/\*

u8g\_line.h

Universal 8bit Graphics Library

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\*/

#include "u8g.h"

void u8g\_DrawLine(u8g\_t \*u8g, u8g\_uint\_t x1, u8g\_uint\_t y1, u8g\_uint\_t x2, u8g\_uint\_t y2)

{

u8g\_uint\_t tmp;

u8g\_uint\_t x,y;

u8g\_uint\_t dx, dy;

u8g\_int\_t err;

u8g\_int\_t ystep;

uint8\_t swapxy = 0;

/\* no BBX intersection check at the moment, should be added... \*/

if ( x1 > x2 ) dx = x1-x2; else dx = x2-x1;

if ( y1 > y2 ) dy = y1-y2; else dy = y2-y1;

if ( dy > dx )

{

swapxy = 1;

tmp = dx; dx =dy; dy = tmp;

tmp = x1; x1 =y1; y1 = tmp;

tmp = x2; x2 =y2; y2 = tmp;

}

if ( x1 > x2 )

{

tmp = x1; x1 =x2; x2 = tmp;

tmp = y1; y1 =y2; y2 = tmp;

}

err = dx >> 1;

if ( y2 > y1 ) ystep = 1; else ystep = -1;

y = y1;

for( x = x1; x <= x2; x++ )

{

if ( swapxy == 0 )

u8g\_DrawPixel(u8g, x, y);

else

u8g\_DrawPixel(u8g, y, x);

err -= (uint8\_t)dy;

if ( err < 0 )

{

y += (u8g\_uint\_t)ystep;

err += (u8g\_uint\_t)dx;

}

}

}