**Group Members:** Jacob Sprafka, Eleanor Plager, Jacob Crain

**Note! –** I know the canvas page says we are supposed to work in groups of two, but I spoke with both the professor and my lab TA, Sandhya Krishnakumar, and they both approved of the group of 3. I have the email threads as evidence of this if it is necessary.

**Core Concept**: We plan to use the PIC24 to interface with a NHD-C12864LZ-FSW-FBW-3V3 LCD display to make tetris. We will wire up 4 buttons to control the game and have it run on the screen. We also plan to build tetris from scratch to run on the PIC24.

**Proposed new hardware:** NHD-C12864LZ-FSW-FBW-3V3 LCD display

<https://www.digikey.com/en/products/detail/newhaven-display-intl/NHD-C12864LZ-FSW-FBW-3V3/2625201?s=N4IgTCBcDaIHIAkAiBaAwgRjADgGwBYAZALRQDEBlAdXICEaBmANQZAF0BfIA>

We chose this display because it runs on 3.3 volts, it works with 16Mhz processors, it is well documented, has serial *and* parallel input, and it’s fairly cheap (also the screen has that retro video game look, which is a plus if you ask me).