Ping Pong Score Board

Circuit Layout

1. SPST Switch for Changing Game Length
	1. GND
	2. Pin A8
2. SPST Switch for Serve Length
	1. GND
	2. Pin A9
3. SPST Switch for Personal Names vs. Player 1 & 2
	1. GND
	2. Pin A10
4. Score Point Buttons (All Momentary NO pushbuttons)
	1. GND (all of them)
	2. Pin 2 – Reset Match
	3. Pin 3 – Switch Serve back and forth
	4. Pin 4 – Scored Point Player 1
	5. Pin 5 – Remove Point Player 1
	6. Pin 6 – Scored Point Player 2
	7. Pin 7 – Remove Point Player 2
5. Connections from Arduino to FX Sound Board Pins
	1. SoundStartup Pin 36 to FX 0 Startup Ping Pong ball bouncing
	2. SoundChangeServe Pin 37 to FX 1 Switch Serve
	3. SoundNewGame Pin 38 to FX 2 New Game, Shall We Play a Game
	4. SoundGameOver Pin 39 to FX 3 Game Over + Cheering
	5. SoundWinnerIs1 Pin 40 to FX 4 And the Winner is Player 1
	6. SoundWinnerIs2 Pin 41 to FX 5 And the Winner is Player 2
	7. SoundUndo Pin 42 to FX 6 Point was a mistake “Oh No”
	8. SoundWinnerIsJoan Pin 43 to FX 7 And the winner is “Joan”
	9. SoundWinnerIsIrwin Pin 44 to FX 8 same for “Irwin”
	10. SoundLetsPlay Pin 45 to FX 9 Startup “Let’s Play Ping Pong”
	11. Pin 8 to ACT on FX Remains Low while FX is busy playing
	12. GND to GND
	13. 3 V from Arduino
6. Connections to AdaFruit 16x32 LED Matrix (note this is for the Arduino Mega)
	1. CLK to Pin 11
	2. OE to Pin 9
	3. LAT to Pin 10
	4. A to A0
	5. B to A1
	6. C to A2
	7. GND to Arduino GND (four connections)
	8. Separate 5v 2a Power Supply Power connector
7. AdaFruit 16x2 LCD with backpack (Shows settings)
	1. VIN to 5v
	2. GND to GND
	3. SDA and SLC pins
8. AdaFruit 1.2 inch 7-Segment LED (Shows Score)
	1. Vin and IO (2nd power input) to 5v Pin
	2. SDA and SLC connected to Arduino SDA and SLC pin
9. AdaFruit .58 inch 7-Segment LED (Shows Games Score)
	1. Vin to 5v Pin
	2. SDA and SLC connected to Arduino SDA and SLC pin
10. Speakers (8 ohm)
	1. Connected to FX Sound Board speaker contacts (L&R)
11. SPST switch for On / Off controlling extension cord that power supply (9v) for Arduino and (5v) for LED matrix
12. Big Pushbuttons (Arduino pins 4&6) have 5v LED’s to light up
	1. Connected to extra 5V and GND from RGB 16x32 matrix power supply