/\*

u8g\_arduino\_std\_sw\_spi.c

Universal 8bit Graphics Library

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#include "u8g.h"

#if defined(ARDUINO)

#if ARDUINO < 100

#include <WProgram.h>

#else

#include <Arduino.h>

#endif

void u8g\_arduino\_sw\_spi\_shift\_out(uint8\_t dataPin, uint8\_t clockPin, uint8\_t val)

{

uint8\_t i = 8;

do

{

if ( val & 128 )

digitalWrite(dataPin, HIGH);

else

digitalWrite(dataPin, LOW);

val <<= 1;

u8g\_MicroDelay(); /\* 23 Sep 2012 \*/

//delay(1);

digitalWrite(clockPin, HIGH);

u8g\_MicroDelay(); /\* 23 Sep 2012 \*/

//delay(1);

digitalWrite(clockPin, LOW);

u8g\_MicroDelay(); /\* 23 Sep 2012 \*/

//delay(1);

i--;

} while( i != 0 );

}

uint8\_t u8g\_com\_arduino\_std\_sw\_spi\_fn(u8g\_t \*u8g, uint8\_t msg, uint8\_t arg\_val, void \*arg\_ptr)

{

switch(msg)

{

case U8G\_COM\_MSG\_INIT:

u8g\_com\_arduino\_assign\_pin\_output\_high(u8g);

u8g\_com\_arduino\_digital\_write(u8g, U8G\_PI\_SCK, LOW);

u8g\_com\_arduino\_digital\_write(u8g, U8G\_PI\_MOSI, LOW);

break;

case U8G\_COM\_MSG\_STOP:

break;

case U8G\_COM\_MSG\_RESET:

if ( u8g->pin\_list[U8G\_PI\_RESET] != U8G\_PIN\_NONE )

u8g\_com\_arduino\_digital\_write(u8g, U8G\_PI\_RESET, arg\_val);

break;

case U8G\_COM\_MSG\_CHIP\_SELECT:

if ( arg\_val == 0 )

{

/\* disable \*/

u8g\_com\_arduino\_digital\_write(u8g, U8G\_PI\_CS, HIGH);

}

else

{

/\* enable \*/

u8g\_com\_arduino\_digital\_write(u8g, U8G\_PI\_SCK, LOW);

u8g\_com\_arduino\_digital\_write(u8g, U8G\_PI\_CS, LOW);

}

break;

case U8G\_COM\_MSG\_WRITE\_BYTE:

u8g\_arduino\_sw\_spi\_shift\_out(u8g->pin\_list[U8G\_PI\_MOSI], u8g->pin\_list[U8G\_PI\_SCK], arg\_val);

break;

case U8G\_COM\_MSG\_WRITE\_SEQ:

{

register uint8\_t \*ptr = arg\_ptr;

while( arg\_val > 0 )

{

u8g\_arduino\_sw\_spi\_shift\_out(u8g->pin\_list[U8G\_PI\_MOSI], u8g->pin\_list[U8G\_PI\_SCK], \*ptr++);

arg\_val--;

}

}

break;

case U8G\_COM\_MSG\_WRITE\_SEQ\_P:

{

register uint8\_t \*ptr = arg\_ptr;

while( arg\_val > 0 )

{

u8g\_arduino\_sw\_spi\_shift\_out(u8g->pin\_list[U8G\_PI\_MOSI], u8g->pin\_list[U8G\_PI\_SCK], u8g\_pgm\_read(ptr));

ptr++;

arg\_val--;

}

}

break;

case U8G\_COM\_MSG\_ADDRESS: /\* define cmd (arg\_val = 0) or data mode (arg\_val = 1) \*/

u8g\_com\_arduino\_digital\_write(u8g, U8G\_PI\_A0, arg\_val);

break;

}

return 1;

}

#else /\* ARDUINO \*/

uint8\_t u8g\_com\_arduino\_std\_sw\_spi\_fn(u8g\_t \*u8g, uint8\_t msg, uint8\_t arg\_val, void \*arg\_ptr)

{

return 1;

}

#endif /\* ARDUINO \*/