Background Research for 8x8 LED Matrix

**Arduino Large 8x8 RGB LED Display** - <http://www.youtube.com/watch?v=QXNxg_AjSUw>

This one is the basis of the LED Matrix to be designed. This one uses a RBBB Arduino with 3 MAX7219s to control each light channel. LEDs are common cathode.

**Introduction to Driving LED Matrices** - 5980-3132EN+AN\_1216+10May10.pdf

This document outlines how the LED should be constructed. LEDs should be arranged in a multiplex sequence to allow fewer pins to control the matrix. Shift registers drive the LEDs on the rows and columns. Brightnesses can be controlled via pulse width modulation.

**Beat Detection Circuit and Code** - <http://arduino.cc/forum/index.php?topic=50021.0>

This code shows a circuit input audio signal