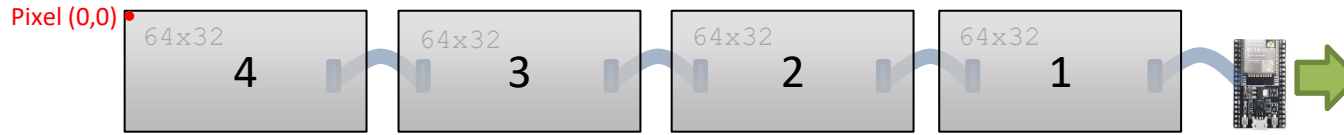# The physical 'chained' matrix panel wiring (example)

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

Pixel (0,0)

Note: No 'Virtual Display' class usage is required for a simple horizontal only chain / display.
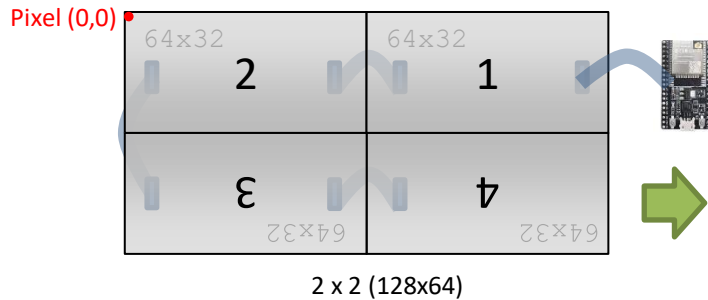
In your code / sketch:

```
#define PANEL_RES_X 64
#define PANEL_RES_X 32
#define PANEL_CHAIN 4

HUB75_I2S_CFG mxconfig
 (PANEL_RES_X, PANEL_RES_Y,
  PANEL_CHAIN);
```

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

(refer to the 'ChainedPanels' example sketch in the examples folder)
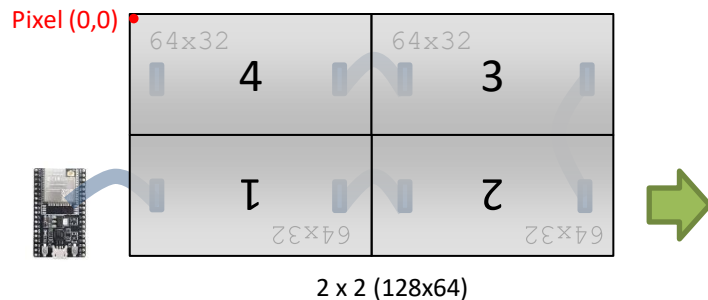
Top-right DOWN serpentine 'S' chain

Pixel (0,0)

2 x 2 (128x64)

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

/* Create physical dma output 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

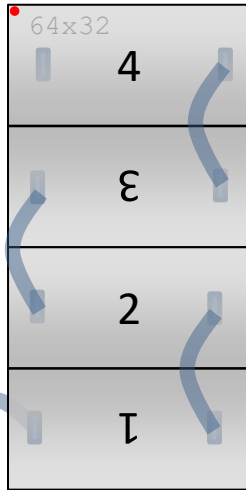Pixel (0,0)

2 x 2 (128x64)

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

/* Create physical dma output 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 dma output 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);
```

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