

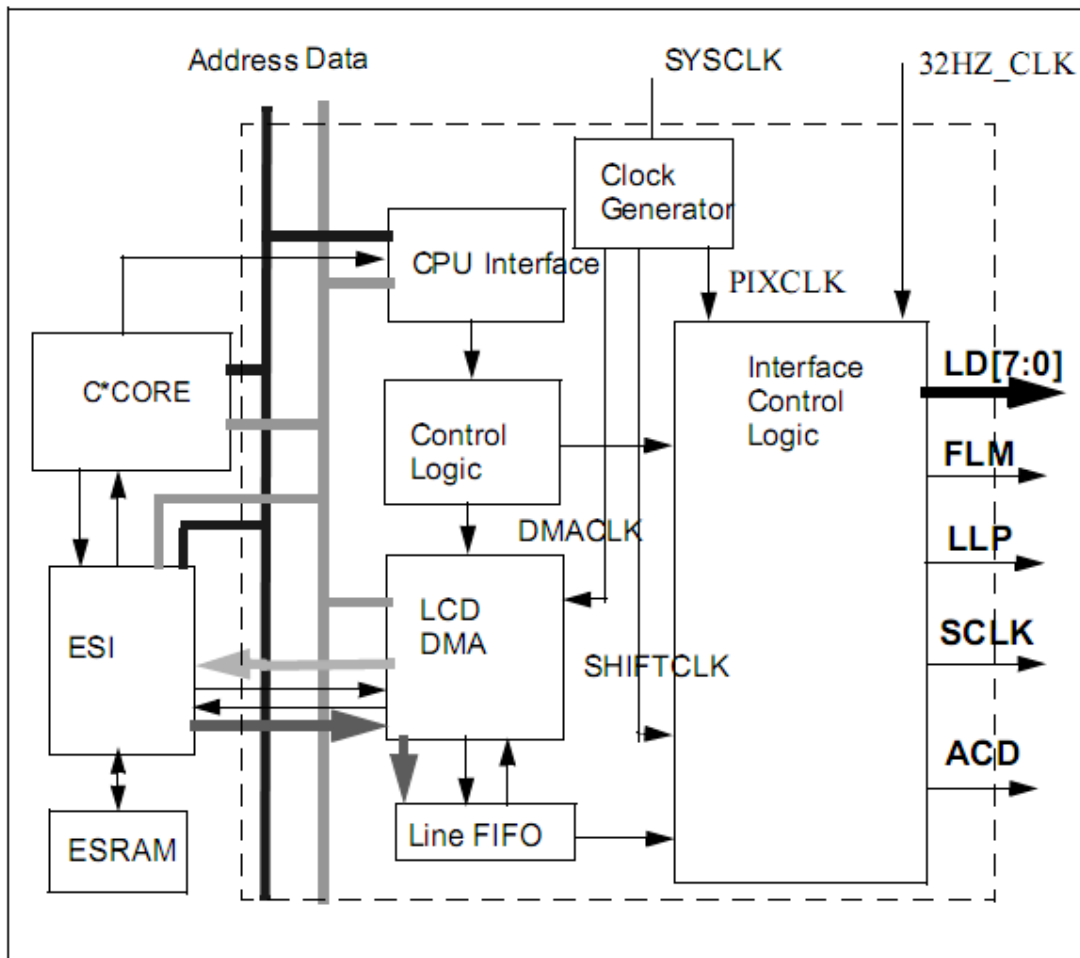
# LCDC

## Liquid Crystal Display Controller Module

### Summary

The Liquid Crystal Display Controller (LCDC) provides display data for an external LCD panel. The LCD controller is capable of supporting black and white, gray and color passive panels. The LCD controller can get the display data from embedded SRAM or external sram by a dedicated DMA transfer between video memory and LCDC.

**NOTE:** All the LCDC registers only support word read/write operation. Byte and half-word read/write may cause unexpected results.



**LCDC Block Diagram**

## Features

- Video memory selectable from embedded sram or external memory.
- Standard panel interface for common LCD drivers.
- Supports single (non-split) screen monochrome and STN color LCD panels.
- Maximum display size is 640x512 pixels.
- Panel interface of 8-, 4-, 2-, and 1-bit wide LCD panel data bus for monochrome panels, 8-bits for color panels.
- Sixteen simultaneous gray-scale levels from a palette of 16
- Hardware blinking cursor that is programmable at a maximum 31 x 31 pixels
- Logical operation between H/W cursor and background supported
- Hardware panning (soft horizontal scrolling)
- Supports self refresh type LCD panels
- 32-bits wide DMA from video memory
- All ports are GPIO capability

To obtain more information about the LCDC or other C\*Core<sup>TM</sup> products, please contact the C\*Core Technology Co., Ltd. by phone: 0512-68091377, email: [support@china-core.com](mailto:support@china-core.com) or web: <http://www.china-core.com>.

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