

70120

DESCRIPTION

The AHB TFTLCD Controller is a configurable core that interfaces to an AHB or generic microprocessor bus and provides all the timing control and pixel serialization for controlling various TFT LCD Display Panels. The core can also be used with various RAMDACs to interface to VGA Monitors or VGA style LCD Panels.

The AHB TFTLCD Controller supports 24-bit true color and 16-bit color, as well as an 8-bit color display mode via the 256 Pixel Palette Ram. A 24-bit true color multiplex mode is also supported in which 3 8-bit sub-pixels are time-multiplexed (R, G, B) on an 8-bit output. Pixel clock generation, Sync Control and Display Enable controls are fully programmable and can be used with a wide range of system clock rates.

The LCD data interface contains 8-bit Red, 8-bit Green, and 8-bit Blue for a total of 24bits. The LCD data interface will work with 6-bit RGB panels as well.

Interrupt sources timed to hsync, vsync and control signals are programmable and selectable to signal the processor to update display information.

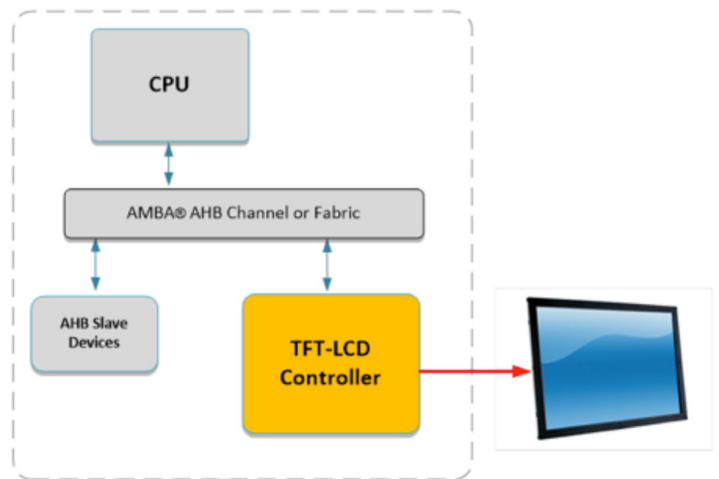
The AHB TFTLCD supports an asynchronous clock input (lcdClk) as a timebase for pixel operations.

AHB TFT LCD CONTROLLER IP CORE DELIVERABLES

- Verilog Source
- Complete Test Environment
- AHB Bus Functional Model
- C-Sample Code

AHB TFT LCD CONTROLLER IP CORE FEATURES

- AMBA® 2.0 Compatible
- 24 bit TFT LCD Controller.
- 32x32 Pixel FIFO.
- 256 Pixel Palette Mode.
- True Color and 24 bit Color support.
- Programmable Hsync and Vsync rates.
- Supports up to 2048 x 1536 resolution (expandable)
- Pixel DMA controller.
- Programmable Interrupt Interface.
- Supports wide variety of system clock rates.
- Asynchronous input clock for pixel operation.
- 8080-style parallel command/data interface



SILVACO

HEADQUARTERS

2811 Mission College Boulevard, 6th Floor

Santa Clara, CA 95054

Phone: 408-567-1000

Fax: 408-496-6080



CALIFORNIA

sales@silvaco.com

408-567-1000

MASSACHUSETTS

masales@silvaco.com

978-323-7901

TEXAS

txsales@silvaco.com

512-418-2929

JAPAN

jpsales@silvaco.com

EUROPE

eusales@silvaco.com

FRANCE

eusales@silvaco.com

KOREA

krsales@silvaco.com

TAIWAN

twsales@silvaco.com

SINGAPORE

sgsales@silvaco.com

CHINA

cnsales@silvaco.com

WWW.SILVACO.COM

Rev 090418_02