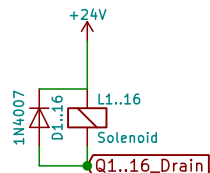
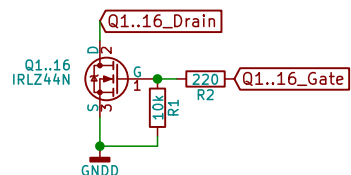


Solenoids (max 16) Each equipped with a flyback diode and connected to 24V supply and their respective driver MOSFET Drain.

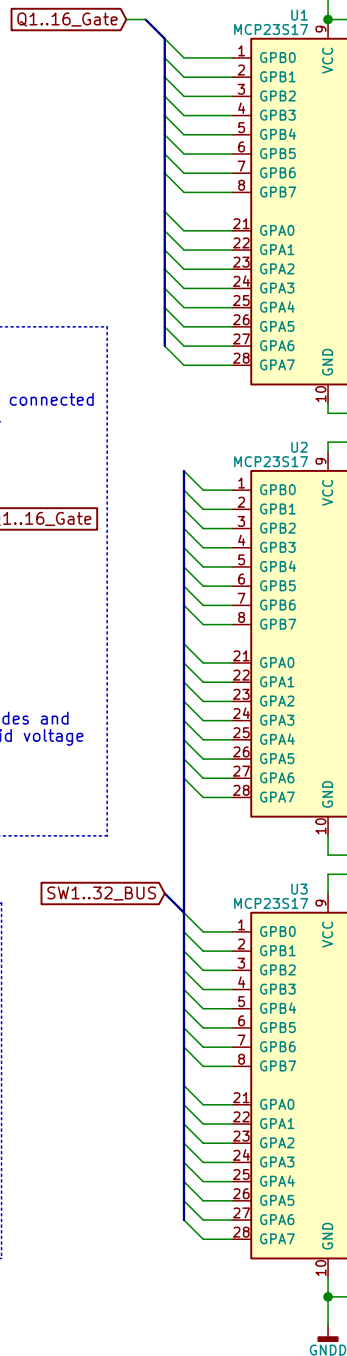
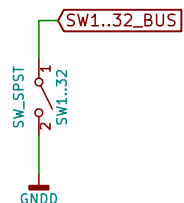


Driver MOSFET assy.( max 16) Each connected to a GPIO pin on U1 and a heavy copper power gnd which is connected to the digital grounds at a single point.



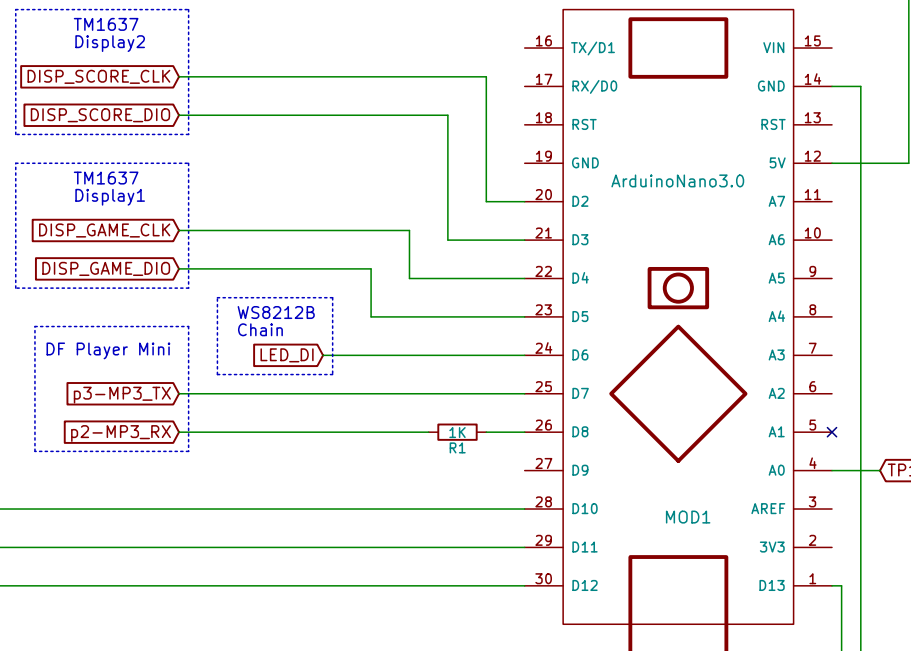
TILT Mosfet is another type with much lower R D-S ON and Heat Sink.  
All Power Mosfets must have internal diodes and be rated significantly higher than solenoid voltage  
Also 6A min and logic level switching.

Switches (Max 32)  
All connected to a common GND and with one wire to their respective pins.  
Debounce / spike filter handled in S/W.



Note: modules, LEDs, VCC GND not drawn, MP3 speakers and amp module not drawn.

Decoupling caps not drawn.  
100nF per GPIO and a central 470uF electrolytic at minimum.



Arduino Pinball Adapter  
Dennis Meulensteen

Prototype. Build at own risk

Sheet: 1/ 1

File: ArduinoPinball.sch

Title: Arduino Pinball Adapter

Size: A4 Date: 20180919 - 20181126

KiCad E.D.A. kicad 4.0.7-e2-637661ubuntu18.04.1

Rev: 1.50

Id: 1/1