

# 24-bit Graphics Pass Through Card Information Sheet

#### AC320213

The 24-bit Graphics Pass Through Card (AC320213) enables controller and non-controller based graphics for a large variety of Microchip starter kits. This document provides an overview and a detailed schematic of the 24-bit Graphics Pass Through Card.

The 24-bit Graphics Pass Through Card is a board designed to provide a straight data pass through, and it can be used with 24-bit LCD panels and external controllers that require raw MCU data, such as 8080 mode or 8600 mode.

The 24-bit Graphics Pass Through Card is designed to be used specifically with the PIC32MZ DA Curiosity Board (EV87D54A); however, it can be used with the SAM E70 Xplained Ultra (DM320113) and Curiosity PIC32 MZ EF 2.0 (DM320209) boards.

The graphics card can be used with the following displays, and it can be used with other Microchip development hardware.

- High-Performance 4.3" WQVGA Display Module with maXTouch (AC320005-4)
- High-Performance WVGA LCD Display Module with maXTouch (AC320005-5

Additional information about the 24-bit Graphics Pass Through Card is available at www.microchip.com.

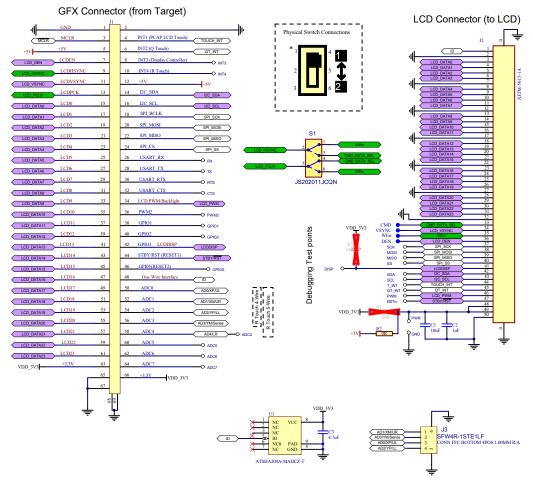
The following are key feature of the 24-bit Graphics Pass Through Card.

#### Switch1

Switch 1 remaps the LCD\_HSYNC and LCD\_PCLK signals between Write Enable (WEn) and CMD\_DATA\_SEL. For a 24-bit RGB interface, S1 must be in the position 1. When using an external controller, that is either 8080 mode or 8600 mode, the switch can be in either S1 or S2 depending on the host MCU or controller being used. An applications help document in MPLAB Harmony provides the setup and required switch position.

#### Schematic

#### Figure 1. Schematic



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