

PSOC® TFT EXPANSION BOARD

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









TO OUR VALUED CUSTOMERS

I want to express my thanks to you for being interested in our products and for having confidence in MikroElektronika.

The primary aim of our company is to design and produce high quality electronic products and to constantly improve the performance thereof in order to better suit your needs.

Nebojsa Matic General Managei

Table of Contents

Introduction to PSoC* TFT Expansion Board	4
microSD Card Slot	
Schematic	(
Dimensions	
Disclaimer	9

Introduction to PSoC® TFT Expansion Board



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).



The PSoC® TFT Expansion Board is equipped with a immicroSD card slot. You can use your immicroSD 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

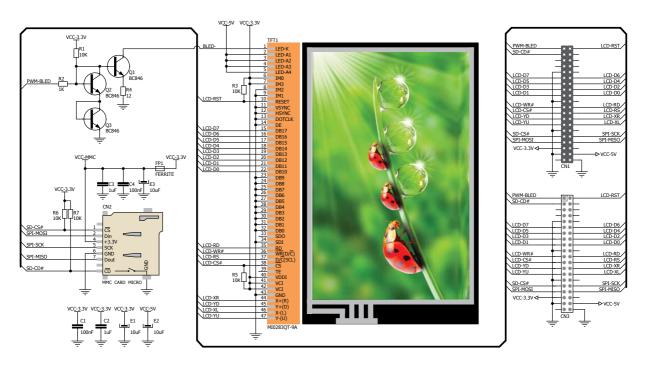


Figure 1-3: PSoC® TFT Expansion Board schematic

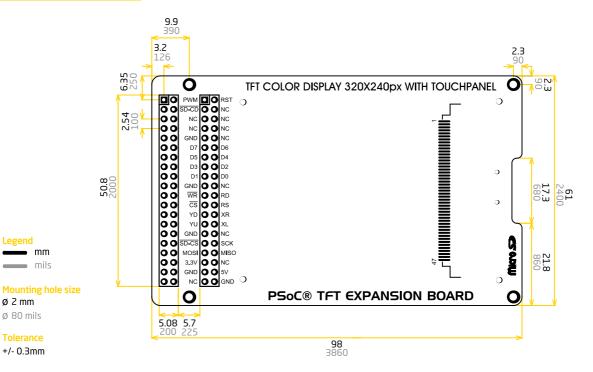
Dimensions

mm

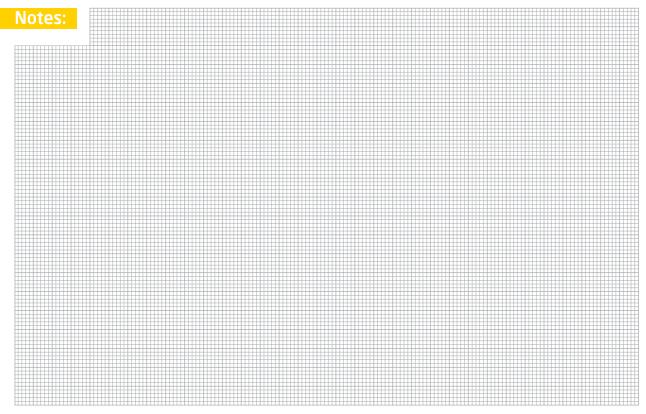
mils

ø 2 mm ø 80 mils

+/- 0.3mm



Page 7



DISCLAIMER

All the products owned by MikroElektronika are protected by copyright law and international copyright treaty. Therefore, this manual is to be treated as any other copyright material. No part of this manual, including product and software described herein, may be reproduced, stored in a retrieval system, translated or transmitted in any form or by any means, without the prior written permission of MikroElektronika. The manual PDF edition can be printed for private or local use, but not for distribution. Any modification of this manual is prohibited.

MikroElektronika provides this manual 'as is' without warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties or conditions of merchantability or fitness for a particular purpose.

MikroElektronika shall assume no responsibility or liability for any errors, omissions and inaccuracies that may appear in this manual. In no event shall MikroElektronika, its directors, officers, employees or distributors be liable for any indirect, specific, incidental or consequential damages (including damages for loss of business profits and business information, business interruption or any other pecuniary loss) arising out of the use of this manual or product, even if MikroElektronika has been advised of the possibility of such damages. MikroElektronika reserves the right to change information contained in this manual at any time without prior notice, if necessary.

HIGH RISK ACTIVITIES

The products of MikroElektronika are not fault - tolerant nor designed, manufactured or intended for use or resale as on - line control equipment in hazardous environments requiring fail - safe performance, such as in the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, direct life support machines or weapons systems in which the failure of Software could lead directly to death, personal injury or severe physical or environmental damage ('High Risk Activities'). MikroElektronika and its suppliers specifically disclaim any expressed or implied warranty of fitness for High Risk Activities.

TRADEMARKS

The MikroElektronika name and logo are trademarks of MikroElektronika. All other trademarks mentioned herein are property of their respective companies. All other product and corporate names appearing in this manual may or may not be registered trademarks or copyrights of their respective companies, and are only used for identification or explanation and to the owners' benefit, with no intent to infringe.

Copyright © MikroElektronika, 2014, All Rights Reserved.







If you want to learn more about our products, please visit our website at www.mikroe.com

If you are experiencing some problems with any of our products or just need additional

information, please place your ticket at www.mikroe.com/support/

If you have any questions, comments or business proposals,

do not hesitate to contact us at office@mikroe.com

PSoC TFT Expansion Board Manual ver. 1.01

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

mikroElektronika:

MIKROE-1448