

# PIC32MX470 Curiosity Development Board Information Sheet

Thank you for purchasing the Microchip PIC32MX470 Curiosity Development Board. This information sheet highlights some important details that will help you successfully use the board as quickly as possible.

## Features

The PIC32MX470 Curiosity Development Board showcases a platform over which a wide range of applications can be run. This development board hosts the Microchip PIC32MX470F512H MCU. Without any additional hardware, the PIC32MX470 Curiosity Development Board can run an array of applications involving USB Device, USB Host, and Bluetooth®.

The development board provides two mikroBUS™ headers for the purpose of connecting MikroElektronika mikroBUS Click™ adapter boards. Through the click boards, the PIC32MX470 Curiosity Development Board can be enhanced with real-time clocks, storage interfaces, displays, measurement sensors, and much more.

The development board also provides expansion connectors for interfacing audio daughter boards. Supported Microchip audio daughter boards can be used over these expansion connectors to explore and develop an array of applications.

Features of the PIC32MX470 Curiosity Development Board include:

- PIC32MX470F512H 32-bit microcontroller
- Two mikroBUS headers
- Header for audio codec daughter board
- BM64 Bluetooth module
- mini-B USB port for programming and debugging
- micro-B USB Host/Device port
- Utility switch and LEDs

Refer to the “*PIC32MX470 Curiosity Development Board User’s Guide*” (DS70005283) for more information on the features, hardware, and software demonstrations that are available for the development board. This document is available for download from the Microchip web site at [www.microchip.com](http://www.microchip.com).

## Getting Started

The PIC32MX470 Curiosity Development Board is preprogrammed with an application that will blink the user LEDs on the board in a sequential manner.

To run the demonstration, perform the following steps:

1. On jumper J8, ensure that pin 4 and pin 3 are shorted.
2. Connect the mini-B connector of the development board (J3) to the computer through a Type-A male to mini-B USB cable.
3. If connected correctly, the LEDs, LED1, LED2, and LED3, will follow a repeating pattern:
  - LED1: ON, LED2: OFF, LED3: ON
  - LED1: OFF, LED2: ON, LED3: OFF

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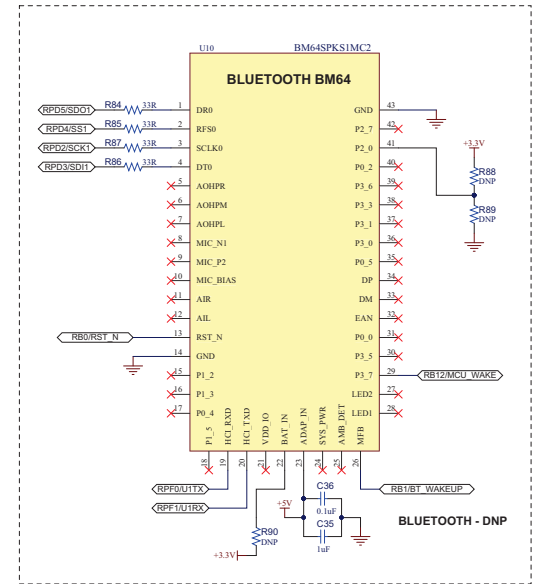
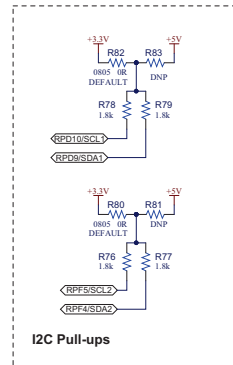
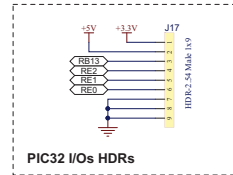
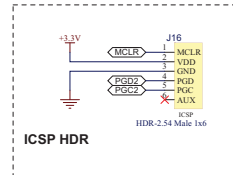
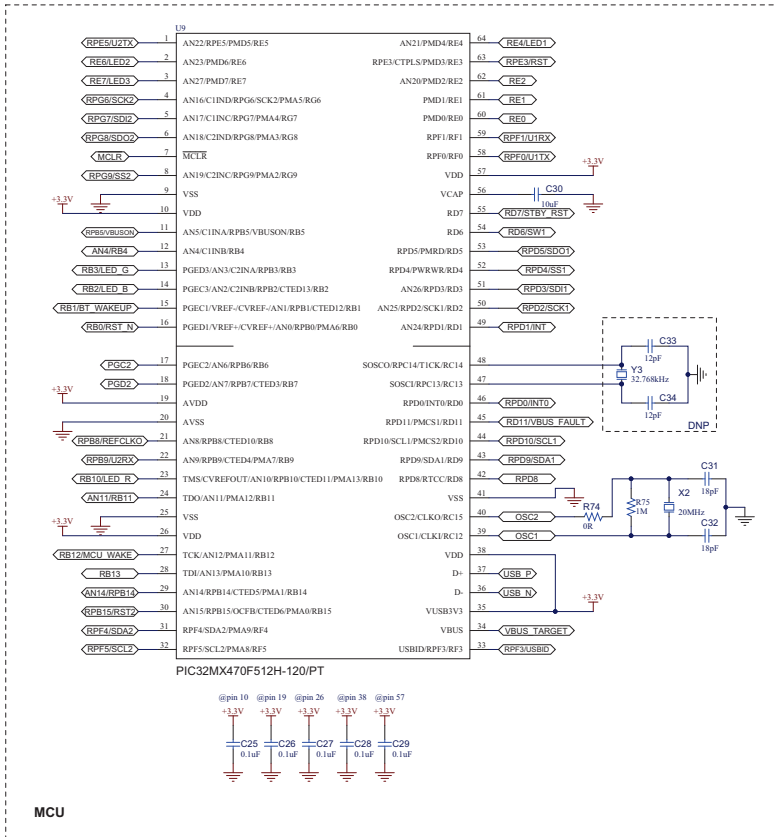
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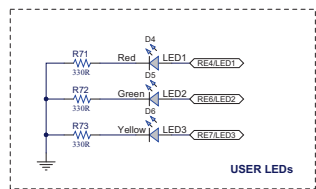
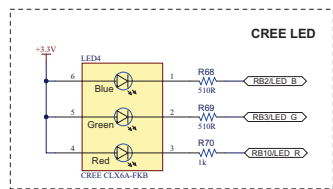
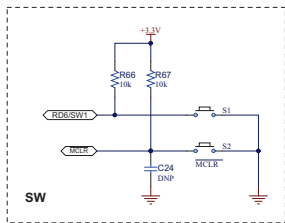
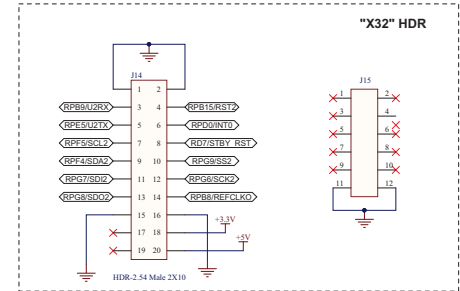
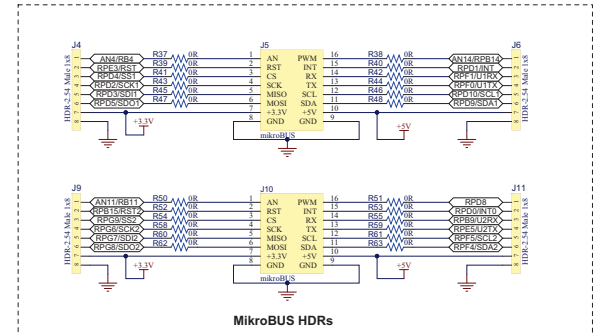
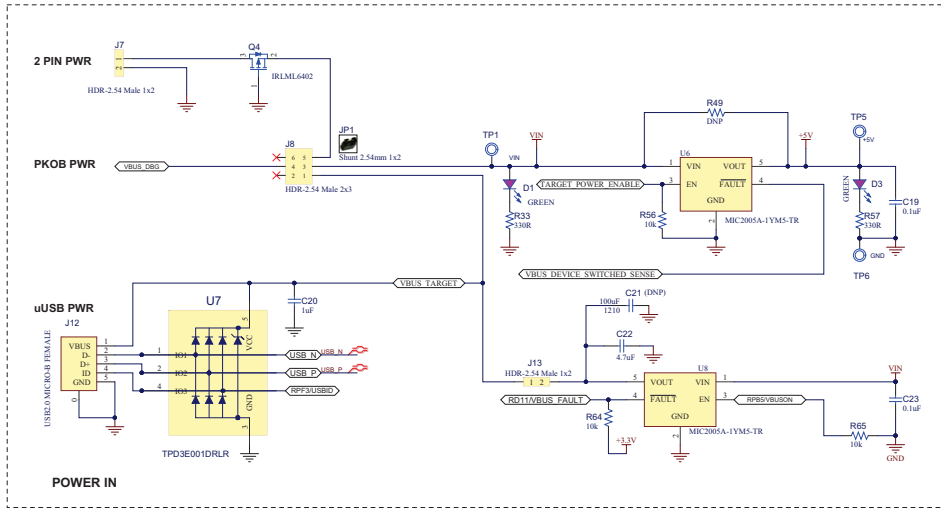
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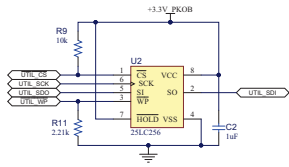
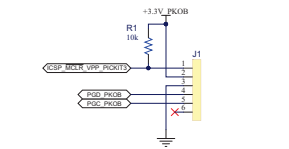
# PIC32MX470 Curiosity Development Board Schematics (Sheet 1 of 3)



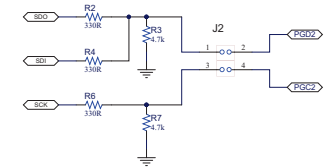
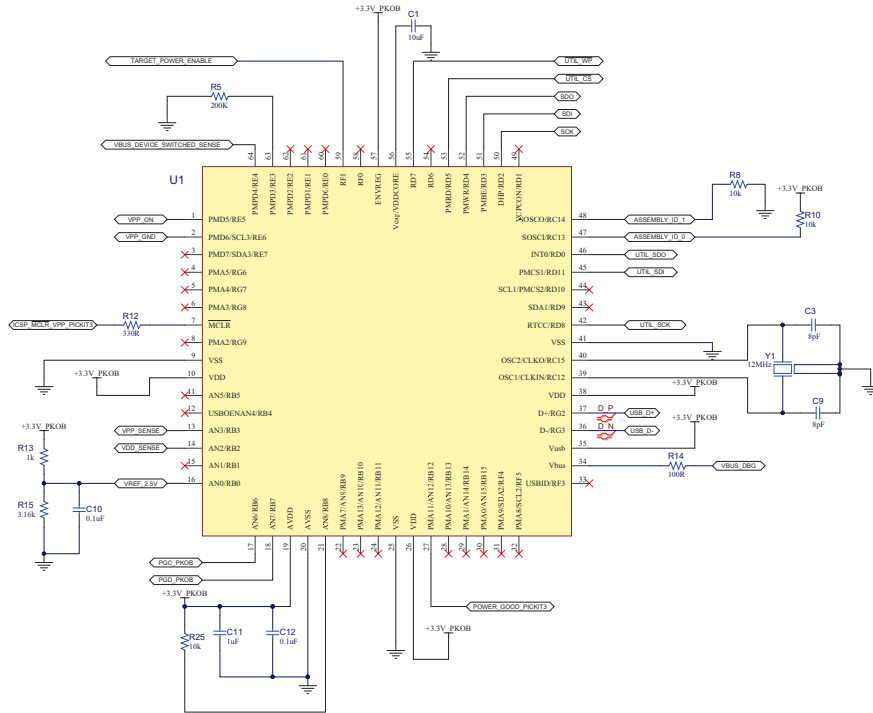
# PIC32MX470 Curiosity Development Board Schematics (Sheet 2 of 3)



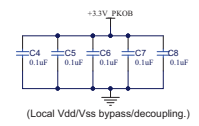
# PIC32MX470 Curiosity Development Board Schematics (Sheet 3 of 3)



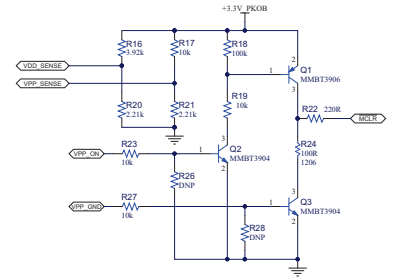
**SERIAL EEPROM (25LC256)**



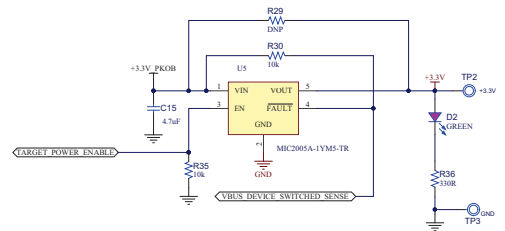
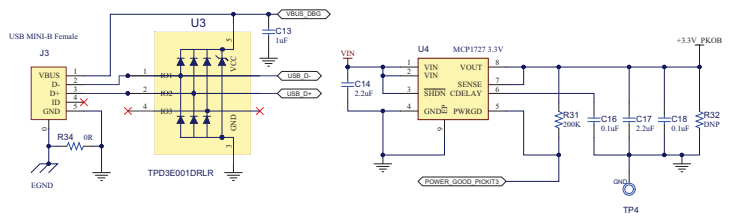
J2 Jumper Positions	
PKOB Mode	REAL ICE Mode
pins 1-2: Shorted	pins 1-2: Open
pins 3-4: Shorted	pins 3-4: Open



(Local Vdd/Vss bypass/decoupling.)



**USB INTERFACE (BUS POWERED)**



**POWER DISTRIBUTION/SWITCHING**