Traffic light

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| ***Seconds***  **CO\_SCH**  **(Tick = 5 ms)**  **LED**  **TIME**  **SSD** |

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| --- |
| ***SSD\_TENS*** |
| ***SSD\_UNITS*** |

|  |
| --- |
| ***LED\_RED*** |
| ***LED\_YELLOW*** |
| ***LED\_GREEN*** |

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| **0 5 10 1000 Time(ms)** |

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| --- | --- |
|  | ***LED @ 1000 ms*** |
|  | ***TIME @ 1000 ms*** |
|  | ***SSD @ 5 ms*** |

***After 1 second***

***After 1 second***

***After 1 second***

Modules diagram

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| --- |
| ***LED*** |
|  |
| ***+LED\_Init(void) : void***  ***+LED\_Update(void) : void***  ***-LED\_On(LED\_ID : const LED\_t) : void***  ***-LED\_Off(LED\_ID : const LED\_t) : void*** |

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| --- |
| ***TIME*** |
|  |
| ***+TIME\_Init(void) : void***  ***+TIME\_Update(void) : void*** |

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| --- |
| ***SSD*** |
| ***-SSD\_Symbol : u8\_t*** |
| ***+SSD\_Init(void) : void***  ***+SSD\_Update(void) : void***  ***+SSD\_Set\_Symbol(SYMBOL : const u8\_t) : void***  ***-SSD\_On(SSD\_ID : const SSD\_t) : void***  ***-SSD\_Off(SSD\_ID : const SSD\_t) : void***  ***-SSD\_Refresh(void) : void***  ***-SSD\_Update\_Symbol(SYMBOL : const u8\_t) : void*** |

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| --- | --- | --- | --- | --- | --- |
| *Task* | *Action* | *BCET*  *(ms)* | *WCET*  *(ms)* | *Periode Of Action*  *(ms)* | *Periode Of Task*  *(ms)* |
| *LED\_Update* | ***Update Red, Yellow, Green Led*** | ***~0*** | ***~0*** | ***1000*** | ***1000*** |
| *TIME\_Update* | ***Update Seconds*** | ***~0*** | ***~0*** | ***1000*** | ***1000*** |
| *SSD\_Update* | ***Display Seconds*** | ***~0*** | ***~0*** | ***5*** | ***5*** |
| *TICK(ms)* | | | | | ***5*** |
| *Major Cycle(ms)* | | | | | ***1000*** |