


# Software Development

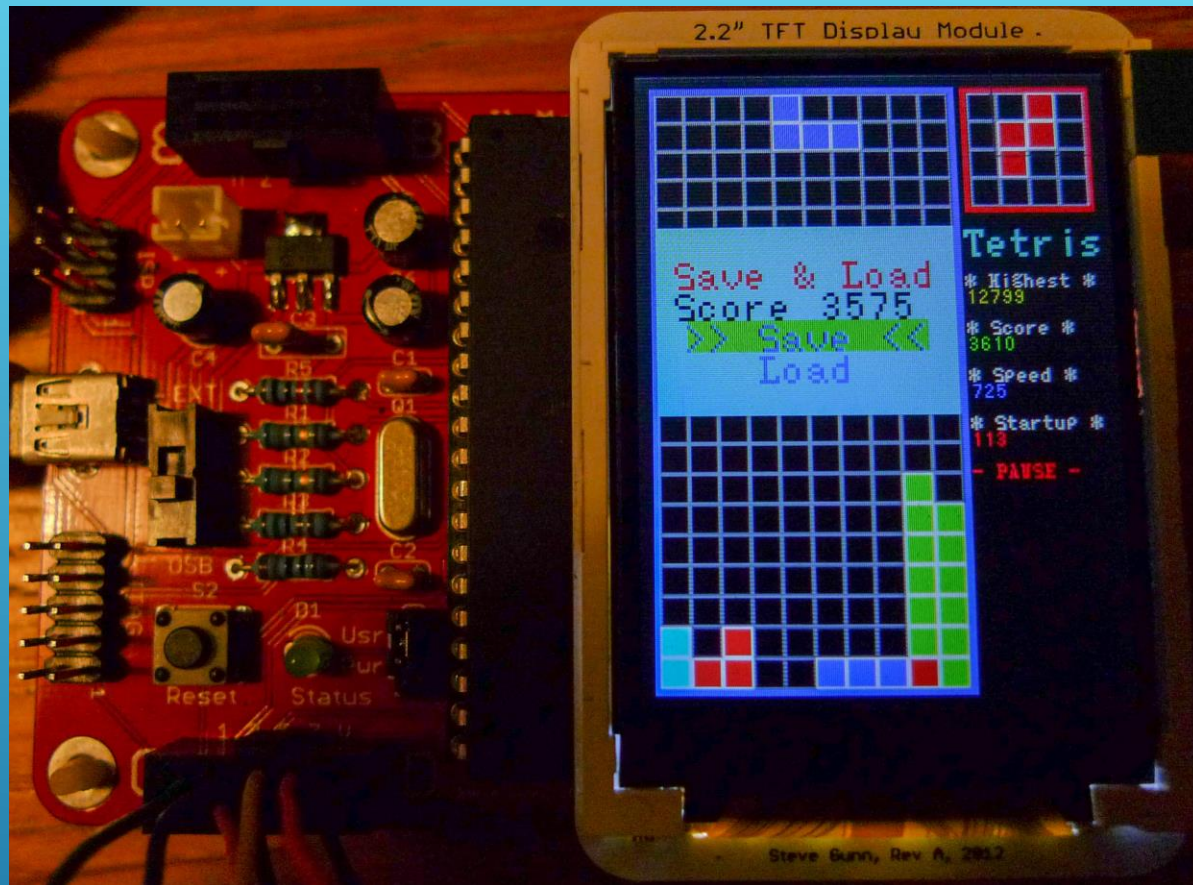
Incremental development method

Hello, world!

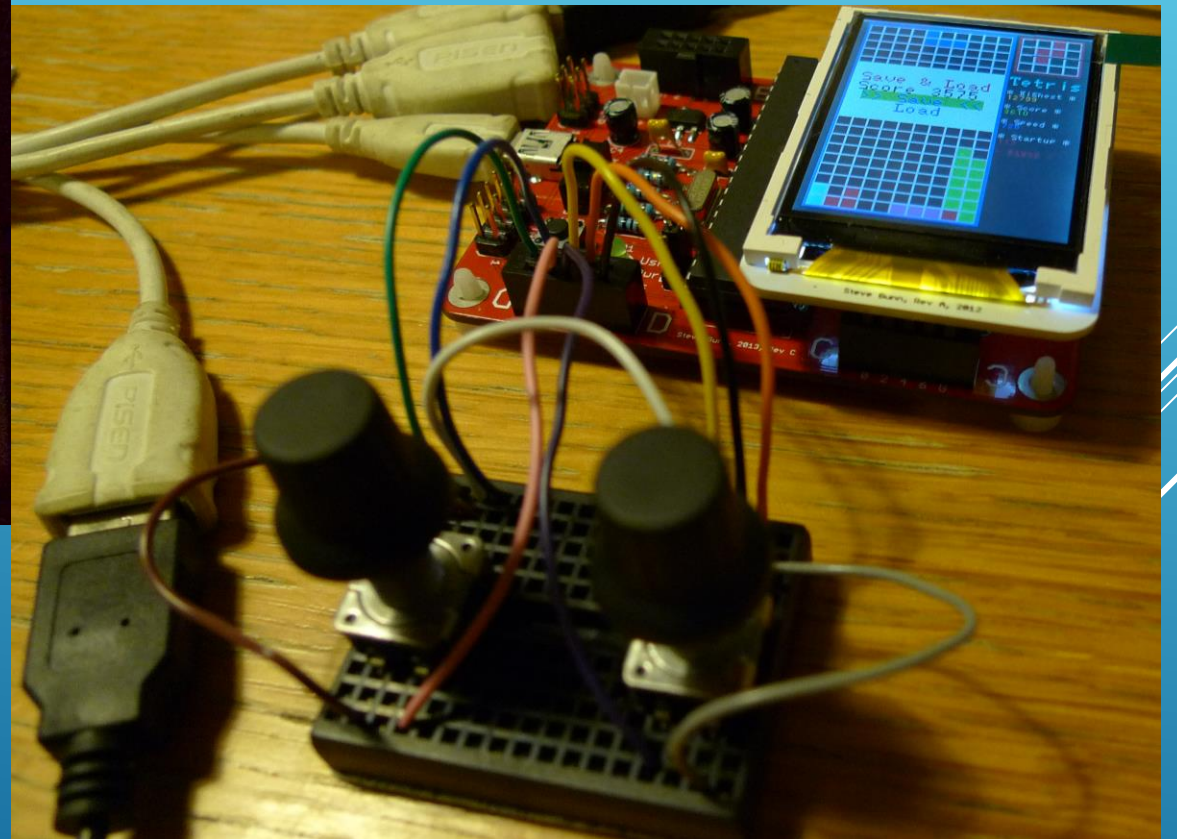
Norman  
(Yubo Zhi)

# Incremental development method

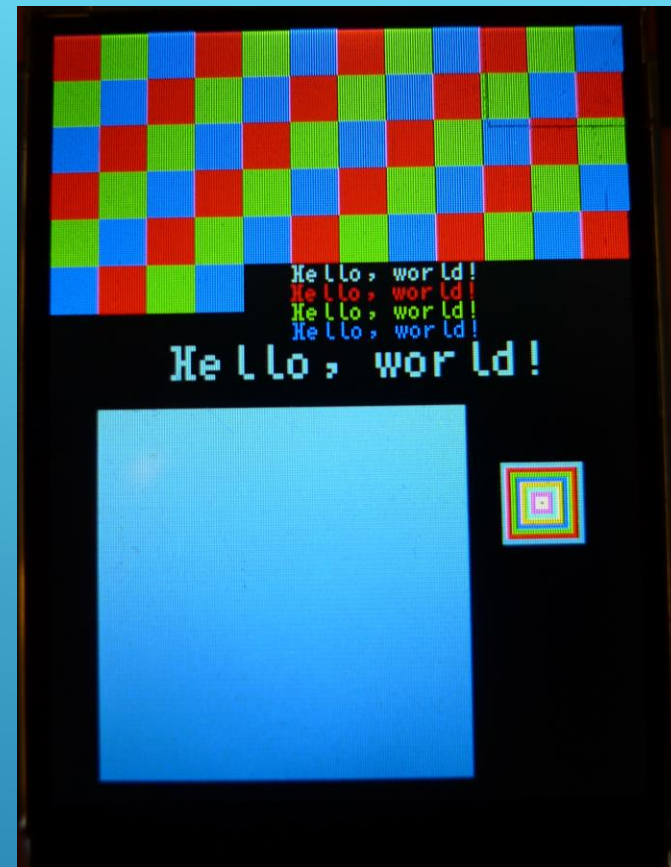
- ▶ Split entire program into small parts
  - ▶ Perhaps continually split them into smaller parts
  - ▶ Complete basic data structures & functions first
  - ▶ Build a further small part every time, make sure it works as required
  - ▶ Continually build & combine parts, until finish the program
  - ▶ Perhaps some extensions
- 
- A series of white diagonal lines of varying lengths and thicknesses, located in the bottom right corner of the slide, creating a modern, abstract graphic element.



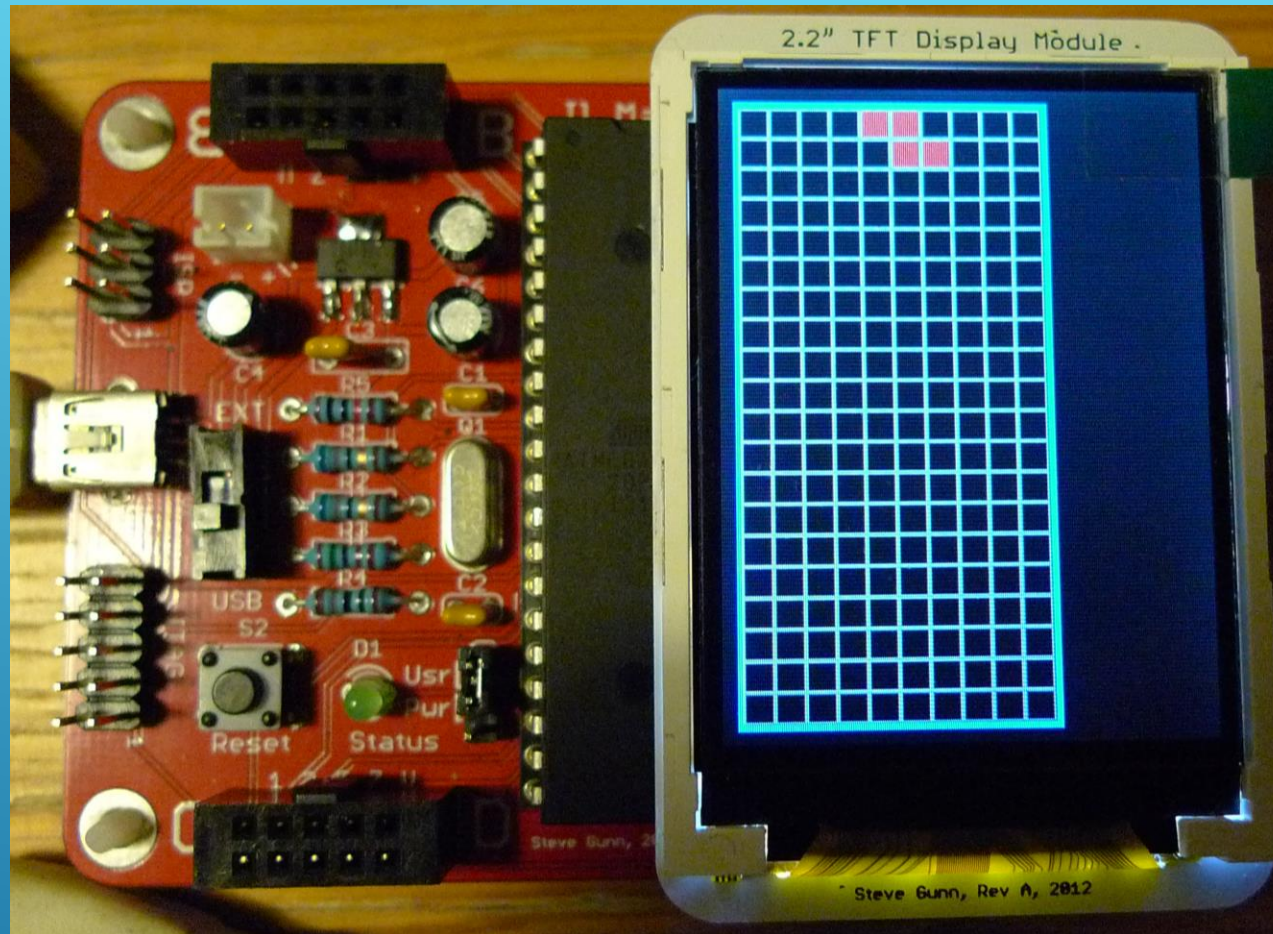
TETRIS!





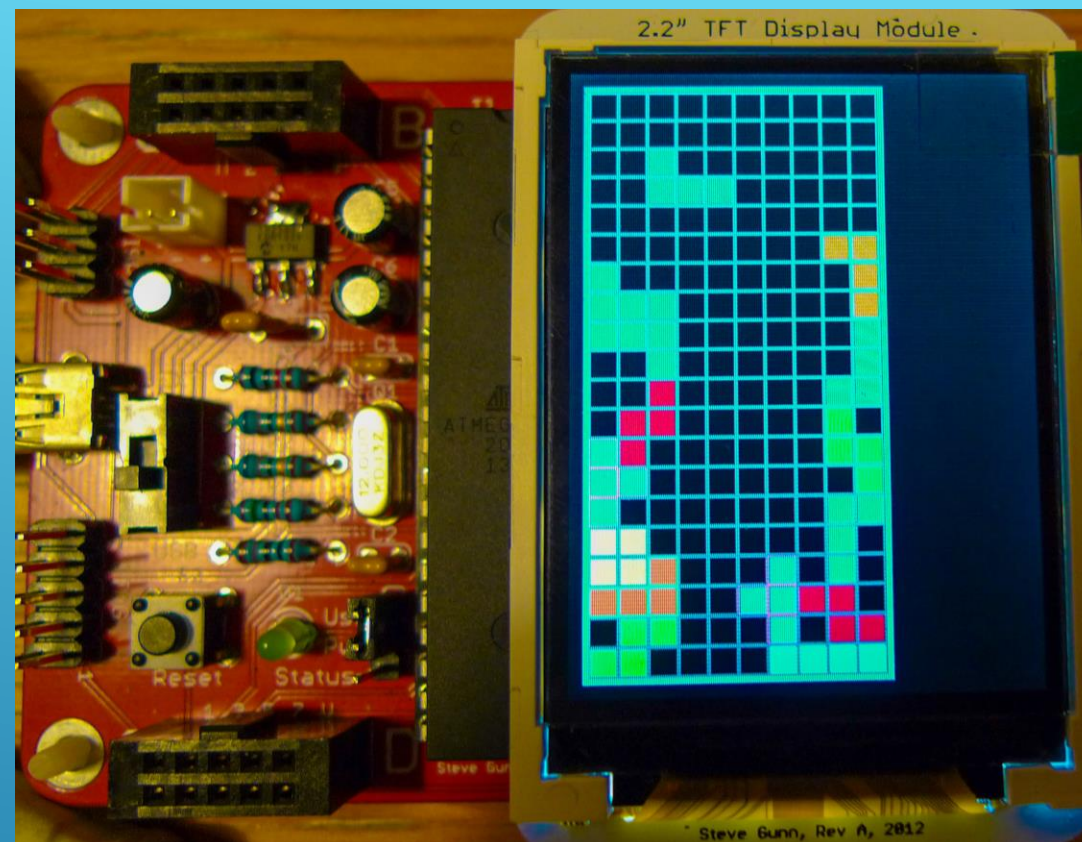
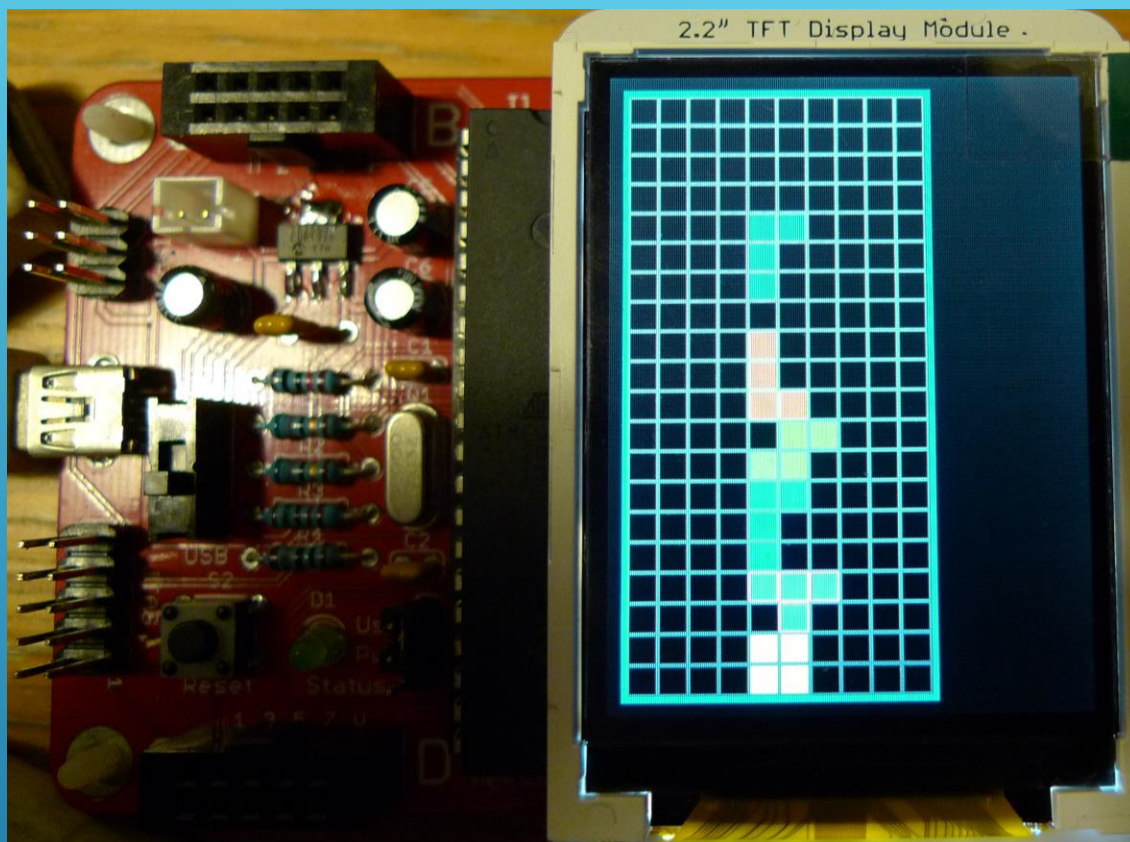


Initialise the TFT, basic drawing functions



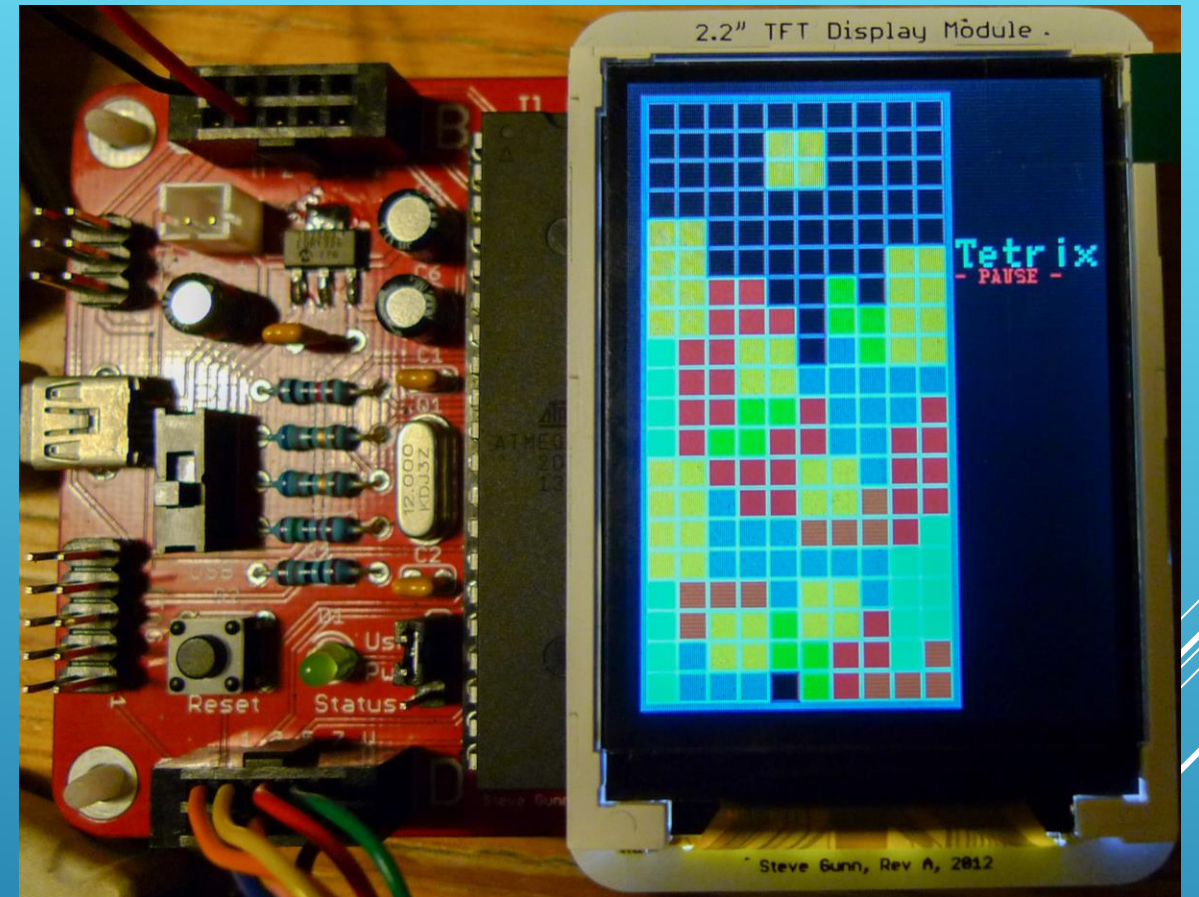
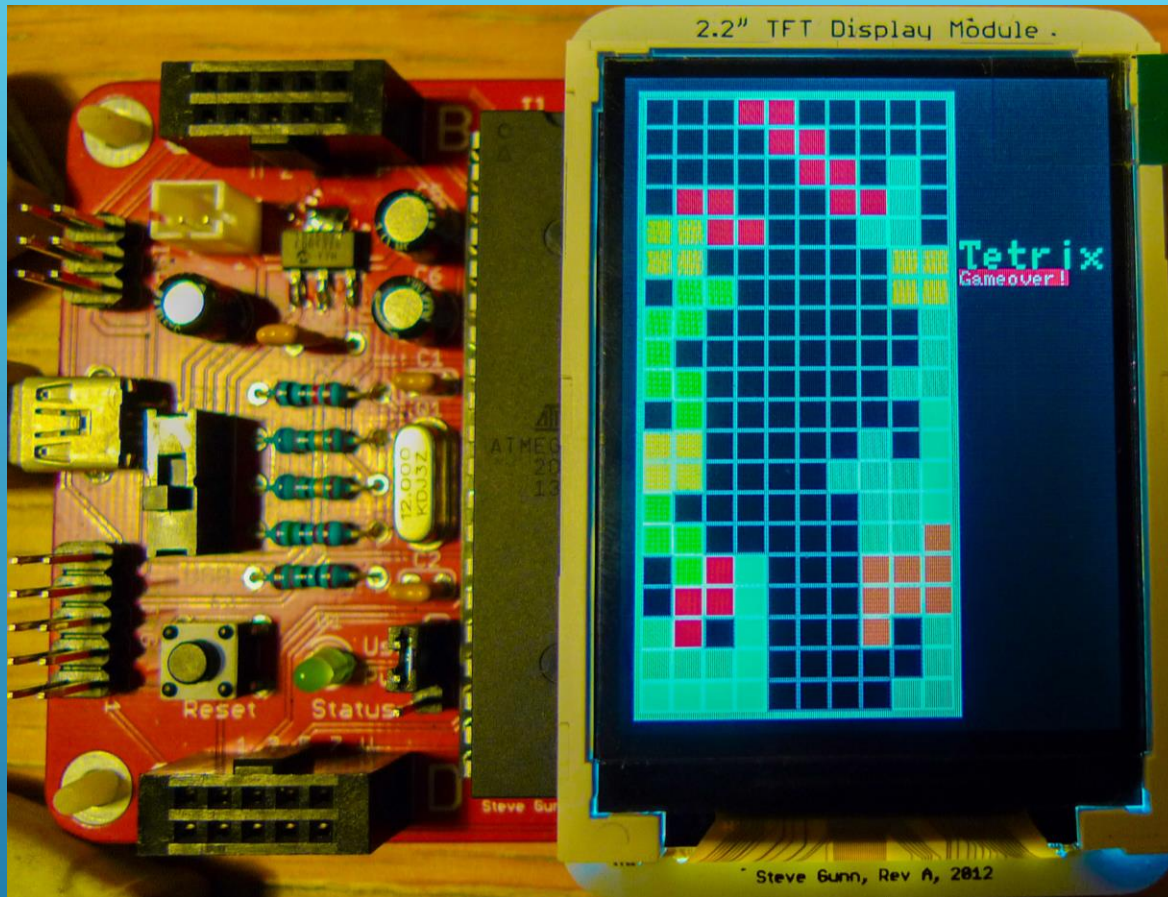
Board display, random generation function





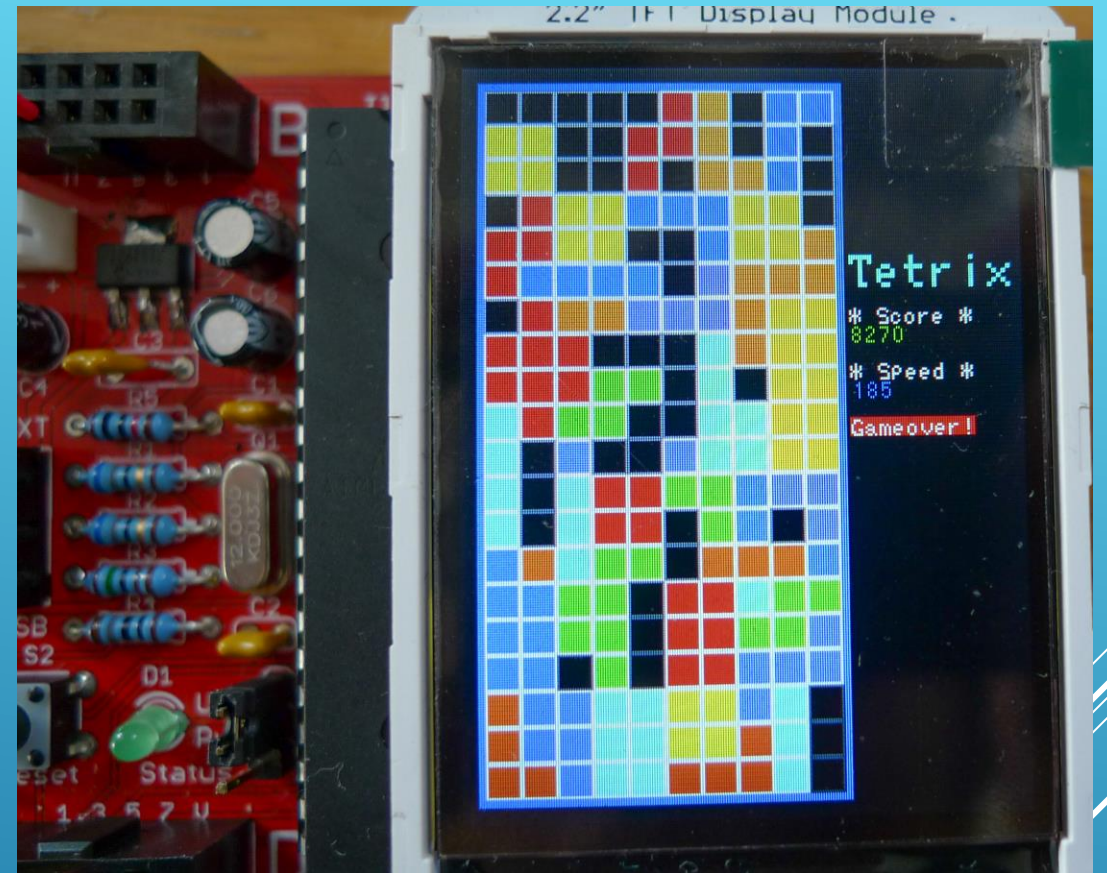
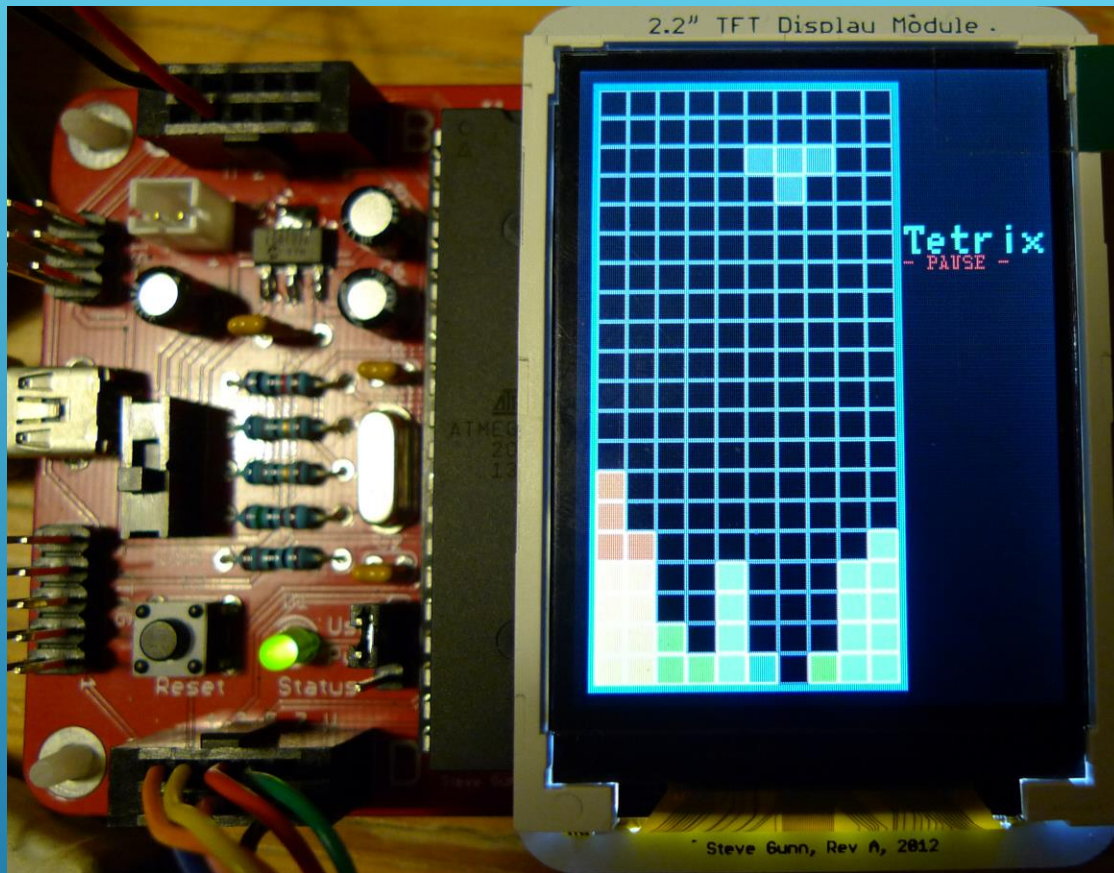
Drop & place function, move function





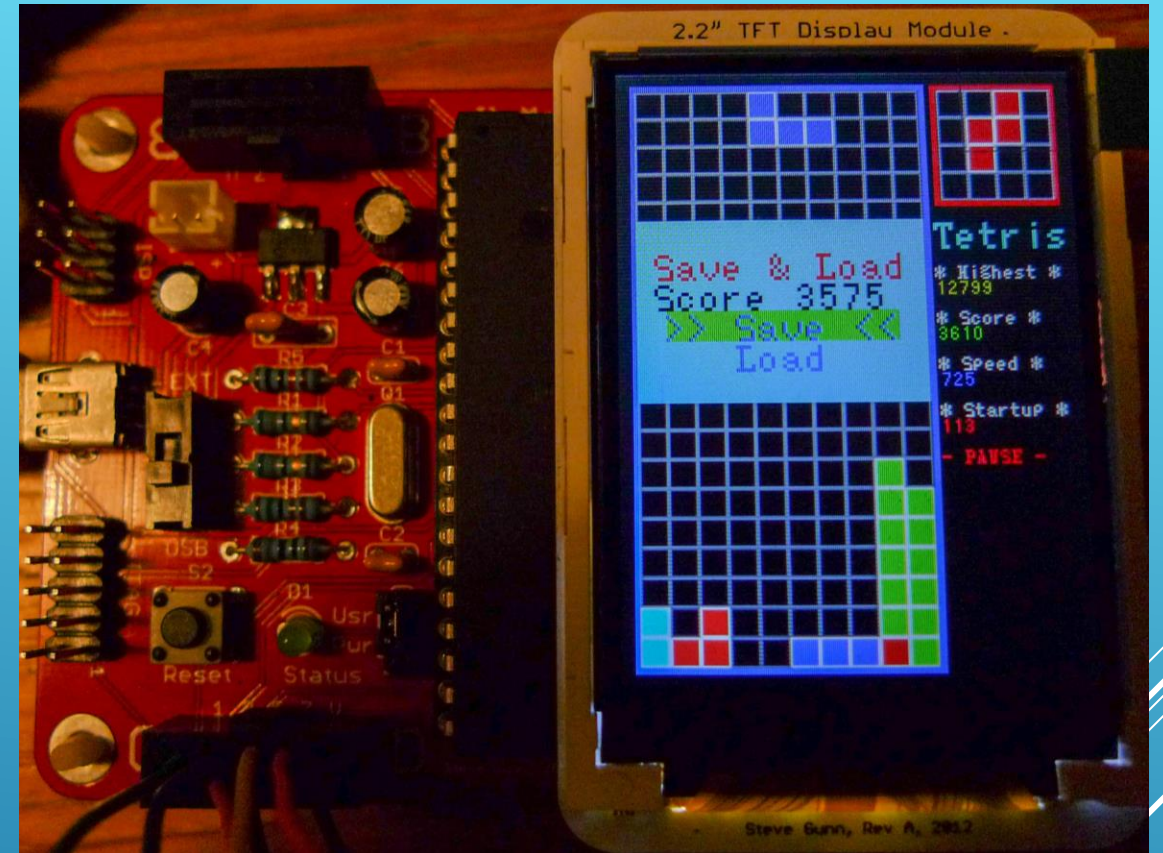
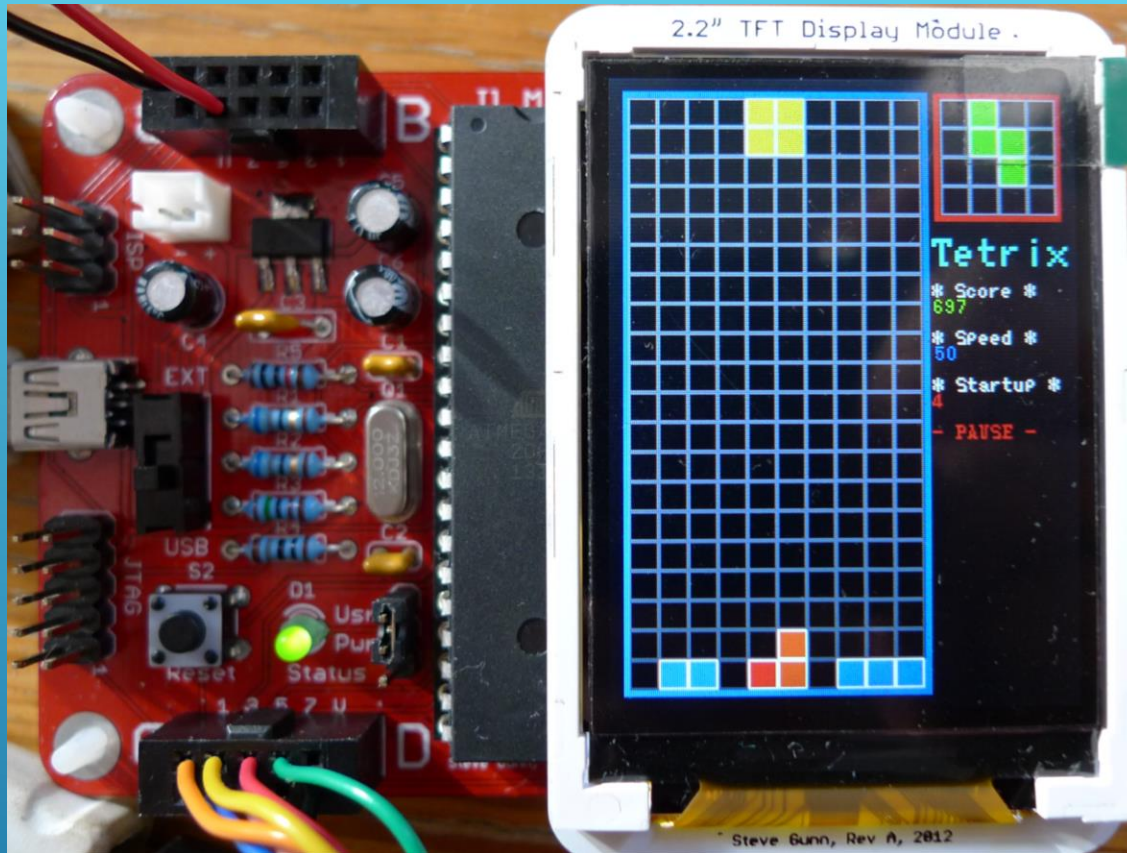
Game over detection, keypad control & pause





Line eliminate, score & speed display





Extended: next unit, high score, save & load

# Incremental development

- ▶ Advantages:

- Small parts of code is easier to write

- Easy to debug

- Easy to extend

- Can be used for group project

- ▶ Disadvantages:

- Difficult to change basic structure



# Thank you!

- ▶ Reference: [http://en.wikipedia.org/wiki/Software\\_development\\_methodology](http://en.wikipedia.org/wiki/Software_development_methodology)
- ▶ Source code: <https://github.com/zhiyb/TFT/tree/Tetris>
- ▶ Questions?

