The physical 'chained' matrix panel wiring (example)

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

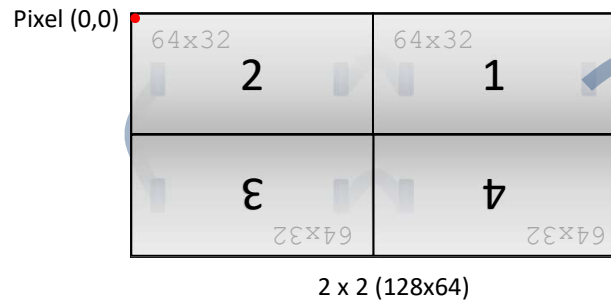| 64x32	64x32	64x32	64x32
4	**3**	**2**	**1**

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

Pixel (0,0)

64x32	64x32
2	**1**
Ɛ	**ㄣ**
64x32	64x32

2 x 2 (128x64)

```
#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);
```
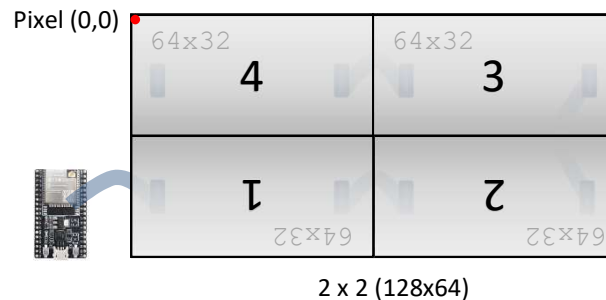
Bottom-left UP serpentine 'S' chain

Pixel (0,0)

64x32	64x32
4	**3**
Ɩ	**ᄅ**
64x32	64x32

2 x 2 (128x64)

```
#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

Pixel (0,0)

64x32

4

Ɛ

2

Ɩ

4x1 (64x128)

```
#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);
```