

The physical 'chained' matrix panel wiring (example)

(example with 4 x (64w x 32h px) LED matrix panels chained in series)



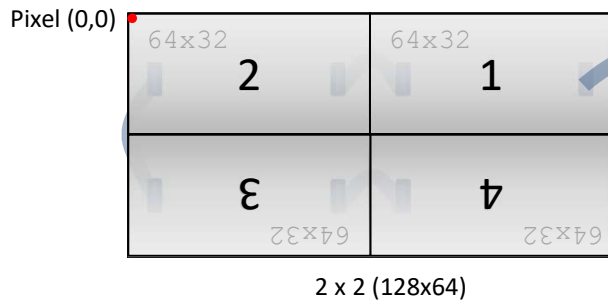
In ESP32-HUB75-MatrixPanel-I2S-DMA.h:

```
MATRIX_HEIGHT    32
MATRIX_WIDTH     64*4
```

Note: No 'Virtual Display' class usage is required for a simple horizontal chain / display.

'Virtual Display' class to create a matrix of LED matrix panels

Top-right DOWN serpentine 'S' chain



```
#define NUM_ROWS 2
#define NUM_COLS 2
#define PANEL_RES_X 64
#define PANEL_RES_Y 32
```

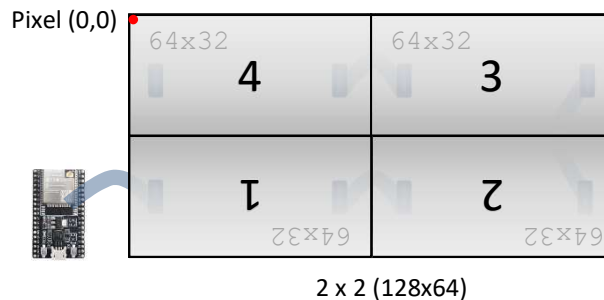
/* Create physical module driver class AND virtual (chained) display class. */

```
#include <ESP32-VirtualMatrixPanel-I2S-DMA.h>
```

```
RGB64x32MatrixPanel_I2S_DMA dma_display;
```

```
VirtualMatrixPanel virtualDisp(dma_display, NUM_ROWS, NUM_COLS, PANEL_RES_X, PANEL_RES_Y,
true, true);
```

Bottom-left UP serpentine 'S' chain



```
#define NUM_ROWS 2
#define NUM_COLS 2
#define PANEL_RES_X 64
#define PANEL_RES_Y 32
```

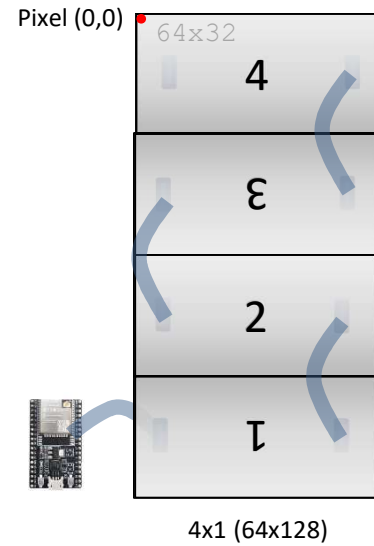
/* Create physical module driver class AND virtual (chained) display class. */

```
#include <ESP32-VirtualMatrixPanel-I2S-DMA.h>
```

```
RGB64x32MatrixPanel_I2S_DMA dma_display;
```

```
VirtualMatrixPanel virtualDisp(dma_display, NUM_ROWS, NUM_COLS, PANEL_RES_X, PANEL_RES_Y,
true, false);
```

Vertical serpentine 'S' chain / stack



```
#define NUM_ROWS 4
#define NUM_COLS 1
#define PANEL_RES_X 64
#define PANEL_RES_Y 32

/* Create physical module driver class AND virtual (chained) display class. */
#include <ESP32-VirtualMatrixPanel-I2S-DMA.h>
RGB64x32MatrixPanel_I2S_DMA dma_display;
VirtualMatrixPanel virtualDisp(dma_display, NUM_ROWS, NUM_COLS, PANEL_RES_X, PANEL_RES_Y, true);
```