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u8g\_dev\_uc1611\_dogxl240.c

Universal 8bit Graphics Library

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\*/

#include "u8g.h"

#define WIDTH 240

#define HEIGHT 128

#define PAGE\_HEIGHT 8

static const uint8\_t u8g\_dev\_uc1611\_dogxl240\_init\_seq[] PROGMEM = {

U8G\_ESC\_CS(1), // enable chip

U8G\_ESC\_ADR(0), // instruction mode

0xF1, // set last COM electrode

0x7F, // DOGXL240

0xF2, // set display start line

0x00, // 0

0xF3, // set display end line

0x7F, // DOGXL240

0x81, // set contrast (0-255)

0xAA, // DOGXL240

0xC0, // set view

//0x04, // topview

0x02, // bottomview

0xA3, // set line rate (9.4k)

0xE9, // set bias ratio (10)

0xA9, // enable display

0xD1, // set black and white mode

U8G\_ESC\_CS(0), // disable chip

U8G\_ESC\_END // end of sequence

};

static void u8g\_dev\_dogxl240\_set\_page(u8g\_t \*u8g, u8g\_dev\_t \*dev, unsigned char page)

{

u8g\_WriteByte(u8g, dev, 0x70);

u8g\_WriteByte(u8g, dev, 0x60 + (page&0x0F));

}

static const uint8\_t u8g\_dev\_uc1611\_dogxl240\_data\_start[] PROGMEM = {

U8G\_ESC\_ADR(0), /\* instruction mode \*/

U8G\_ESC\_CS(1), /\* enable chip \*/

0x10, /\* set upper 4 bit of the col adr to 0 \*/

0x00, /\* set lower 4 bit of the col adr to 0 \*/

U8G\_ESC\_END /\* end of sequence \*/

};

static uint8\_t u8g\_dev\_uc1611\_dogxl240\_fn(u8g\_t \*u8g, u8g\_dev\_t \*dev, uint8\_t msg, void \*arg)

{

switch(msg)

{

case U8G\_DEV\_MSG\_INIT:

u8g\_InitCom(u8g, dev, U8G\_SPI\_CLK\_CYCLE\_300NS);

u8g\_WriteEscSeqP(u8g, dev, u8g\_dev\_uc1611\_dogxl240\_init\_seq);

break;

case U8G\_DEV\_MSG\_STOP:

break;

case U8G\_DEV\_MSG\_PAGE\_NEXT:

{

u8g\_pb\_t \*pb = (u8g\_pb\_t \*)(dev->dev\_mem);

u8g\_WriteEscSeqP(u8g, dev, u8g\_dev\_uc1611\_dogxl240\_data\_start);

u8g\_dev\_dogxl240\_set\_page(u8g, dev, pb->p.page); /\* select current page (uc1611) \*/

u8g\_SetAddress(u8g, dev, 1); /\* data mode \*/

if ( u8g\_pb\_WriteBuffer(pb, u8g, dev) == 0 )

return 0;

u8g\_SetChipSelect(u8g, dev, 1);

}

break;

case U8G\_DEV\_MSG\_CONTRAST:

u8g\_SetChipSelect(u8g, dev, 0);

u8g\_SetAddress(u8g, dev, 0); /\* instruction mode \*/

u8g\_WriteByte(u8g, dev, 0x81);

u8g\_WriteByte(u8g, dev, (\*(uint8\_t \*)arg) >> 2); /\* set contrast from, keep gain at 0 \*/

u8g\_SetChipSelect(u8g, dev, 1);

return 1;

}

return u8g\_dev\_pb8v1\_base\_fn(u8g, dev, msg, arg);

}

U8G\_PB\_DEV(u8g\_dev\_uc1611\_dogxl240\_i2c , WIDTH, HEIGHT, PAGE\_HEIGHT, u8g\_dev\_uc1611\_dogxl240\_fn, U8G\_COM\_UC\_I2C);

U8G\_PB\_DEV(u8g\_dev\_uc1611\_dogxl240\_sw\_spi , WIDTH, HEIGHT, PAGE\_HEIGHT, u8g\_dev\_uc1611\_dogxl240\_fn, U8G\_COM\_SW\_SPI);

U8G\_PB\_DEV(u8g\_dev\_uc1611\_dogxl240\_hw\_spi , WIDTH, HEIGHT, PAGE\_HEIGHT, u8g\_dev\_uc1611\_dogxl240\_fn, U8G\_COM\_HW\_SPI);