\\_TRASH](#)**

Definition at line 27 of file Gpt.c.



## C:/Users/39347/Desktop/prova/Gpt.h File Reference

This graph shows which files directly or indirectly include this file:



### Enumerations

- enum [type\\_GptDriverModes](#) { [MODE\\_UNINITIALIZED](#), [MODE\\_NORMAL](#), [MODE\\_SLEEP](#), [MODE\\_TRASH](#) }
- enum [type\\_GptTimerChannelStates](#) { [STATE\\_INITIALIZED](#), [STATE\\_RUNNING](#), [STATE\\_STOPPED](#), [STATE\\_EXPIRED](#), [STATE\\_TRASH](#) }

### Functions

- void [Gpt\\_Init](#) (void)  
*GPT driver initialization function.*
- void [Gpt\\_DeInit](#) (void)
- uint32\_t [Gpt\\_GetTimeElapsed](#) (uint32\_t channel)
- uint32\_t [Gpt\\_GetTimeRemaining](#) (uint32\_t channel)
- void [Gpt\\_StartTimer](#) (uint32\_t channel, uint32\_t value)
- void [Gpt\\_StopTimer](#) (uint32\_t channel)
- void [Gpt\\_EnableNotification](#) (uint32\_t channel)
- void [Gpt\\_DisableNotification](#) (uint32\_t channel)

---

## Enumeration Type Documentation

enum [type\\_GptDriverModes](#)

Enumerator:

MODE_UNINITIALIZED	
MODE_NORMAL	
MODE_SLEEP	
MODE_TRASH	

Definition at line 19 of file Gpt.h.

enum [type\\_GptTimerChannelStates](#)

Enumerator:

STATE_INITIALIZED	
STATE_RUNNING	

STATE_STOPPED	
STATE_EXPIRED	
STATE_TRASH	

Definition at line 20 of file Gpt.h.

---

## Function Documentation

### **void Gpt\_DeInit (void )**

Definition at line 84 of file Gpt.c.

### **void Gpt\_DisableNotification (uint32\_t channel)**

Definition at line 225 of file Gpt.c.

### **void Gpt\_EnableNotification (uint32\_t channel)**

Definition at line 138 of file Gpt.c.

### **uint32\_t Gpt\_GetTimeElapsed (uint32\_t channel)**

Definition at line 160 of file Gpt.c.

### **uint32\_t Gpt\_GetTimeRemaining (uint32\_t channel)**

Definition at line 182 of file Gpt.c.

### **void Gpt\_Init (void )**

GPT driver initialization function.

Service for driver initialization. The Initialization function shall initialize all relevant registers of the configured hardware with the values of the structure referenced by the parameter [ConfigPtr](#). All time units used within the API services of the GPT driver shall be of the unit ticks. This function shall only initialize the configured resources. Resources that are not configured in the configuration file shall not be touched. The following rules regarding initialization of controller registers shall apply to the GPT Driver implementation:

- If the hardware allows for only one usage of the register, the driver module implementing that functionality is responsible for initializing the register
- If the register can affect several hardware modules and if it is an I/O register it shall be initialized by the PORT driver
- If the register can affect several hardware modules and if it is not an I/O register it shall be initialized by the MCU driver
- One-time writable registers that require initialization directly after reset shall be initialized by the startup code

- All other registers shall be initialized by the startup code

#### Parameters

in	<i>configPtr</i>	Pointer to a selected configuration structure
----	------------------	---

@api

Definition at line 55 of file Gpt.c.

**void Gpt\_StartTimer (uint32\_t *channel*, uint32\_t *value*)**

Definition at line 115 of file Gpt.c.

**void Gpt\_StopTimer (uint32\_t *channel*)**

Definition at line 204 of file Gpt.c.

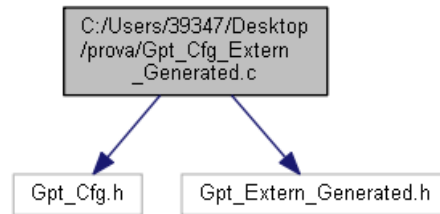
## C:/Users/39347/Desktop/prova/Gpt\_Cfg\_Extern\_Generated.c

### File Reference

```
#include "Gpt_Cfg.h"
```

```
#include "Gpt_Extern_Generated.h"
```

Include dependency graph for Gpt\_Cfg\_Extern\_Generated.c:



### Variables

- [ConfigPtr Cfg \[\]](#)

---

### Variable Documentation

#### [ConfigPtr Cfg\[\]](#)

```
Initial value:=
{
    {
        1,
        TMR1,
        SYS_CLK,
        0,
        65535,
        "GptNotification01",
    },
    {
        2,
        TMR2,
        SYS_CLK,
        64,
        255,
        "GptNotification02",
    }
}
```

Definition at line 8 of file Gpt\_Cfg\_Extern\_Generated.c.

## C:/Users/39347/Desktop/prova/Gpt\_Cfg\_Extern\_Generated.h File Reference

### Classes

- struct [ConfigPtr](#)

### Macros

- #define [CONFIGURED\\_CHANNELS](#) 2
- #define [MODULE\\_TMR1](#)
- #define [MODULE\\_TMR2](#)

### Enumerations

- enum [type\\_GptHwChannel](#) { [TMR0](#), [TMR1](#), [TMR2](#) }
- enum [type\\_GptClockReference](#) { [SYS\\_CLK](#), [EXT\\_CLK\\_FE](#) = 6, [EXT\\_CLK\\_RE](#) = 7 }

### Functions

- void [GptNotification01](#) ()
- void [GptNotification02](#) ()

### Variables

- [ConfigPtr Cfg](#) []

---

## Macro Definition Documentation

### #define CONFIGURED\_CHANNELS 2

Definition at line 19 of file Gpt\_Cfg\_Extern\_Generated.h.

### #define MODULE\_TMR1

Definition at line 21 of file Gpt\_Cfg\_Extern\_Generated.h.

### #define MODULE\_TMR2

Definition at line 22 of file Gpt\_Cfg\_Extern\_Generated.h.

---

## Enumeration Type Documentation

### enum [type\\_GptClockReference](#)

#### Enumerator:

<a href="#">SYS_CLK</a>	
<a href="#">EXT_CLK_FE</a>	
<a href="#">EXT_CLK_RE</a>	

Definition at line 6 of file Gpt\_Cfg\_Extern\_Generated.h.



enum [type\\_GptHwChannel](#)

**Enumerator:**

TMR0	
TMR1	
TMR2	

Definition at line 5 of file Gpt\_Cfg\_Extern\_Generated.h.

---

## Function Documentation

**void GptNotification01 ()**

**void GptNotification02 ()**

---

## Variable Documentation

[ConfigPtr](#) Cfg[]

Definition at line 8 of file Gpt\_Cfg\_Extern\_Generated.c.

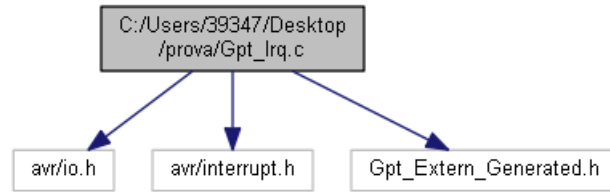
## C:/Users/39347/Desktop/prova/Gpt\_Irq.c File Reference

```
#include <avr/io.h>
```

```
#include <avr/interrupt.h>
```

```
#include "Gpt_Extern_Generated.h"
```

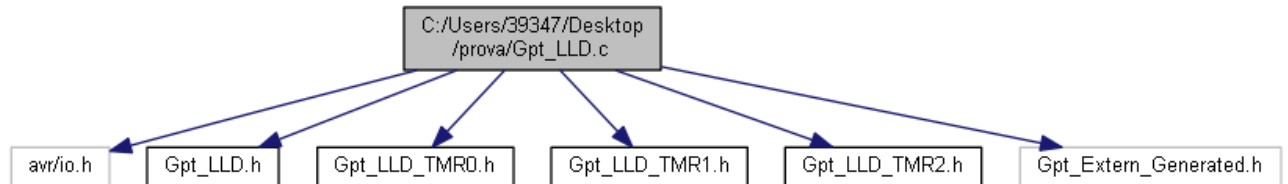
Include dependency graph for Gpt\_Irq.c:



## C:/Users/39347/Desktop/prova/Gpt\_LLD.c File Reference

```
#include <avr/io.h>
#include "Gpt_LLD.h"
#include "Gpt_LLD_TMR0.h"
#include "Gpt_LLD_TMR1.h"
#include "Gpt_LLD_TMR2.h"
#include "Gpt_Extern_Generated.h"
```

Include dependency graph for Gpt\_LLD.c:



## Functions

- void [Gpt\\_Init\\_LLD](#) (uint8\_t channel)
  - void [Gpt\\_DeInit\\_LLD](#) (uint8\_t channel)
  - void [Gpt\\_StartTimer\\_LLD](#) (uint32\_t channel, uint32\_t value)
  - void [Gpt\\_EnableNotification\\_LLD](#) (uint32\_t channel)
  - void [Gpt\\_DisableNotification\\_LLD](#) (uint32\_t channel)
  - uint32\_t [Gpt\\_GetTimeElapsed\\_LLD](#) (uint32\_t channel)
  - uint32\_t [Gpt\\_GetTimeRemaining\\_LLD](#) (uint32\_t channel)
  - void [Gpt\\_StopTimer\\_LLD](#) (uint32\_t channel)
- 

## Function Documentation

**void Gpt\_DeInit\_LLD (uint8\_t channel)**

Definition at line 52 of file Gpt\_LLD.c.

**void Gpt\_DisableNotification\_LLD (uint32\_t channel)**

Definition at line 128 of file Gpt\_LLD.c.

**void Gpt\_EnableNotification\_LLD (uint32\_t channel)**

Definition at line 104 of file Gpt\_LLD.c.

**uint32\_t Gpt\_GetTimeElapsed\_LLD (uint32\_t channel)**

Definition at line 152 of file Gpt\_LLD.c.

**uint32\_t Gpt\_GetTimeRemaining\_LLD (uint32\_t channel)**

Definition at line 177 of file Gpt\_LLD.c.

**void Gpt\_Init\_LLD (uint8\_t *channel*)**

Definition at line 28 of file Gpt\_LLD.c.

**void Gpt\_StartTimer\_LLD (uint32\_t *channel*, uint32\_t *value*)**

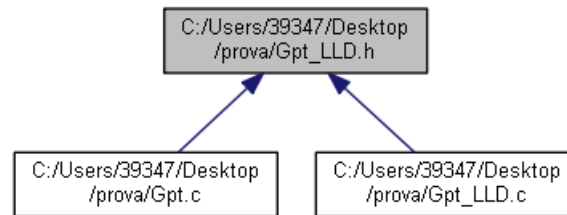
Definition at line 76 of file Gpt\_LLD.c.

**void Gpt\_StopTimer\_LLD (uint32\_t *channel*)**

Definition at line 184 of file Gpt\_LLD.c.

## C:/Users/39347/Desktop/prova/Gpt\_LLD.h File Reference

This graph shows which files directly or indirectly include this file:



### Functions

- void [Gpt\\_Init\\_LLD](#) (uint8\_t channel)
- void [Gpt\\_DeInit\\_LLD](#) (uint8\_t channel)
- uint32\_t [Gpt\\_GetTimeElapsed\\_LLD](#) (uint32\_t channel)
- uint32\_t [Gpt\\_GetTimeRemaining\\_LLD](#) (uint32\_t channel)
- void [Gpt\\_StartTimer\\_LLD](#) (uint32\_t channel, uint32\_t value)
- void [Gpt\\_StopTimer\\_LLD](#) (uint32\_t channel)
- void [Gpt\\_EnableNotification\\_LLD](#) (uint32\_t channel)
- void [Gpt\\_DisableNotification\\_LLD](#) (uint32\_t channel)
- void [Gpt\\_SetMode\\_LLD](#) ()

---

### Function Documentation

**void Gpt\_DeInit\_LLD (uint8\_t *channel*)**

Definition at line 52 of file Gpt\_LLD.c.

**void Gpt\_DisableNotification\_LLD (uint32\_t *channel*)**

Definition at line 128 of file Gpt\_LLD.c.

**void Gpt\_EnableNotification\_LLD (uint32\_t *channel*)**

Definition at line 104 of file Gpt\_LLD.c.

**uint32\_t Gpt\_GetTimeElapsed\_LLD (uint32\_t *channel*)**

Definition at line 152 of file Gpt\_LLD.c.

**uint32\_t Gpt\_GetTimeRemaining\_LLD (uint32\_t *channel*)**

Definition at line 177 of file Gpt\_LLD.c.

**void Gpt\_Init\_LLD (uint8\_t *channel*)**

Definition at line 28 of file Gpt\_LLD.c.

**void Gpt\_SetMode\_LLD ()**

**void Gpt\_StartTimer\_LLD (uint32\_t *channel*, uint32\_t *value*)**

Definition at line 76 of file Gpt\_LLD.c.

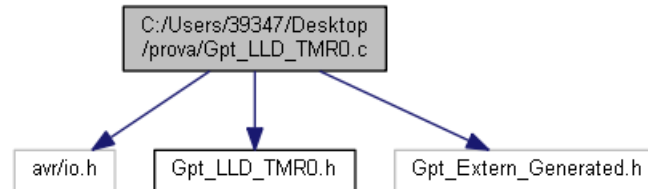
**void Gpt\_StopTimer\_LLD (uint32\_t *channel*)**

Definition at line 184 of file Gpt\_LLD.c.

## C:/Users/39347/Desktop/prova/Gpt\_LLD\_TMR0.c File Reference

```
#include <avr/io.h>
#include "Gpt_LLD_TMR0.h"
#include "Gpt_Extern_Generated.h"
```

Include dependency graph for Gpt\_LLD\_TMR0.c:



### Macros

- #define [SET\\_BIT\\_REGISTER](#)(Reg\_type, REGISTER, mask) { REGISTER |= (Reg\_type)mask; }
- #define [CLEAR\\_BIT\\_REGISTER](#)(Reg\_type, REGISTER, mask) { REGISTER &= (Reg\_type)(~((0xFF)&(mask))); }

### Functions

- void [Gpt\\_Init\\_LLD\\_TMR0](#) ()
- void [Gpt\\_DeInit\\_LLD\\_TMR0](#) (void)
- uint32\_t [Gpt\\_GetTimeElapsed\\_LLD\\_TMR0](#) (void)
- void [Gpt\\_StartTimer\\_LLD\\_TMR0](#) (uint32\_t value, uint8\_t clockValue)
- void [Gpt\\_StopTimer\\_LLD\\_TMR0](#) ()
- void [Gpt\\_EnableNotification\\_LLD\\_TMR0](#) ()
- void [Gpt\\_DisableNotification\\_LLD\\_TMR0](#) (void)
- uint8\_t [Gpt\\_CalculateClockSelect\\_TMR0](#) (uint8\_t clockSource, uint16\_t clockPrescaler)

---

### Macro Definition Documentation

**#define CLEAR\_BIT\_REGISTER( Reg\_type, REGISTER, mask) { REGISTER &= (Reg\_type)(~((0xFF)&(mask))); }**

Definition at line 98 of file Gpt\_LLD\_TMR0.c.

**#define SET\_BIT\_REGISTER( Reg\_type, REGISTER, mask) { REGISTER |= (Reg\_type)mask; }**

Definition at line 97 of file Gpt\_LLD\_TMR0.c.

---

### Function Documentation

**uint8\_t Gpt\_CalculateClockSelect\_TMR0 (uint8\_t clockSource, uint16\_t clockPrescaler)**

Definition at line 162 of file Gpt\_LLD\_TMR0.c.

**void Gpt\_DeInit\_LLD\_TMR0 (void )**

Definition at line 114 of file Gpt\_LLD\_TMR0.c.

**void Gpt\_DisableNotification\_LLD\_TMR0 (void )**

Definition at line 154 of file Gpt\_LLD\_TMR0.c.

**void Gpt\_EnableNotification\_LLD\_TMR0 (void )**

Definition at line 146 of file Gpt\_LLD\_TMR0.c.

**uint32\_t Gpt\_GetTimeElapsed\_LLD\_TMR0 (void )**

Definition at line 126 of file Gpt\_LLD\_TMR0.c.

**void Gpt\_Init\_LLD\_TMR0 (void )**

Definition at line 100 of file Gpt\_LLD\_TMR0.c.

**void Gpt\_StartTimer\_LLD\_TMR0 (uint32\_t *value*, uint8\_t *clockValue*)**

Definition at line 132 of file Gpt\_LLD\_TMR0.c.

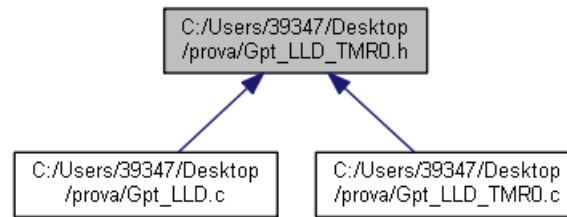
**void Gpt\_StopTimer\_LLD\_TMR0 (void )**

Definition at line 140 of file Gpt\_LLD\_TMR0.c.



## C:/Users/39347/Desktop/prova/Gpt\_LLD\_TMR0.h File Reference

This graph shows which files directly or indirectly include this file:



## Enumerations

- enum [type\\_GptClockSelect\\_TMR0](#) { [TMR0\\_NO\\_CLK](#), [TMR0\\_SYS\\_CLK\\_P0](#), [TMR0\\_SYS\\_CLK\\_P8](#), [TMR0\\_SYS\\_CLK\\_P64](#), [TMR0\\_SYS\\_CLK\\_P256](#), [TMR0\\_SYS\\_CLK\\_P1024](#) }

## Functions

- void [Gpt\\_Init\\_LLD\\_TMR0](#) (void)
- void [Gpt\\_DeInit\\_LLD\\_TMR0](#) (void)
- uint32\_t [Gpt\\_GetTimeElapsed\\_LLD\\_TMR0](#) (void)
- void [Gpt\\_StartTimer\\_LLD\\_TMR0](#) (uint32\_t value, uint8\_t clockValue)
- void [Gpt\\_StopTimer\\_LLD\\_TMR0](#) (void)
- void [Gpt\\_EnableNotification\\_LLD\\_TMR0](#) (void)
- void [Gpt\\_DisableNotification\\_LLD\\_TMR0](#) (void)
- uint8\_t [Gpt\\_CalculateClockSelect\\_TMR0](#) (uint8\_t clockSource, uint16\_t clockPrescaler)

---

## Enumeration Type Documentation

enum [type\\_GptClockSelect\\_TMR0](#)

### Enumerator:

TMR0_NO_CLK	
TMR0_SYS_CLK_P0	
TMR0_SYS_CLK_P8	
TMR0_SYS_CLK_P64	
TMR0_SYS_CLK_P256	
TMR0_SYS_CLK_P1024	

Definition at line 14 of file Gpt\_LLD\_TMR0.h.

---

## Function Documentation

**uint8\_t Gpt\_CalculateClockSelect\_TMR0 (uint8\_t *clockSource*, uint16\_t *clockPrescaler*)**

Definition at line 162 of file Gpt\_LLD\_TMR0.c.

**void Gpt\_DeInit\_LLD\_TMR0 (void )**

Definition at line 114 of file Gpt\_LLD\_TMR0.c.

**void Gpt\_DisableNotification\_LLD\_TMR0 (void )**

Definition at line 154 of file Gpt\_LLD\_TMR0.c.

**void Gpt\_EnableNotification\_LLD\_TMR0 (void )**

Definition at line 146 of file Gpt\_LLD\_TMR0.c.

**uint32\_t Gpt\_GetTimeElapsed\_LLD\_TMR0 (void )**

Definition at line 126 of file Gpt\_LLD\_TMR0.c.

**void Gpt\_Init\_LLD\_TMR0 (void )**

Definition at line 100 of file Gpt\_LLD\_TMR0.c.

**void Gpt\_StartTimer\_LLD\_TMR0 (uint32\_t *value*, uint8\_t *clockValue*)**

Definition at line 132 of file Gpt\_LLD\_TMR0.c.

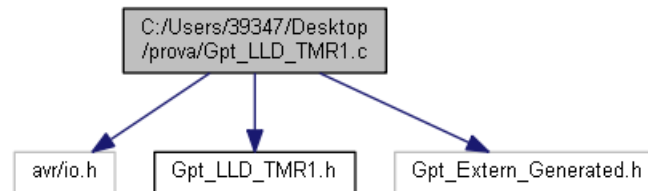
**void Gpt\_StopTimer\_LLD\_TMR0 (void )**

Definition at line 140 of file Gpt\_LLD\_TMR0.c.

## C:/Users/39347/Desktop/prova/Gpt\_LLD\_TMR1.c File Reference

```
#include <avr/io.h>
#include "Gpt_LLD_TMR1.h"
#include "Gpt_Extern_Generated.h"
```

Include dependency graph for Gpt\_LLD\_TMR1.c:



### Macros

- #define [SET\\_BIT\\_REGISTER](#)(Reg\_type, REGISTER, mask) { REGISTER |= (Reg\_type)mask; }
- #define [CLEAR\\_BIT\\_REGISTER](#)(Reg\_type, REGISTER, mask) { REGISTER &= (Reg\_type)(~((0xFF)&(mask))); }

### Functions

- void [Gpt\\_Init\\_LLD\\_TMR1](#) ()
- void [Gpt\\_DeInit\\_LLD\\_TMR1](#) (void)
- uint16\_t [Gpt\\_GetTimeElapsed\\_LLD\\_TMR1](#) (void)
- void [Gpt\\_StartTimer\\_LLD\\_TMR1](#) (uint16\_t value, uint8\_t clockValue)
- void [Gpt\\_StopTimer\\_LLD\\_TMR1](#) ()
- void [Gpt\\_EnableNotification\\_LLD\\_TMR1](#) ()
- void [Gpt\\_DisableNotification\\_LLD\\_TMR1](#) (void)
- uint8\_t [Gpt\\_CalculateClockSelect\\_TMR1](#) (uint8\_t clockSource, uint16\_t clockPrescaler)

---

### Macro Definition Documentation

**#define CLEAR\_BIT\_REGISTER( Reg\_type, REGISTER, mask) { REGISTER &= (Reg\_type)(~((0xFF)&(mask))); }**

Definition at line 159 of file Gpt\_LLD\_TMR1.c.

**#define SET\_BIT\_REGISTER( Reg\_type, REGISTER, mask) { REGISTER |= (Reg\_type)mask; }**

Definition at line 158 of file Gpt\_LLD\_TMR1.c.

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### Function Documentation

**uint8\_t [Gpt\\_CalculateClockSelect\\_TMR1](#) (uint8\_t *clockSource*, uint16\_t *clockPrescaler*)**

Definition at line 235 of file Gpt\_LLD\_TMR1.c.

**void Gpt\_DeInit\_LLD\_TMR1 (void )**

Definition at line 179 of file Gpt\_LLD\_TMR1.c.

**void Gpt\_DisableNotification\_LLD\_TMR1 (void )**

Definition at line 227 of file Gpt\_LLD\_TMR1.c.

**void Gpt\_EnableNotification\_LLD\_TMR1 (void )**

Definition at line 219 of file Gpt\_LLD\_TMR1.c.

**uint16\_t Gpt\_GetTimeElapsed\_LLD\_TMR1 (void )**

Definition at line 197 of file Gpt\_LLD\_TMR1.c.

**void Gpt\_Init\_LLD\_TMR1 (void )**

Definition at line 161 of file Gpt\_LLD\_TMR1.c.

**void Gpt\_StartTimer\_LLD\_TMR1 (uint16\_t *value*, uint8\_t *clockValue*)**

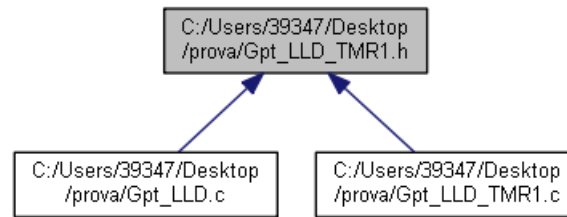
Definition at line 203 of file Gpt\_LLD\_TMR1.c.

**void Gpt\_StopTimer\_LLD\_TMR1 ()**

Definition at line 213 of file Gpt\_LLD\_TMR1.c.

## C:/Users/39347/Desktop/prova/Gpt\_LLD\_TMR1.h File Reference

This graph shows which files directly or indirectly include this file:



## Enumerations

- enum [type\\_GptClockSelect\\_TMR1](#) { [TMR1\\_NO\\_CLK](#), [TMR1\\_SYS\\_CLK\\_P0](#), [TMR1\\_SYS\\_CLK\\_P8](#), [TMR1\\_SYS\\_CLK\\_P64](#), [TMR1\\_SYS\\_CLK\\_P256](#), [TMR1\\_SYS\\_CLK\\_P1024](#) }

## Functions

- void [Gpt\\_Init\\_LLD\\_TMR1](#) (void)
- void [Gpt\\_DeInit\\_LLD\\_TMR1](#) (void)
- uint16\_t [Gpt\\_GetTimeElapsed\\_LLD\\_TMR1](#) (void)
- void [Gpt\\_StartTimer\\_LLD\\_TMR1](#) (uint16\_t value, uint8\_t clockValue)
- void [Gpt\\_StopTimer\\_LLD\\_TMR1](#) ()
- void [Gpt\\_EnableNotification\\_LLD\\_TMR1](#) (void)
- void [Gpt\\_DisableNotification\\_LLD\\_TMR1](#) (void)
- uint8\_t [Gpt\\_CalculateClockSelect\\_TMR1](#) (uint8\_t clockSource, uint16\_t clockPrescaler)

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## Enumeration Type Documentation

enum [type\\_GptClockSelect\\_TMR1](#)

### Enumerator:

TMR1_NO_CLK	
TMR1_SYS_CLK_P0	
TMR1_SYS_CLK_P8	
TMR1_SYS_CLK_P64	
TMR1_SYS_CLK_P256	
TMR1_SYS_CLK_P1024	

Definition at line 14 of file Gpt\_LLD\_TMR1.h.

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## Function Documentation

**uint8\_t Gpt\_CalculateClockSelect\_TMR1 (uint8\_t *clockSource*, uint16\_t *clockPrescaler*)**

Definition at line 235 of file Gpt\_LLD\_TMR1.c.

**void Gpt\_DeInit\_LLD\_TMR1 (void )**

Definition at line 179 of file Gpt\_LLD\_TMR1.c.

**void Gpt\_DisableNotification\_LLD\_TMR1 (void )**

Definition at line 227 of file Gpt\_LLD\_TMR1.c.

**void Gpt\_EnableNotification\_LLD\_TMR1 (void )**

Definition at line 219 of file Gpt\_LLD\_TMR1.c.

**uint16\_t Gpt\_GetTimeElapsed\_LLD\_TMR1 (void )**

Definition at line 197 of file Gpt\_LLD\_TMR1.c.

**void Gpt\_Init\_LLD\_TMR1 (void )**

Definition at line 161 of file Gpt\_LLD\_TMR1.c.

**void Gpt\_StartTimer\_LLD\_TMR1 (uint16\_t *value*, uint8\_t *clockValue*)**

Definition at line 203 of file Gpt\_LLD\_TMR1.c.

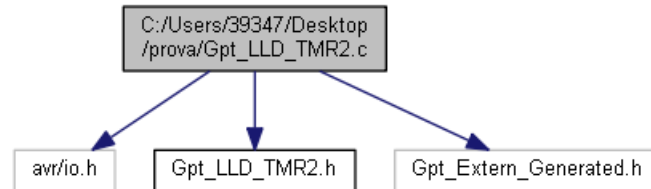
**void Gpt\_StopTimer\_LLD\_TMR1 ()**

Definition at line 213 of file Gpt\_LLD\_TMR1.c.

## C:/Users/39347/Desktop/prova/Gpt\_LLD\_TMR2.c File Reference

```
#include <avr/io.h>
#include "Gpt_LLD_TMR2.h"
#include "Gpt_Extern_Generated.h"
```

Include dependency graph for Gpt\_LLD\_TMR2.c:



### Macros

- #define [SET\\_BIT\\_REGISTER](#)(Reg\_type, REGISTER, mask) { REGISTER |= (Reg\_type)mask; }
- #define [CLEAR\\_BIT\\_REGISTER](#)(Reg\_type, REGISTER, mask) { REGISTER &= (Reg\_type)(~((0xFF)&(mask))); }

### Functions

- void [Gpt\\_Init\\_LLD\\_TMR2](#) ()
- void [Gpt\\_DeInit\\_LLD\\_TMR2](#) (void)
- uint8\_t [Gpt\\_GetTimeElapsed\\_LLD\\_TMR2](#) (void)
- void [Gpt\\_StartTimer\\_LLD\\_TMR2](#) (uint32\_t value, uint8\_t clockValue)
- void [Gpt\\_StopTimer\\_LLD\\_TMR2](#) ()
- void [Gpt\\_EnableNotification\\_LLD\\_TMR2](#) ()
- void [Gpt\\_DisableNotification\\_LLD\\_TMR2](#) (void)
- uint8\_t [Gpt\\_CalculateClockSelect\\_TMR2](#) (uint8\_t clockSource, uint16\_t clockPrescaler)

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### Macro Definition Documentation

**#define CLEAR\_BIT\_REGISTER( Reg\_type, REGISTER, mask) { REGISTER &= (Reg\_type)(~((0xFF)&(mask))); }**

Definition at line 348 of file Gpt\_LLD\_TMR2.c.

**#define SET\_BIT\_REGISTER( Reg\_type, REGISTER, mask) { REGISTER |= (Reg\_type)mask; }**

Definition at line 347 of file Gpt\_LLD\_TMR2.c.

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### Function Documentation

**uint8\_t Gpt\_CalculateClockSelect\_TMR2 (uint8\_t clockSource, uint16\_t clockPrescaler)**

Definition at line 418 of file Gpt\_LLD\_TMR2.c.

**void Gpt\_DeInit\_LLD\_TMR2 (void )**

Definition at line 366 of file Gpt\_LLD\_TMR2.c.

**void Gpt\_DisableNotification\_LLD\_TMR2 (void )**

Definition at line 410 of file Gpt\_LLD\_TMR2.c.

**void Gpt\_EnableNotification\_LLD\_TMR2 (void )**

Definition at line 402 of file Gpt\_LLD\_TMR2.c.

**uint8\_t Gpt\_GetTimeElapsed\_LLD\_TMR2 (void )**

Definition at line 382 of file Gpt\_LLD\_TMR2.c.

**void Gpt\_Init\_LLD\_TMR2 (void )**

Definition at line 350 of file Gpt\_LLD\_TMR2.c.

**void Gpt\_StartTimer\_LLD\_TMR2 (uint32\_t *value*, uint8\_t *clockValue*)**

Definition at line 388 of file Gpt\_LLD\_TMR2.c.

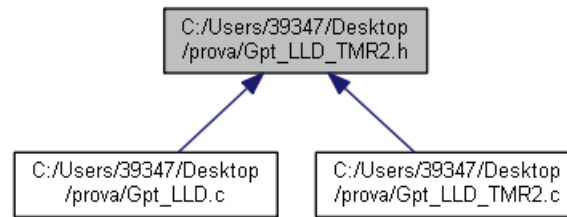
**void Gpt\_StopTimer\_LLD\_TMR2 ()**

Definition at line 396 of file Gpt\_LLD\_TMR2.c.



## C:/Users/39347/Desktop/prova/Gpt\_LLD\_TMR2.h File Reference

This graph shows which files directly or indirectly include this file:



## Enumerations

- enum [type GptClockSelectBit TMR2](#) { [TMR2\\_NO\\_CLK](#) = 0, [TMR2\\_SYS\\_CLK\\_P0](#) = 1, [TMR2\\_SYS\\_CLK\\_P8](#) = 2, [TMR2\\_SYS\\_CLK\\_P32](#) = 3, [TMR2\\_SYS\\_CLK\\_P64](#) = 4, [TMR2\\_SYS\\_CLK\\_P128](#) = 5, [TMR2\\_SYS\\_CLK\\_P256](#) = 6, [TMR2\\_SYS\\_CLK\\_P1024](#) = 7 }

## Functions

- void [Gpt\\_Init\\_LLD\\_TMR2](#) (void)
- void [Gpt\\_DeInit\\_LLD\\_TMR2](#) (void)
- uint8\_t [Gpt\\_GetTimeElapsed\\_LLD\\_TMR2](#) (void)
- void [Gpt\\_StartTimer\\_LLD\\_TMR2](#) (uint32\_t value, uint8\_t clockValue)
- void [Gpt\\_StopTimer\\_LLD\\_TMR2](#) ()
- void [Gpt\\_EnableNotification\\_LLD\\_TMR2](#) (void)
- void [Gpt\\_DisableNotification\\_LLD\\_TMR2](#) (void)
- uint8\_t [Gpt\\_CalculateClockSelect\\_TMR2](#) (uint8\_t clockSource, uint16\_t clockPrescaler)

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## Enumeration Type Documentation

enum [type GptClockSelectBit TMR2](#)

### Enumerator:

TMR2_NO_CLK	
TMR2_SYS_CLK_P0	
TMR2_SYS_CLK_P8	
TMR2_SYS_CLK_P32	
TMR2_SYS_CLK_P64	
TMR2_SYS_CLK_P128	
TMR2_SYS_CLK_P256	
TMR2_SYS_CLK_P1024	

Definition at line 27 of file Gpt\_LLD\_TMR2.h.

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## Function Documentation

**uint8\_t Gpt\_CalculateClockSelect\_TMR2 (uint8\_t *clockSource*, uint16\_t *clockPrescaler*)**

Definition at line 418 of file Gpt\_LLD\_TMR2.c.

**void Gpt\_DeInit\_LLD\_TMR2 (void )**

Definition at line 366 of file Gpt\_LLD\_TMR2.c.

**void Gpt\_DisableNotification\_LLD\_TMR2 (void )**

Definition at line 410 of file Gpt\_LLD\_TMR2.c.

**void Gpt\_EnableNotification\_LLD\_TMR2 (void )**

Definition at line 402 of file Gpt\_LLD\_TMR2.c.

**uint8\_t Gpt\_GetTimeElapsed\_LLD\_TMR2 (void )**

Definition at line 382 of file Gpt\_LLD\_TMR2.c.

**void Gpt\_Init\_LLD\_TMR2 (void )**

Definition at line 350 of file Gpt\_LLD\_TMR2.c.

**void Gpt\_StartTimer\_LLD\_TMR2 (uint32\_t *value*, uint8\_t *clockValue*)**

Definition at line 388 of file Gpt\_LLD\_TMR2.c.

**void Gpt\_StopTimer\_LLD\_TMR2 ()**

Definition at line 396 of file Gpt\_LLD\_TMR2.c.

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