Detailed Design of TIMERS Driver

Team X

**Introduction and functional overview:**

This document specifies detailed design of the DIO Driver.

**Introduction and functional overview:**

The DIO module shall comply with the following file structure:

|  |  |  |
| --- | --- | --- |
| [SRS\_TIMERS\_12330] | The Timers driver shall set the clock select to acquire the desired prescalar | [DD\_TIMERS\_12330] |
| [SRS\_TIMERS\_501] | The timers driver shall add the timer configuration in CTC mode | [DD\_TIMERS\_12330] |
| [SRS\_TIMERS\_502] | The timers driver shall add the timer configuration in overflow mode | [DD\_TIMERS\_12330] |

**API Specification:**

**Type definitions:**

**1- [DD\_TIMERS-12330]**

|  |  |
| --- | --- |
| **NAME** | S\_TIMERS |
| **TYPE** | Structure |
| **Range** | -- |
| **Description** | Structure that holds the timer\_id, prescalar value, TCNT register preloader, OCR register value. |
| **Covered requirements** | -- |

**Function definitions:**

**1-[DD\_TIMERS\_12331]**

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| --- | --- |
| **SERVICE NAME:** |  |
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