

Matrix TSL Flowcode Ghost Demo

Hardware Setup A

- BL0011 or BL0080 with 16F18877
- PORTA – BL0114 Combo Board
- PORTB - BL0114 Combo Board
- Combo Board ANA/DIG Switch – ANA Position

Hardware Setup B

- BL0055 with Arduino Uno
- PORT A0-A5 – BL0114 Combo Board
- PORT D0-D7 - BL0114 Combo Board
- Combo Board ANA/DIG Switch – ANA Position

Hardware Setup C

- EB006 v9 with 16F1937
- PORTA - EB083 Combo Board
- PORTB - EB083 Combo Board
- Wire from EB006 +V to EB083 +V
- Combo Board ANA/DIG Jumpers – ANA Position

Setup

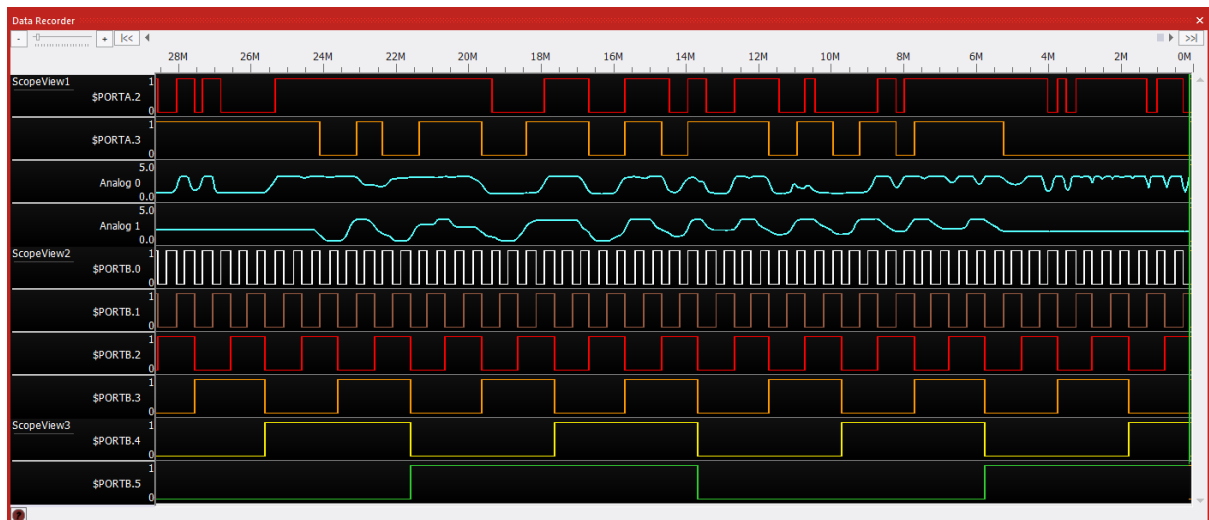
- Load into Flowcode the project file GhostDemoA, GhostDemoB or GhostDemoC
- Click the Ghost ICD button to switch on hardware execution control– the simulation icons turn green



- Click the Compile to Chip button.
- Once the program has been loaded onto the chip open up the Data Recorder window.

The Demo

- Clicking the Play button in Flowcode should start the hardware running.
- Clicking the Pause button in Flowcode should pause the hardware.
- The Simulation Debugger window can be used to read and write variable values while the execution is paused
- Setting breakpoints in the program will allow the hardware to automatically stop on icons
- Click the Ghost ICT button to switch on the port monitoring, this can be used with or without ICD mode
- The PORTB LEDs should show a count pattern and this should also appear on the data recorder window.
- The analogue sensors on the Combo board should show their readings on the data recorder window.
- When the analogue sensors are over 50% of the voltage the corresponding A2/A3 LED should light and be shown on the data recorder.
- Click the stop button to stop the hardware and reset back to the start of the program.



ICD requires two port pins so be careful not to use these pins in your Flowcode program.

BL0011 / BL0080 / EB006v9 – B6 & B7

BL0055 – D0 & D1