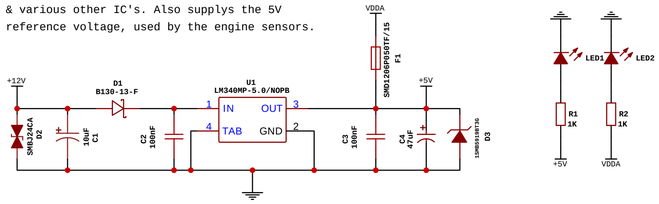
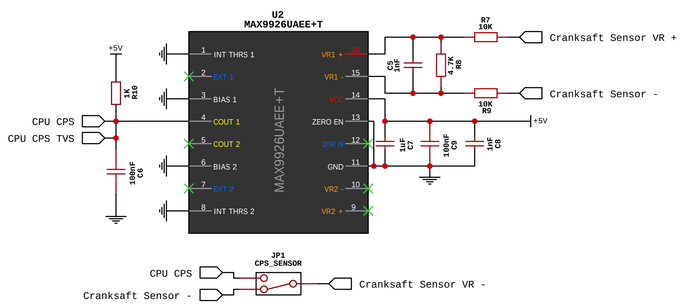
Power Supply

Steps down the battery voltage to a regulated
5V DC voltage, which provides power to the CPU
& various other IC's. Also supplys the 5V
reference voltage, used by the engine sensors.



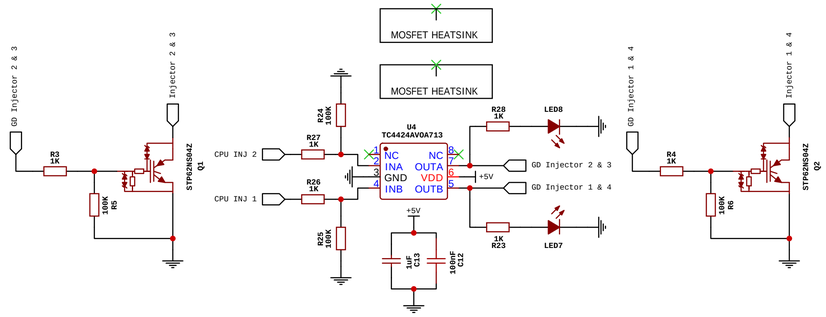
Crankshaft Position Sensor

Circuit using the MAX9926 IC, which conditions
a VR Reluctor type sensor. The reluctor type sensor
is a two wire sensor, that outputs an AC voltage.
Hall / Optical signal is not routed through the MAX9926 IC.
These ouput direct 0v - 5v. Directly compatible.



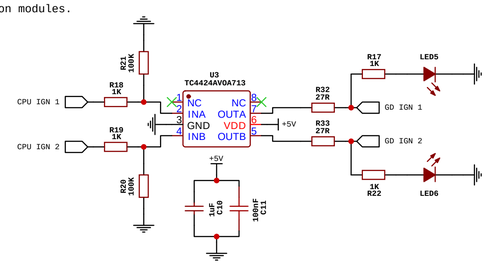
Fuel Injector Control

High Impediance Injectors (> 10 Ohm), directly supported.
2 Power Mosfets [STP62NS04Z], for dual channel Injection, support pairing
to run 4 cylinder wasted / batch injection.
Mosfets charged via TC4424 Mosfet Driver @ 5v.



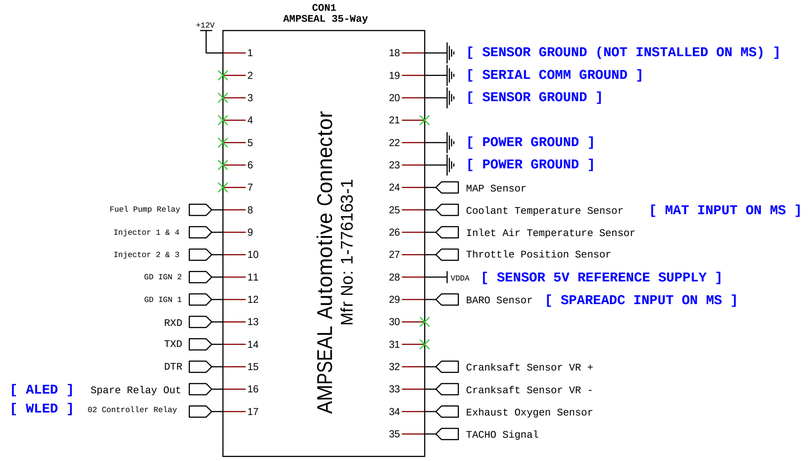
Ignition / Spark Control

Mosfets charged via TC4424 Mosfet Driver @ 5v.
Control for logic level ignition modules.

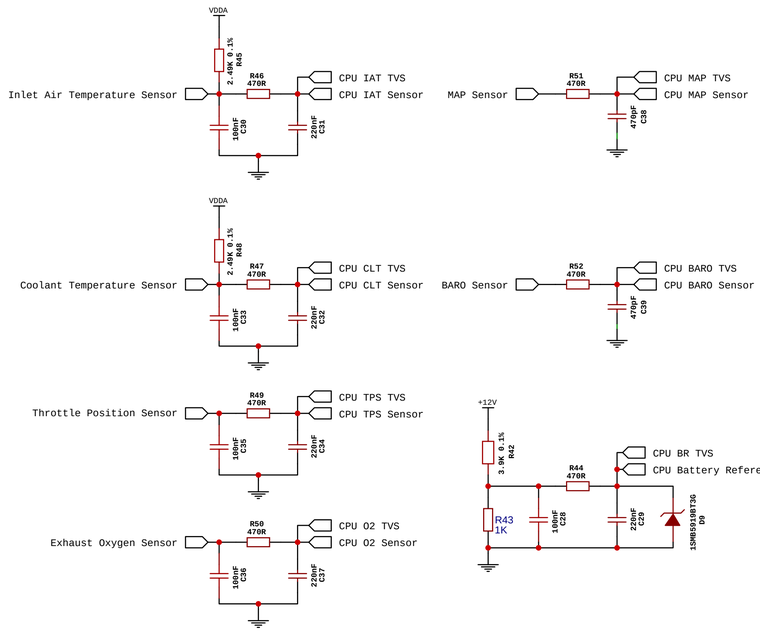


35 Pin AMPSEAL Connector

Follows the same Pinout as the Microsqirt

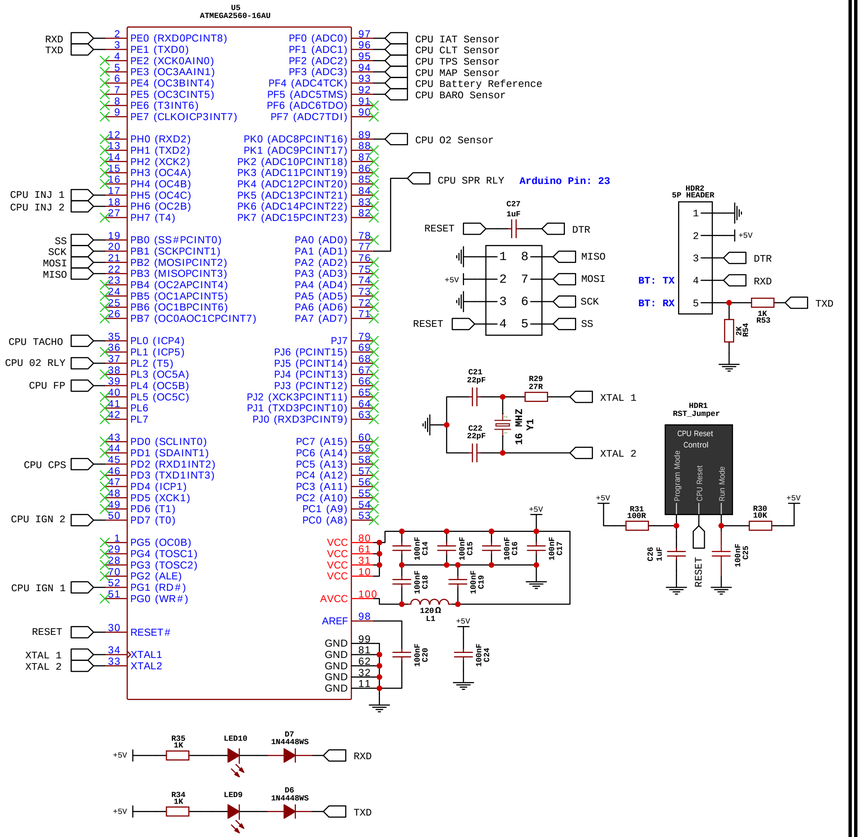


Engine Analog Sensor Inputs



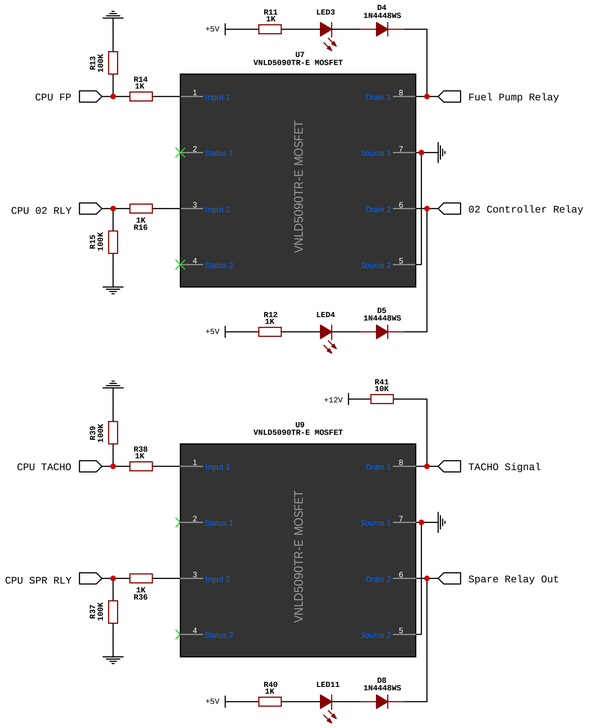
CPU / Processor

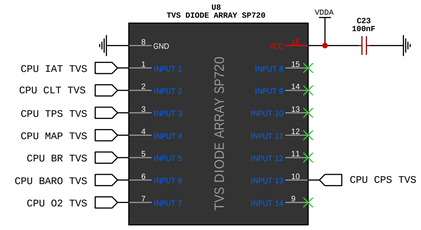
PCB uses an ATmega2560-AU CPU.



Fuel Pump Relay & AUX Relay Outputs

Relay Outputs switched via VNLD5090TR-E Mosfet, with status LEDs.





TITLE: 2CH Engine Management ECU		REV: 1.0
	Company:	Sheet: 1/1
	Date: 16/04/2021	Drawn By: Matthew Howard