

565 LCD Adapter Graphics Card Information Sheet

Overview

The 565 LCD Adapter Graphics Card (AC320212) enables controllerless-based graphics for a large variety of Microchip starter kits. This information sheet provides an overview and a detailed schematic of the 565 LCD Adapter Graphics Card.

The 565 LCD Adapter Graphics Card is designed to allow the color space mapping to increase from the 16-bit output to the 24-bit input which is found on most of the displays.

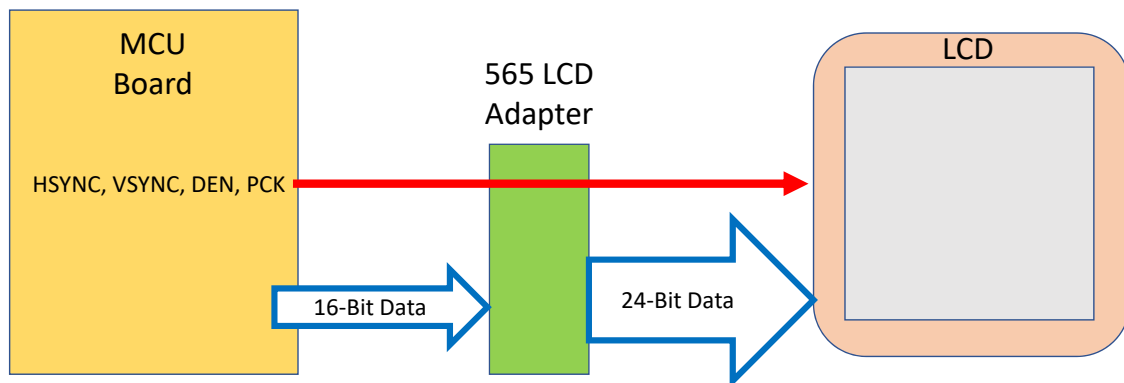
The 565 LCD Adapter Graphic Card is designed to be used with the following starter kits:

- SAM E70 Xplained Ultra (Part number [DM320113](#))
- Curiosity PIC32 MZ EF 2.0 (Part number [DM320209](#))
- High-Performance 4.3" WQVGA Display Module with maXTouch (Part number [AC320005-4](#))
- High-Performance WVGA LCD Display Module with maXTouch (Part number [AC320005-5](#))

Additional information about the 565 LCD Adapter Graphics Card is available at <http://www.microchip.com>.

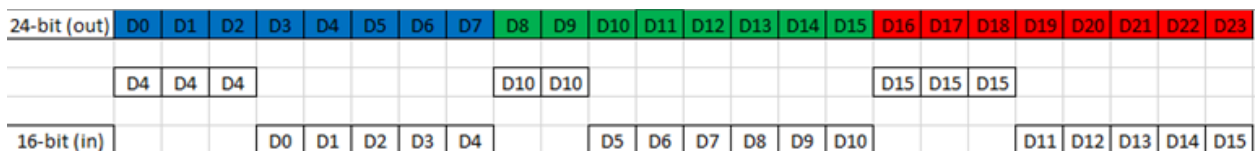
The graphic card can also be used with other Microchip development hardware. A typical block diagram of the 565 LCD Adapter Graphics Card is shown below.

Figure 1. 565 LCD Adapter Graphics Card Block Diagram



The following figure shows the color mapping from a 16-bit source output from the microcontroller, where 24-bit is the input to an LCD panel. The lower LSBs of the 24-bit connections are tied to the MSB from the 16-bit output. This allows the maximum color output on the LCD panel when the 16-bit value is written to the maximum of its output space.

Figure 2. Color Space Mapping



For additional information on drivers and examples, refer to <http://www.microchip.com/mplab/mplab-harmony>.

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