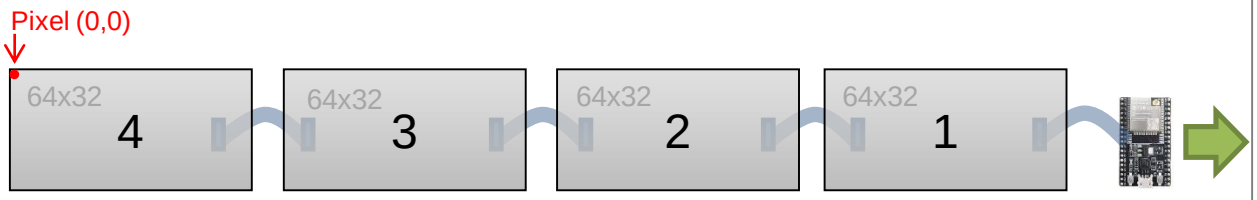
Standard Use – Horizontal ‘chained’ LED matrix panels

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



Note: ‘VirtualMatrixPanel’ usage is **not** required for a simple horizontal chain!

In the code / sketch:

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

HUB75_I2S_CFG mxconfig(
        PANEL_RES_X,  // module width
        PANEL_RES_Y,  // module height
        PANEL_CHAIN   // chain length
);
```

Using the ‘VirtualMatrixPanel’ to combine panels into a larger display

(refer to the ‘ChainedPanels’ example sketch)

Example 1) Top-right DOWN serpentine ‘S’ chain


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

#define NUM_ROWS         2
#define NUM_COLS         2
#define PANEL_RES_X      64
#define PANEL_RES_Y      32
#define PANEL_CHAIN NUM_ROWS*NUM_COLS

#define VIRTUAL_MATRIX_CHAIN_TYPE    CHAIN_TOP_RIGHT_DOWN
```

Refer to: [ESP32-HUB75-MatrixPanel-DMA/examples/ChainedPanels at master · mrfaptastic/ESP32-HUB75-MatrixPanel-DMA · GitHub]

Using the ‘VirtualMatrixPanel’ to combine panels into a larger display

(refer to the ‘ChainedPanels’ example sketch in the examples folder)

Example 2) Bottom-left UP serpentine ‘S’ chain

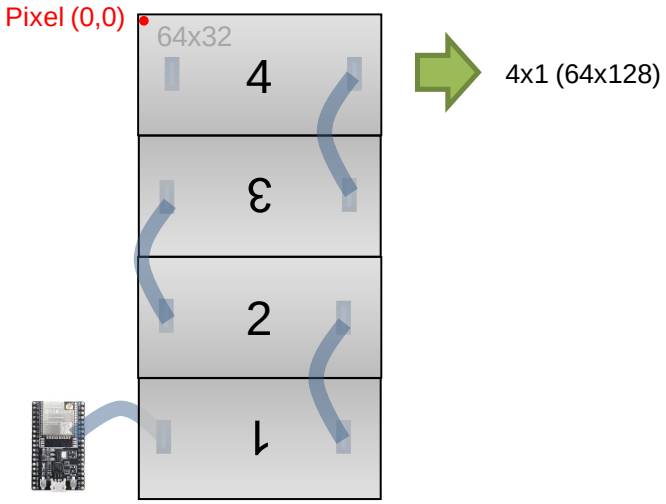

```
#include <ESP32-VirtualMatrixPanel-I2S-DMA.h>

#define NUM_ROWS        2
#define NUM_COLS        2
#define PANEL_RES_X     64
#define PANEL_RES_Y     32
#define PANEL_CHAIN NUM_ROWS*NUM_COLS

#define VIRTUAL_MATRIX_CHAIN_TYPE    CHAIN_BOTTOM_LEFT_UP
```

Refer to: [ESP32-HUB75-MatrixPanel-DMA/examples/ChainedPanels at master · mrfaptastic/ESP32-HUB75-MatrixPanel-DMA · GitHub]

Using the ‘VirtualMatrixPanel’ to combine panels into a larger display

(refer to the ‘ChainedPanels’ example sketch in the examples folder)

Example 3) Vertical serpentine ‘S’ chain / stack




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

#define NUM_ROWS 4
#define NUM_COLS 1
#define PANEL_RES_X 64
#define PANEL_RES_Y 32
#define PANEL_CHAIN NUM_ROWS*NUM_COLS

#define VIRTUAL_MATRIX_CHAIN_TYPE    CHAIN_BOTTOM_LEFT_UP
```

Refer to: ESP32-HUB75-MatrixPanel-DMA/examples/ChainedPanels at master · mrfaptastic/ESP32-HUB75-MatrixPanel-DMA · GitHub

👌😀

Using the ‘VirtualMatrixPanel’ to combine panels into a larger display

Serpentine ‘S’ chaining types supported.

CHAIN_TOP_LEFT_DOWN

ESP

panel 9	8	7
4	5	6
3	2	1

CHAIN_TOP_RIGHT_DOWN

7	8	panel 9
6	5	4
1	2	3

ESP

Legend
upside down panel

CHAIN_BOTTOM_LEFT_UP

3	2	1
4	5	6
panel 9	8	7

ESP

CHAIN_BOTTOM_RIGHT_UP

1	2	3
6	5	4
7	8	panel 9

ESP