

Sheet: Connector

Sheet: Fuel-Ignition

Sheet: Analog Inputs

Sheet: Output

File: Connector.sch

File: Fuel-Ignition.sch

File: Analog.sch

File: Output.sch

Pre-Ignition X4  
By: DetonationEMS

DetonationEMS.com

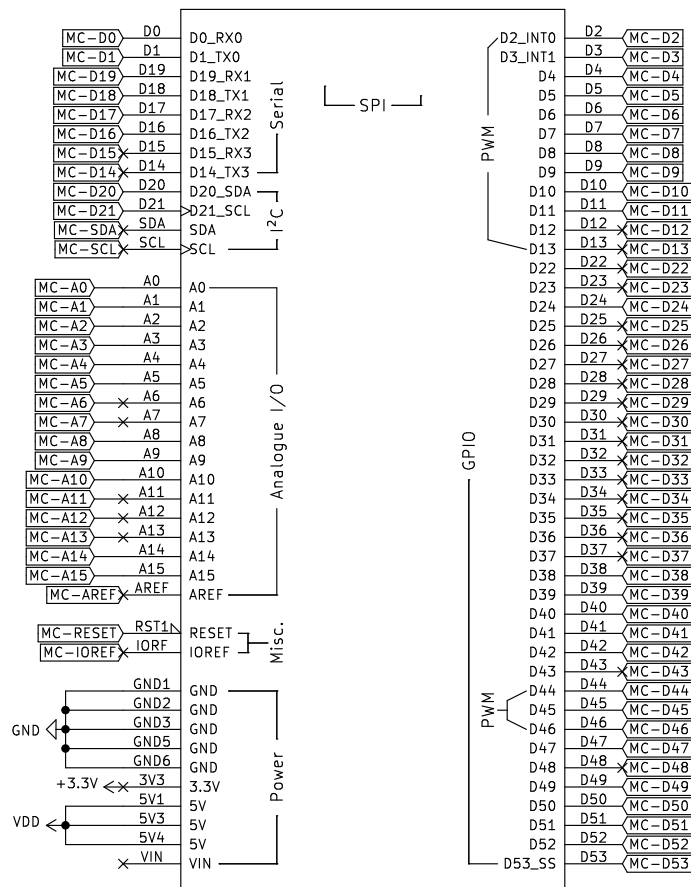
If you are happy with DetonationEMS, Speeduino Compatible devices, Firmware and/or Software please consider sponsoring Josh so he can advance his efforts.

<https://github.com/sponsors/noisymime>

Arduino Mega 2560 R3

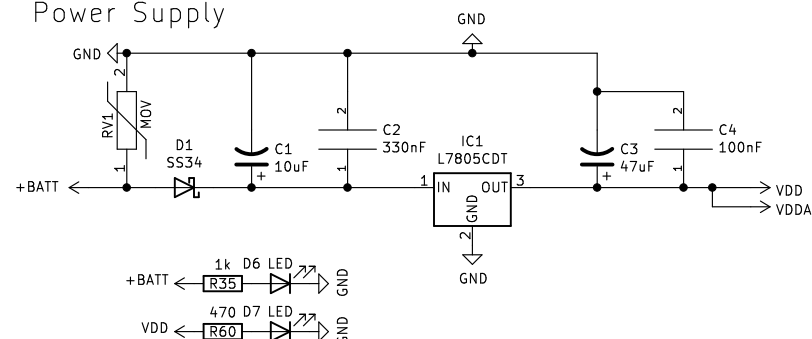
XA1

Arduino\_Mega2560\_Shield-Arduino



Remove DC Jack for proper fitment.

## Power Supply



test



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**DetonationEMS**

Sheet: /

File: Pre-Ignition.sch

**Title: Pre-Ignition X4**

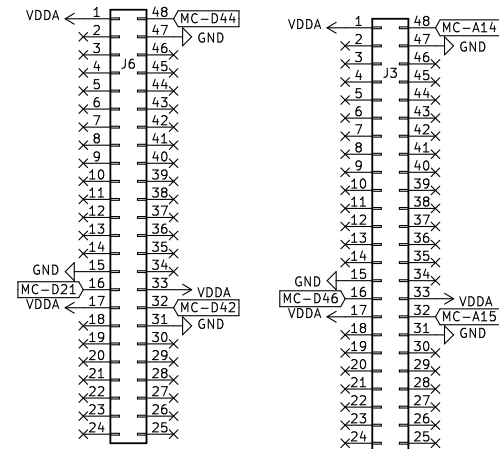
Size: USLetter Date: 2021-09-21

KiCad E.D.A. kicad (5.1.10)-1

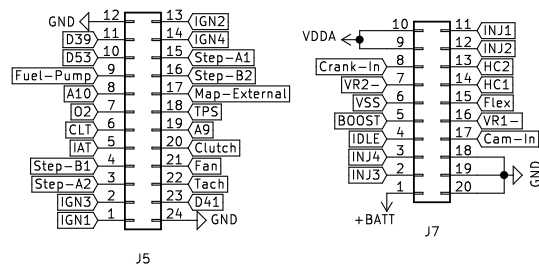
**Rev: 2**

Id: 1/5

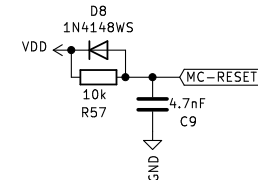
# Proto Area



# Main Connection



# Reset Control



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Sheet: /Connector/

File: Connector.sch

**Title: Pre-Ignition X4**

Size: A4

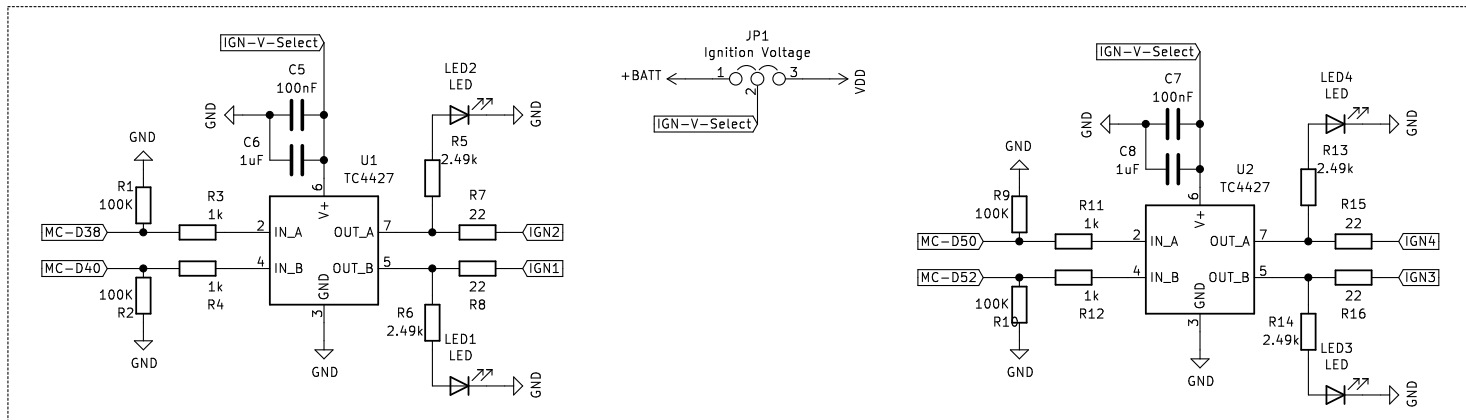
Date:

**Rev: 2**

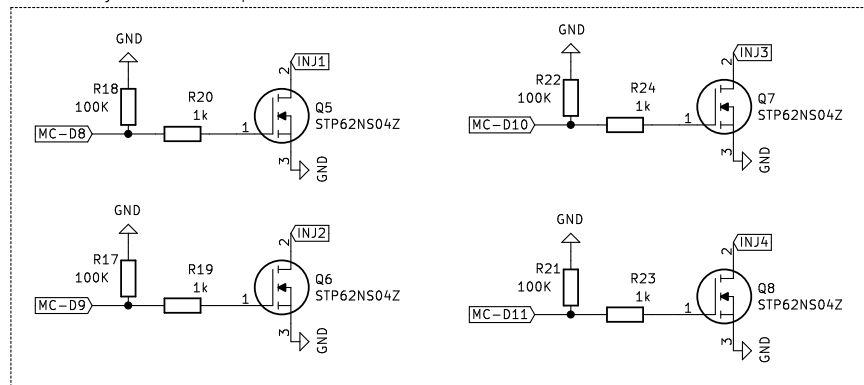
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Id: 2/5

## Ignition Output



## Fuel Injector Output



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**DetonationEMS**

Sheet: /Fuel-Ignition/  
File: Fuel-Ignition.sch

**Title: Pre-Ignition X4**

Size: A4

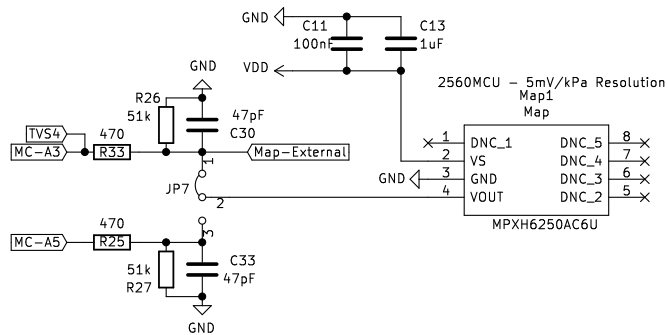
Date:

**Rev: 2**

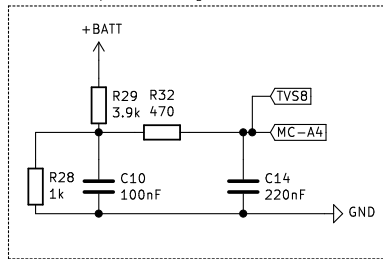
KiCad E.D.A. kicad (5.1.10)-1

Id: 3/5

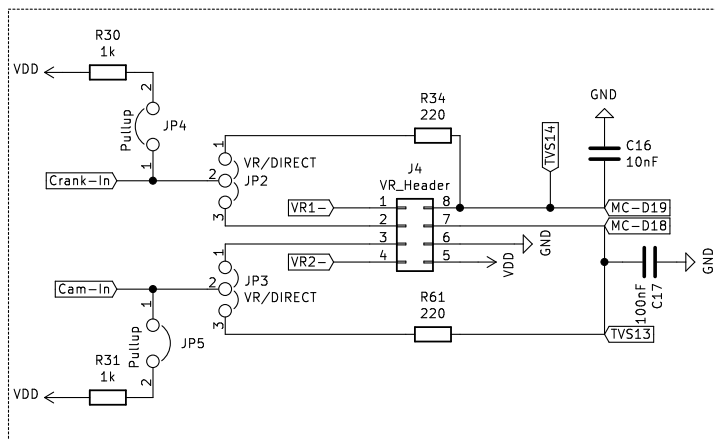
## Map Sensor



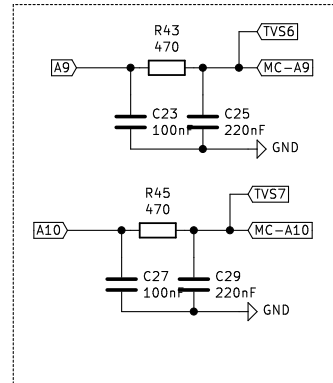
## Battery Voltage Reference



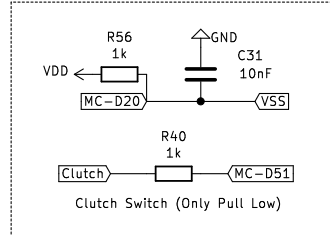
## Crank/Cam Sensor



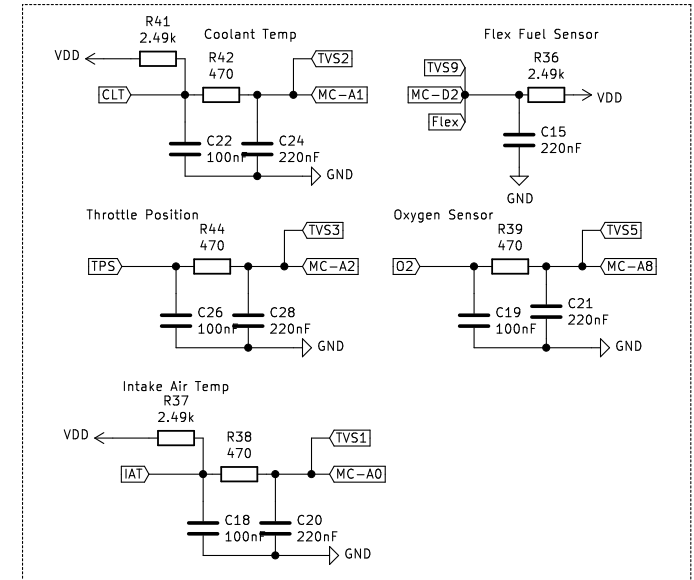
## Aux-Analog-Inputs



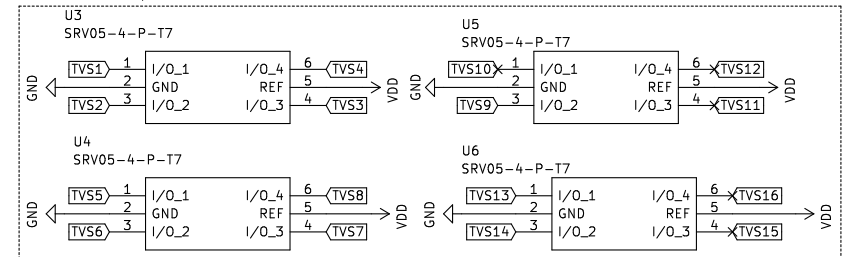
## VSS / Clutch Input



## Engine Inputs



## 5v-Clamp



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Sheet: /Analog Inputs/

File: Analog.sch

**Title: Pre-Ignition X4**

Size: A4

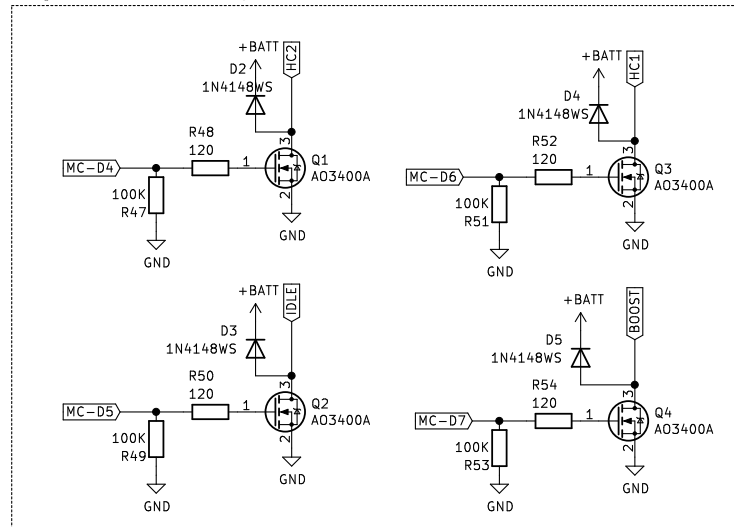
Date:

**Rev: 2**

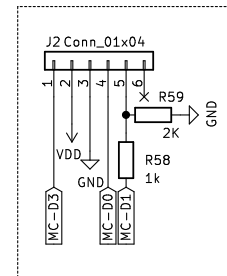
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Id: 4/5

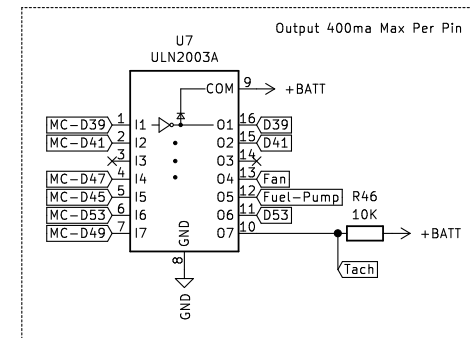
## High Current Output – 1A Max



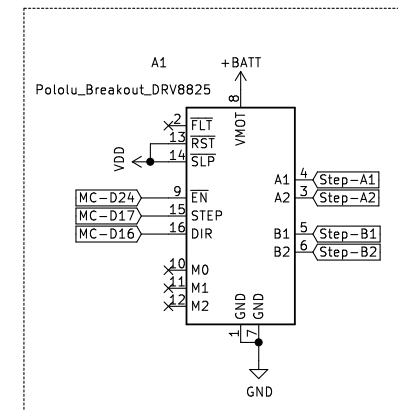
## Bluetooth



## Relay Control / Tach Output



## Stepper Driver



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**DetonationEMS**

Sheet: /Output/

File: Output.sch

**Title: Pre-Ignition X4**

Size: A4 Date:

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**Rev: 2**

Id: 5/5