



Seven segment module

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Introduction

This documentation for 7 segment module in HAL layer for atmega32 microcontroller using BCD (Binary Coded Decimal) with structural methodology by creating instance of keypad and doing necessary operation on that instance.

First section for defining new data types to use them in function.

First data types

Name	ssd_t
Variable name	pin_t p1
Variable name	pin_t p2
Variable name	pin_t p4
Variable name	pin_t p8
Variable name	pin_t en
Variable name	u8 common_t
Description	New data type for 7segment is struct contain 4 pins to represent the value and one pin for enable with variable to select the type of ssd

Functions

Name	ECU_7Seg_Init
INPUT	ssd_t * ssd_obj
RETURN	ErrorStateType ret
Description	Function to initialize the 7segment with its pin's direction and state. take pointer to ssd_t

Name	ECU_7Seg_Print_Num
INPUT	keypad_t * keypad
INPUT	u8 value
RETURN	ErrorStateType ret
Description	Function to display the number on the ssd

Name	ECU_7Seg_disable
INPUT	keypad_t * keypad
RETURN	ErrorStateType ret
Description	Function to disable the seven segment

