

out of the **B** **X**

MXDB Assembly Guide

Last Revised 5/14/19



Electronics and Robotics LLC

ootbrobotics.com

Table of Contents

Procedure	3
Step 1: Break Apart Headers	3
Step 2: USB Connector	3
Step 3: MXDB Breadboard Connections	4
Step 3.1: Insert Pins into Breadboard	4
Step 3.2: Solder Pins	4
Step 4: JTAG Connection	5
Step 5: Read Enable Header	5
Step 6: DIP Resistors	6
Step 6.1: Break Apart Array	6
Step 6.2: Insert Pins into Breadboard	6
Step 6.3: Solder Pins	7
Step 7: Toggle Switch	8
Step 7.1: Insert pins into Breadboard	8
Step 7.2: Place Board and Switch	8
Step 7.3: Solder Mechanical Pins	9

Procedure

Step 1: Break Apart Headers

Break apart the three 40-pin headers

From header 1: 5x 8-pin headers

From header 2: 1x 8-pin headers, 2x 5-pin headers, 1x 3-pin headers, and 3x 2-pin headers

From header 3: 2x 20-pin headers

Step 2: USB Connector

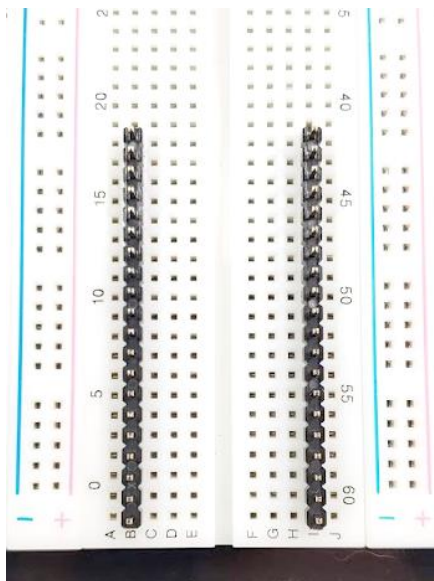
Solder the USB Connector to the MXDB



Step 3: MXDB Breadboard Connections

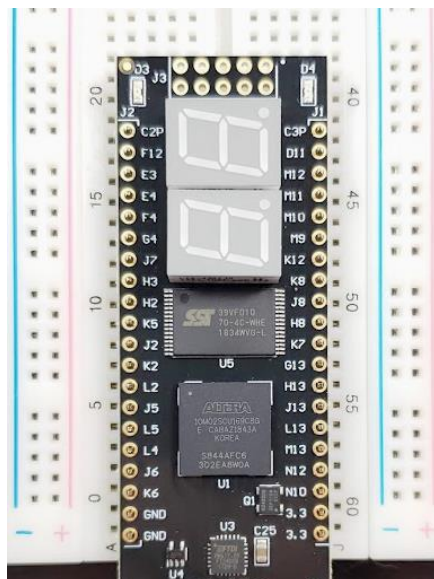
Step 3.1: Insert Pins into Breadboard

Insert the 20-pin headers as displayed. The long side of the headers will be inserted into the breadboard.



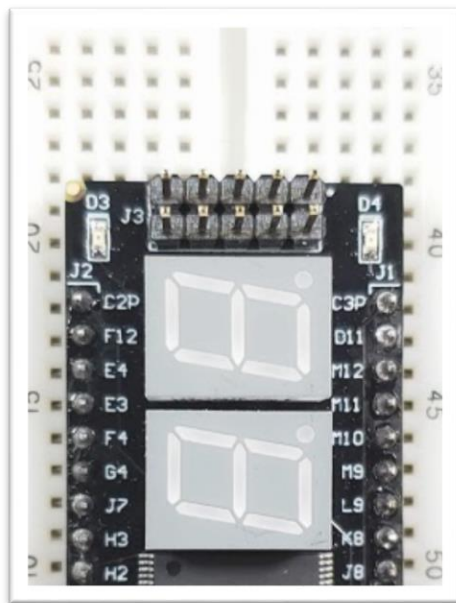
Step 3.2: Solder Pins

Lay the MXDB on the pins in the breadboard and solder.



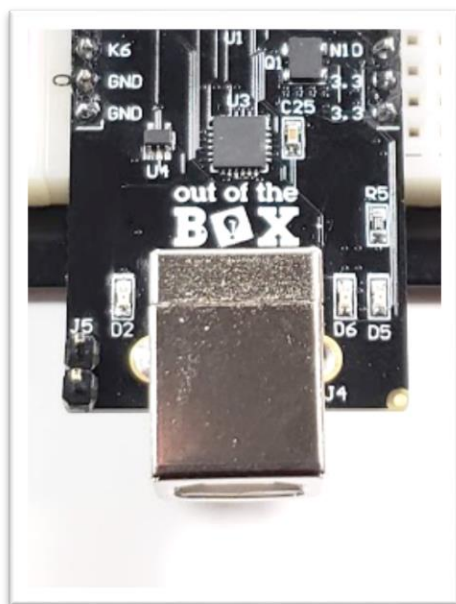
Step 4: JTAG Connection

Solder the 5-pin headers to J3 as displayed. The long portion of the headers will point up. To solder these pins, the MXDB will need to be removed from the breadboard.



Step 5: Read Enable Header

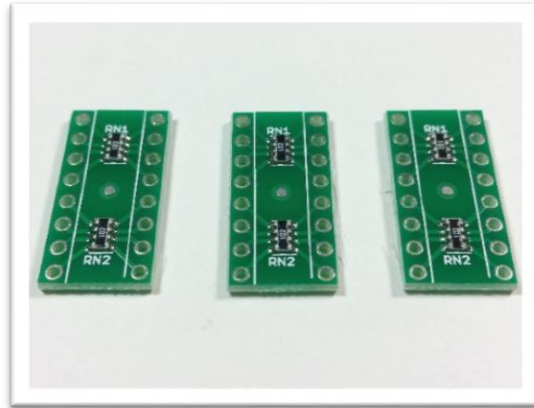
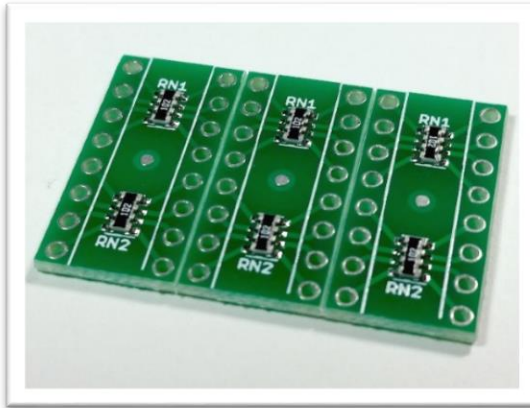
Solder a 2-pin header to J5 of the MXDB.



Step 6: DIP Resistors

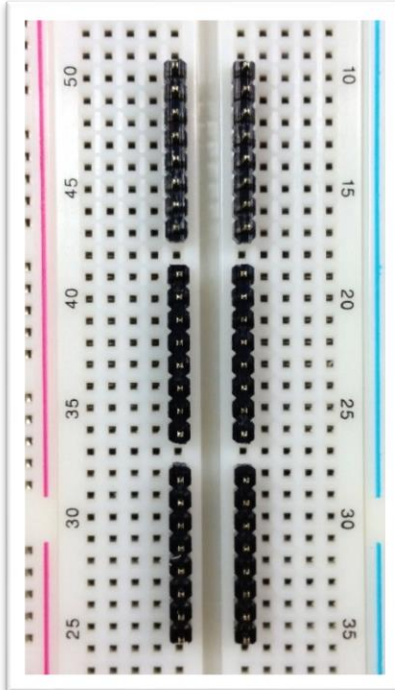
Step 6.1: Break Apart Array

Break apart the DIP resistor boards from the array.



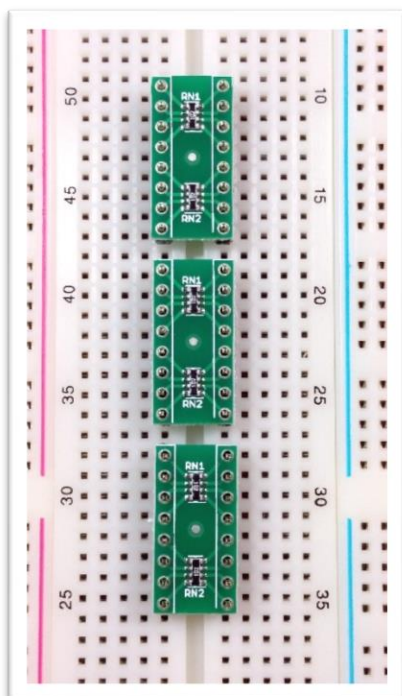
Step 6.2: Insert Pins into Breadboard

Place the 8-pin headers into the breadboard as displayed.



Step 6.3: Solder Pins

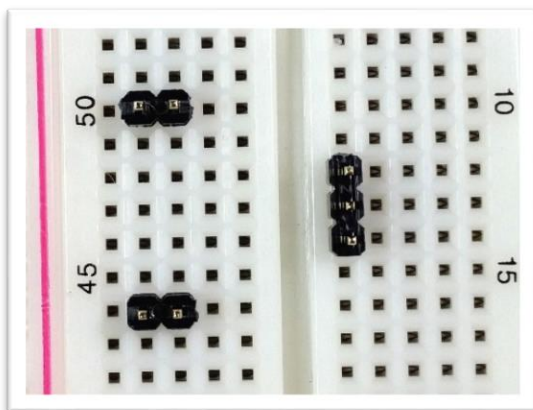
Place the DIP resistor boards onto the headers and solder.



Step 7: Toggle Switch

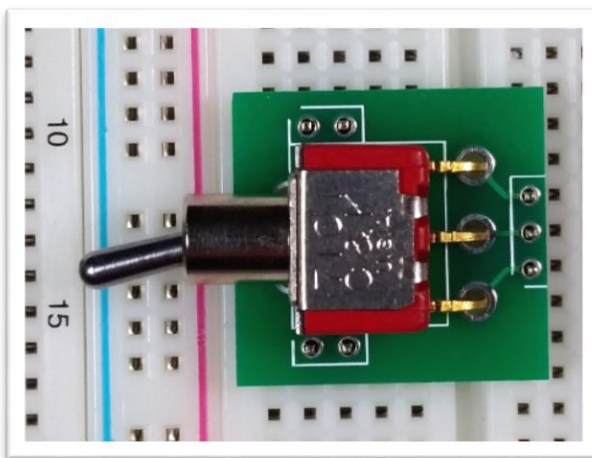
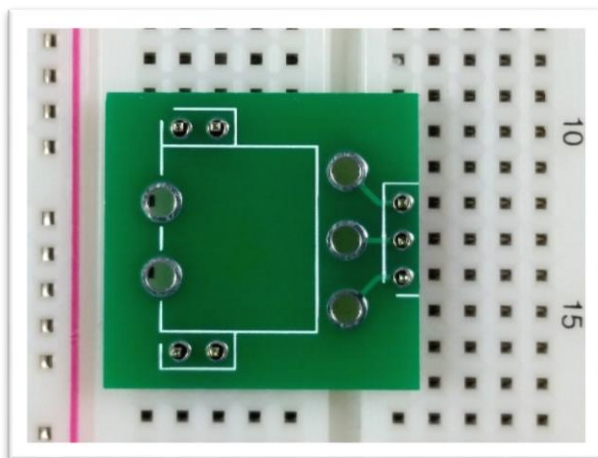
Step 7.1: Insert pins into Breadboard

Insert the 2-pin headers and the 3-pin header into the breadboard as displayed.



Step 7.2: Place Board and Switch

Place the switch breakout board and switch as displayed, and then solder.



Step 7.3: Solder Mechanical Pins

Remove the switch breakout board from the breadboard and solder the remaining mechanical mounts of the switch.

