



PSoC[®] TFT EXPANSION BOARD

Breakout board for 320 x 240 px TFT touch screen
compatible with CY8CKIT-050 PSoC[®] 5LP dev. kit.



Table of Contents

Introduction to PSoC® TFT Expansion Board.....	4
microSD Card Slot	5
Schematic	6
Dimensions.....	7
Disclaimer	9

Introduction to PSoC® TFT Expansion Board

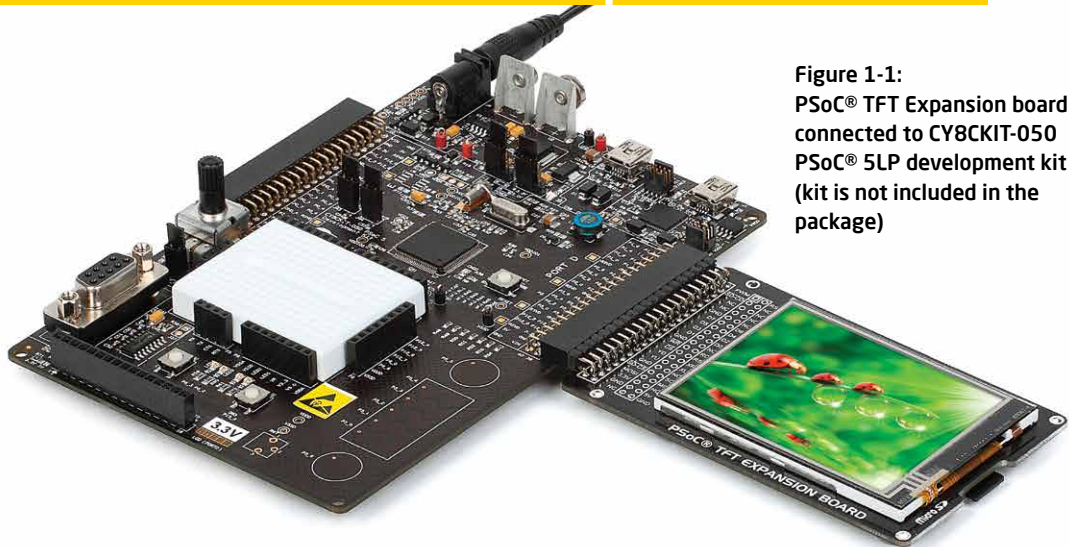


Figure 1-1:
PSoC® TFT Expansion board
connected to CY8CKIT-050
PSoC® 5LP development kit
(kit is not included in the
package)

The **PSoC® TFT Expansion Board** contains a 2.8", 320x240 px resolution **MI0283QT-9A** TFT display and a microSD slot. The TFT can display up to 262k different colors thanks to the **ILI9341** display controller driving it. The screen is covered with a **resistive touch panel** that you can use as an input device. You can also use the **PSoC® TFT Expansion Board** together with the **CY8CKIT-050 PSoC® 5LP** development kit. Four **mounting holes** (ø2 mm) enable easier integration, and **2x20 side headers** are provided (unsoldered).

microSD Card Slot

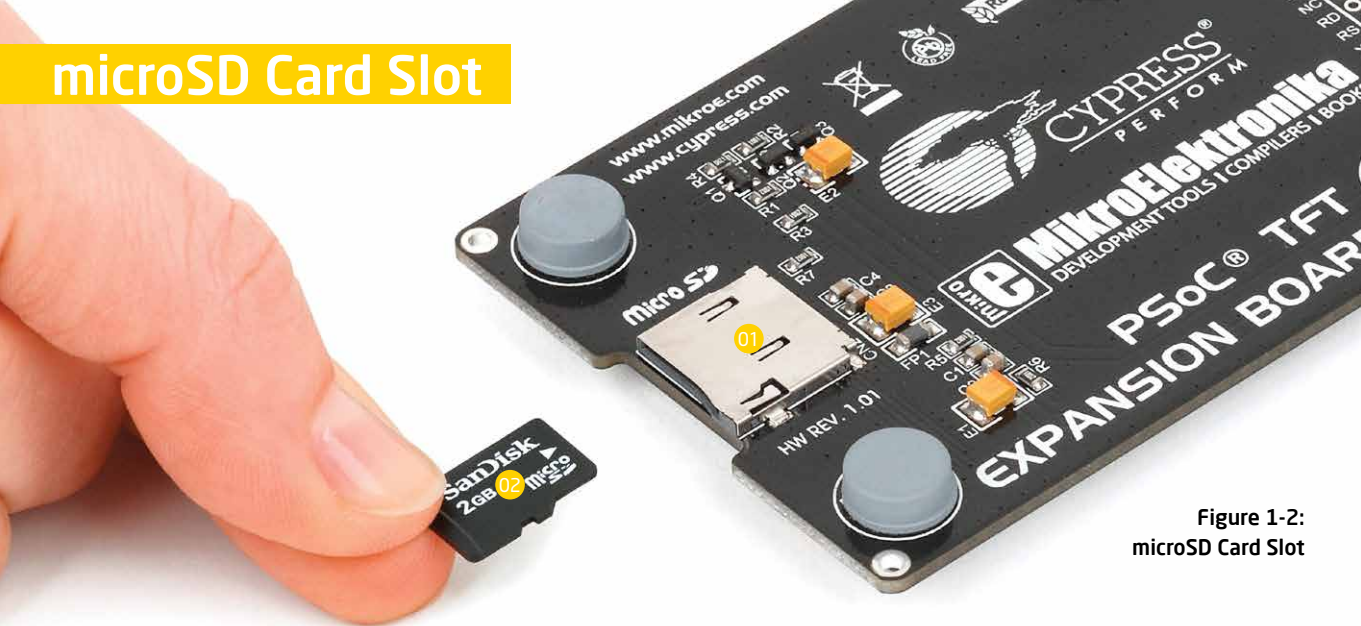


Figure 1-2:
microSD Card Slot

The **PSoC® TFT Expansion Board** is equipped with a **01** **microSD card slot**. You can use your **02** microSD cards to store data externally and thus save your microcontroller's memory. MicroSD cards communicate with the microcontroller through the Serial Peripheral Interface (**SPI**). A ferrite and a capacitor are provided to compensate the voltage and current glitch which can occur when pushing-in and pushing-out a microSD card into the socket. Proper insertion of the microSD card is shown in **Figure 1-2**.

Schematic

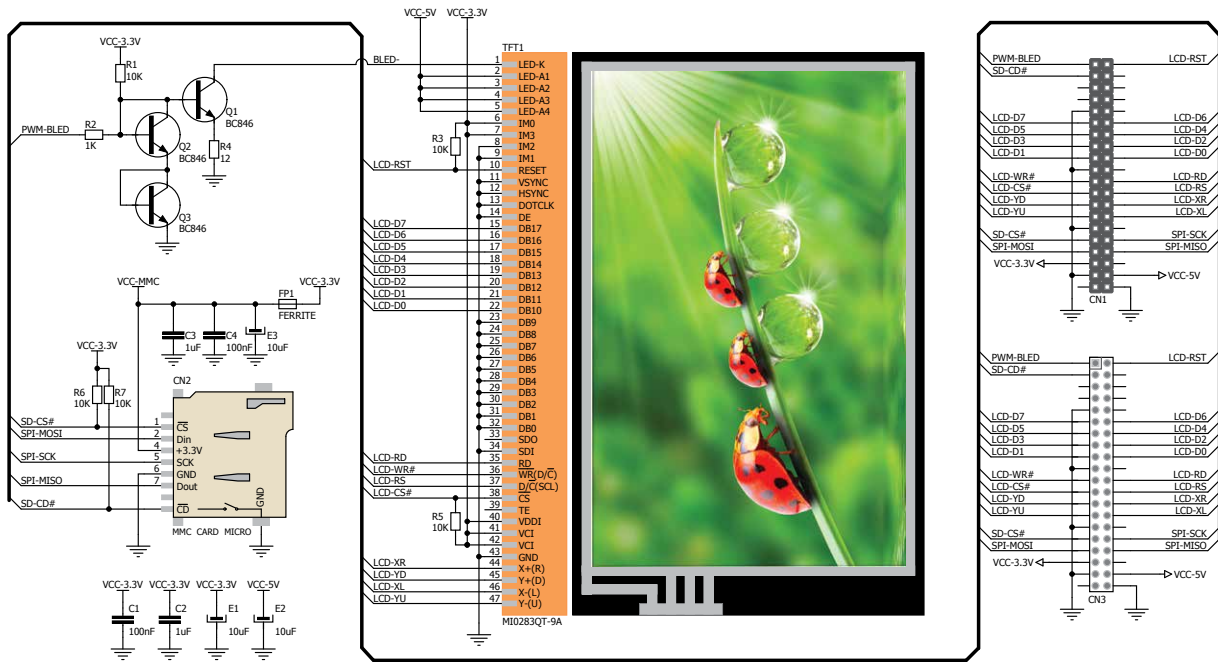
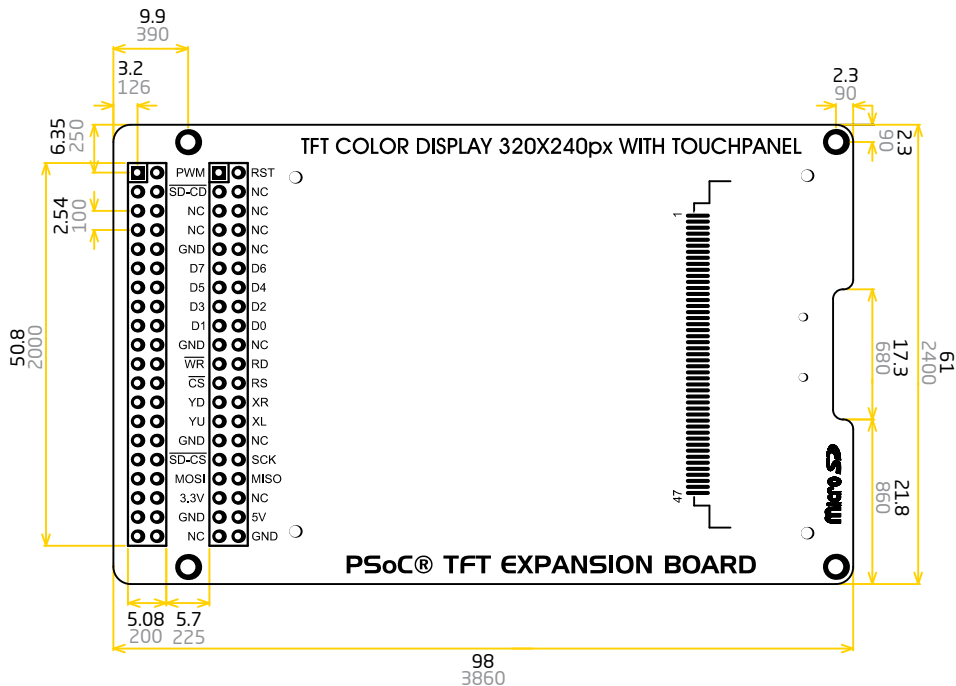


Figure 1-3: PSoC® TFT Expansion Board schematic

Dimensions



Legend

mm
mils

Mounting hole size

∅ 2 mm
 ∅ 80 mils

Tolerance

+/- 0.3mm

Notes:

