

Energia Library — Universal Color LCD BoosterPack

Generated by Doxygen 1.8.2

Sat Nov 17 2012 21:54:54



# Contents

<b>1</b>	<b>Class Index</b>	<b>1</b>
1.1	Class List . . . . .	1
<b>2</b>	<b>File Index</b>	<b>3</b>
2.1	File List . . . . .	3
<b>3</b>	<b>Class Documentation</b>	<b>5</b>
3.1	LCD_Colour Class Reference . . . . .	5
3.1.1	Detailed Description . . . . .	5
3.1.2	Constructor & Destructor Documentation . . . . .	6
3.1.2.1	LCD_Colour . . . . .	6
3.1.2.2	LCD_Colour . . . . .	6
3.1.3	Member Function Documentation . . . . .	6
3.1.3.1	fontX . . . . .	6
3.1.3.2	fontY . . . . .	6
3.1.3.3	getButton . . . . .	6
3.1.3.4	setFont . . . . .	7
3.1.3.5	text . . . . .	7
3.1.3.6	WhoAml . . . . .	7
<b>4</b>	<b>File Documentation</b>	<b>9</b>
4.1	LCD_Colour.h File Reference . . . . .	9
4.1.1	Detailed Description . . . . .	9
4.2	Terminal12.h File Reference . . . . .	10
4.2.1	Detailed Description . . . . .	10
4.3	Terminal6.h File Reference . . . . .	11
4.3.1	Detailed Description . . . . .	11
	<b>Index</b>	<b>11</b>



# Chapter 1

## Class Index

### 1.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

<a href="#">LCD_Colour</a>	
Class for LCD BoosterPack and Nokia 7110 screen . . . . .	<a href="#">5</a>



## Chapter 2

# File Index

### 2.1 File List

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

<a href="#">LCD_Colour.h</a>	
Library for <a href="#">LCD_Colour</a> with Nokia 7110 display . . . . .	<a href="#">9</a>
<a href="#">Terminal12.h</a>	
Font library . . . . .	<a href="#">10</a>
<a href="#">Terminal6.h</a>	
Font library . . . . .	<a href="#">11</a>





## Chapter 3

# Class Documentation

### 3.1 LCD\_Colour Class Reference

Class for LCD BoosterPack and Nokia 7110 screen.

```
#include <LCD_Colour.h>
```

#### Public Member Functions

- [LCD\\_Colour](#) ()  
*Constructor with default pins.*
- [LCD\\_Colour](#) (uint8\_t pinChipSelect, uint8\_t pinSerialClock, uint8\_t pinSerialData, uint8\_t pinDataCommand, uint8\_t pinPushButton)  
*Constructor with specific pins.*
- void [begin](#) ()  
*Initialise.*
- String [WhoAml](#) ()  
*Request information about the screen.*
- void [clear](#) ()  
*Clear the screen.*
- void [setFont](#) (uint8\_t font=0)  
*Switch backlight.*
- void [setColour](#) (uint16\_t colour)
- uint8\_t [fontX](#) ()  
*Font size, x-axis.*
- uint8\_t [fontY](#) ()  
*Font size, y-axis.*
- void [text](#) (uint8\_t x, uint8\_t y, String s)  
*Draw ASCII text (row and line coordinates)*
- boolean [getButton](#) ()  
*Get button state.*

#### 3.1.1 Detailed Description

Class for LCD BoosterPack and Nokia 7110 screen.

### 3.1.2 Constructor & Destructor Documentation

#### 3.1.2.1 LCD.Colour::LCD.Colour ( )

Constructor with default pins.

##### Note

Default pins for LaunchPad  
P2\_2 = Chip Select  
P2\_4 = Serial Clock  
P2\_0 = Serial Data  
P2\_3 = Data/Command  
P1\_0 = Reset  
P2\_1 = Backlight  
P2\_5 = Push Button

#### 3.1.2.2 LCD.Colour::LCD.Colour ( uint8\_t *pinChipSelect*, uint8\_t *pinSerialClock*, uint8\_t *pinSerialData*, uint8\_t *pinDataCommand*, uint8\_t *pinPushButton* )

Constructor with specific pins.

##### Parameters

<i>pinChipSelect</i>	Chip Select pin number
<i>pinSerialClock</i>	Serial Clock pin number
<i>pinSerialData</i>	Serial Data pin number
<i>pinData-Command</i>	Data Command pin number
<i>pinReset</i>	Reset pin number
<i>pinBacklight</i>	Backlight pin number
<i>pinPushButton</i>	Push Button pin number

### 3.1.3 Member Function Documentation

#### 3.1.3.1 uint8\_t LCD.Colour::fontX ( )

Font size, x-axis.

##### Returns

horizontal size of current font, in pixels

#### 3.1.3.2 uint8\_t LCD.Colour::fontY ( )

Font size, y-axis.

##### Returns

vertical size of current font, in pixels

#### 3.1.3.3 boolean LCD.Colour::getButton ( )

Get button state.

**Returns**

true=pressed, otherwise false

**Note**

in case the button is pressed, debounce is checked

**3.1.3.4 void LCD\_Colour::setFont ( uint8\_t font = 0 )**

Switch backlight.

**Parameters**

<i>flag</i>	default=true backlight on, false off Select font
<i>font</i>	default=0=small, 1=large

**3.1.3.5 void LCD\_Colour::text ( uint8\_t x, uint8\_t y, String s )**

Draw ASCII text (row and line coordinates)

**Parameters**

<i>x</i>	row number, x-axis
<i>y</i>	line number, y-axis
<i>s</i>	text string

**3.1.3.6 String LCD\_Colour::WhoAml ( )**

Request information about the screen.

**Returns**

string with hardware version

The documentation for this class was generated from the following files:

- [LCD\\_Colour.h](#)
- LCD\_Colour.cpp



# Chapter 4

## File Documentation

### 4.1 LCD\_Colour.h File Reference

Library for [LCD\\_Colour](#) with Nokia 7110 display.

```
#include "Terminal6.h"
#include "Terminal12.h"
Include dependency graph for LCD_Colour.h:
```

#### Classes

- class [LCD\\_Colour](#)  
*Class for LCD BoosterPack and Nokia 7110 screen.*

#### Macros

- `#define LCD_Colour_h`
- `#define COLOR_16_BLACK 0x0000`
- `#define COLOR_16_BLUE 0x001f`
- `#define COLOR_16_RED 0xf800`
- `#define COLOR_16_GREEN 0x07e0`
- `#define COLOR_16_CYAN 0x07ff`
- `#define COLOR_16_MAGENTA 0xf81f`
- `#define COLOR_16_YELLOW 0xffe0`
- `#define COLOR_16_WHITE 0xffff`
- `#define COLOR_16_ORANGE 0xfd20`
- `#define COLOR_16_GRAY 0xbdf7`

#### 4.1.1 Detailed Description

Library for [LCD\\_Colour](#) with Nokia 7110 display. Based on LCD BoosterPack by SugarAddict

Uses GLCD fonts

Push button on screen to turn backlight on / off

Developed with [embedXcode](#)

**Author**

Rei VILO

<http://embeddedcomputing.weebly.com>

**Date**

May 28, 2012

**Version**

release 102

**Copyright**

© Rei VILO, 2010-2012

CC = BY NC SA

<http://embeddedcomputing.weebly.com>

**See Also**

- LCD BoosterPack by SugarAddict » Mon Jan 02, 2012 6:01 am  
<http://www.43oh.com/forum/viewtopic.php?p=15140#p15140>
- Fonts generated with MikroElektronika GLCD Font Creator 1.2.0.0  
<http://www.mikroe.com>

## 4.2 Terminal12.h File Reference

Font library.

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

### 4.2.1 Detailed Description

Font library. Font Terminal 12 x 16

*Developed with* [embedXcode](#)

**Author**

Rei VILO

<http://embeddedcomputing.weebly.com>

**Date**

May 26, 2012

**Version**

100

**Copyright**

© Rei VILO, 2012

CC = BY NC SA

**See Also**

Font Generated by MikroElektronika GLCD Font Creator 1.2.0.0  
MikroeElektronika 2011 <http://www.mikroe.com>

## 4.3 Terminal6.h File Reference

Font library.

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

### 4.3.1 Detailed Description

Font library. Font Terminal 6 x 8

*Developed with* [embedXcode](#)

#### Author

Rei VILO

<http://embeddedcomputing.weebly.com>

#### Date

May 26, 2012

#### Version

100

#### Copyright

© Rei VILO, 2012

CC = BY NC SA

#### See Also

Font Generated by MikroElektronika GLCD Font Creator 1.2.0.0

MikroeElektronika 2011 <http://www.mikroe.com>