Component description

This component is a common utility component.

This creates a frame buffer, it uses soclib-fb from the utilities for a SDL-based viewer window.

For now, the only supported mode is YUV-422. This may change in the future.

User may directly modify a shared-memory buffer, and update it to screen on-demand.

Component usage

Object

```
soclib::common::FbController *fb;
```

Instanciation

```
soclib::common::FbController(
    const std::string &basename,
    unsigned long width,
    unsigned long height);
```

basename
>   The name of the created framebuffer window

width
>   Width of the window

height
>   Height of the window

Usage

```
const unsigned long width = 320;
const unsigned long height = 240;

soclib::common::FbController fb("fb0", width, height);

...

// sample setter function:

void set(soclib::common::FbController &fb, int line, int column, uint8_t y, uint8_t u, uint8_t v
{
    uint8_t* buffer = (uint8_t*)fb.surface();
    const unsigned long width = fb.m_width;
    const unsigned long height = fb.m_height;

    buffer[                  line*width  +column  ] = y;
    buffer[width*height     +line*width/2+column/2] = u;
    buffer[width*height*3/2+line*width/2+column/2] = v;

    fb->update();
}
```