

DE10-Lite SSD IP

Version 2.0

2/18/2021 8:59:00 AM

Table of Contents

Module Index	1
File Index	1
Module Documentation	1
Display toggle masks	1
Display write index	1
File Documentation	2
HAL/inc/DE10_Lite_SSD_Driver.h	2
Index	3

Module Index

Modules

Here is a list of all modules:

Display toggle masks.....	1
Display write index.....	1

File Index

File List

Here is a list of all documented files with brief descriptions:

HAL/inc/DE10_Lite_SSD_Driver.h	2
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Module Documentation

Display toggle masks

Use these masks with function `ssd_enable` to improve readability.

Macros

- `#define HEX0_ENABLE_ID 0x01`
- `#define HEX1_ENABLE_ID 0x02`
- `#define HEX2_ENABLE_ID 0x04`
- `#define HEX3_ENABLE_ID 0x08`
- `#define HEX4_ENABLE_ID 0x10`
- `#define HEX5_ENABLE_ID 0x20`
- `#define HEX_ALL_ENABLE 0x3f`

Detailed Description

Use these masks with function `ssd_enable` to improve readability.

Display write index

Use these indices with function `ssd_write` to improve readability.

Macros

- `#define HEX0_DATA_ID 0x00`

- `#define HEX1_DATA_ID 0x01`
 - `#define HEX2_DATA_ID 0x02`
 - `#define HEX3_DATA_ID 0x03`
 - `#define HEX4_DATA_ID 0x04`
 - `#define HEX5_DATA_ID 0x05`
-

Detailed Description

Use these indices with function `ssd_write` to improve readability.

File Documentation

HAL/inc/DE10_Lite_SSD_Driver.h File Reference

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

Macros

- `#define HEX0_ENABLE_ID 0x01`
- `#define HEX1_ENABLE_ID 0x02`
- `#define HEX2_ENABLE_ID 0x04`
- `#define HEX3_ENABLE_ID 0x08`
- `#define HEX4_ENABLE_ID 0x10`
- `#define HEX5_ENABLE_ID 0x20`
- `#define HEX_ALL_ENABLE 0x3f`
- `#define HEX0_DATA_ID 0x00`
- `#define HEX1_DATA_ID 0x01`
- `#define HEX2_DATA_ID 0x02`
- `#define HEX3_DATA_ID 0x03`
- `#define HEX4_DATA_ID 0x04`
- `#define HEX5_DATA_ID 0x05`
- `#define HEX_DECIMAL 0x80`
Special value for writing a decimal point to display.

Functions

- `void ssd_enable (uint8_t displays)`
Function used to toggle displays on or off.
 - `void ssd_write (uint8_t display, uint8_t value)`
Function used to write a hexadecimal value to a specific display. Example: To display F in first display use `ssd_write(HEX0_DATA_ID, 0xf)`.
-

Detailed Description

Drivers for the Seven Segment Display component for use with the DE10-Lite board.

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Version

2.0

Date

2017-2021

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Function Documentation

void `ssd_enable` (**uint8_t** *displays*)

Function used to toggle displays on or off.

Parameters

<i>displays</i>	Any combination of HEX ID values to specify which displays should be enabled or disabled. <code>HEX_ALL_ENABLE</code> can be used to enable all displays and value of 0 turns all off.
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void `ssd_write` (**uint8_t** *display*, **uint8_t** *value*)

Function used to write a hexadecimal value to a specific display. Example: To display F in first display use `ssd_write(HEX0_DATA_ID, 0xf)`.

Parameters

<i>display</i>	Defines which display to write to, see "Display write index".
<i>value</i>	Hexadecimal value (0 - F) to write to the display.

Index

DE10_Lite_SSD_Driver.h

`ssd_enable`, i

`ssd_write`, i

Display toggle masks, i

Display write index, i

HAL/inc/DE10_Lite_SSD_Driver.h, i

`ssd_enable`

 DE10_Lite_SSD_Driver.h, i

`ssd_write`

 DE10_Lite_SSD_Driver.h, i