Display controller library

The XMOS display controller library provides the service of removing the real-time constraint of maintaining the LCDs line buffer from the application and provides a managed frame buffering service. It does this by using an SDRAM as a storage for the frame buffers.

Features

- Asynchronous non-blocking interface for modifying frame buffers,
- User configurable number of frame buffers.

Components

- Display controller

Resource Usage

This following table shows typical resource usage in some different configurations. Exact resource usage will depend on the particular use of the library by the application.

Configuration	Pins	Ports	Clocks	Ram	Logical cores
Display controller server, 2 frame buffers of 480x272 pixels	0	0	0	~10.8K	0
Display controller server, 4 frame buffers of 480x272 pixels	0	0	0	~10.9K	0
Display controller server, 8 frame buffers of 480x272 pixels	0	0	0	~11.0K	0

Software version and dependencies

This document pertains to version 3.0.1 of this library. It is known to work on version 14.1.1 of the xTIMEcomposer tools suite, it may work on other versions.

This library depends on the following other libraries:

- lib_sdram (>=3.0.0)
- lib_lcd (>=3.0.0)

Related application notes

The following application notes use this library:

- AN00169 - Using the display controller library