```c
/*
 * utilities.c
 *  Taylor Cowley and Andrew Okazaki
 */

#include "util.h"
#define ROW_MULTIPLIER 1280 // 640 * 2 for screen doubling
#define ROW 640             // one row offset
#define COL_MULTIPLIER 2    // Offset of the row

/*
 * Draws a pixel on the screen. To compensate for our double-resolution screen,
 * it must draw 4 real pixels for every in-came pixel.
 */
void util_draw_pixel(uint32_t *frame, uint32_t row, uint32_t c,uint32_t color){
    // We draw 4 pixels for every 1 small-screen pixel
    frame[row * ROW_MULTIPLIER + c * COL_MULTIPLIER]            = color;
    frame[row * ROW_MULTIPLIER + c * COL_MULTIPLIER + 1]        = color;
    frame[row * ROW_MULTIPLIER + ROW + c * COL_MULTIPLIER]      = color;
    frame[row * ROW_MULTIPLIER + ROW + c * COL_MULTIPLIER + 1]  = color;
}
```