

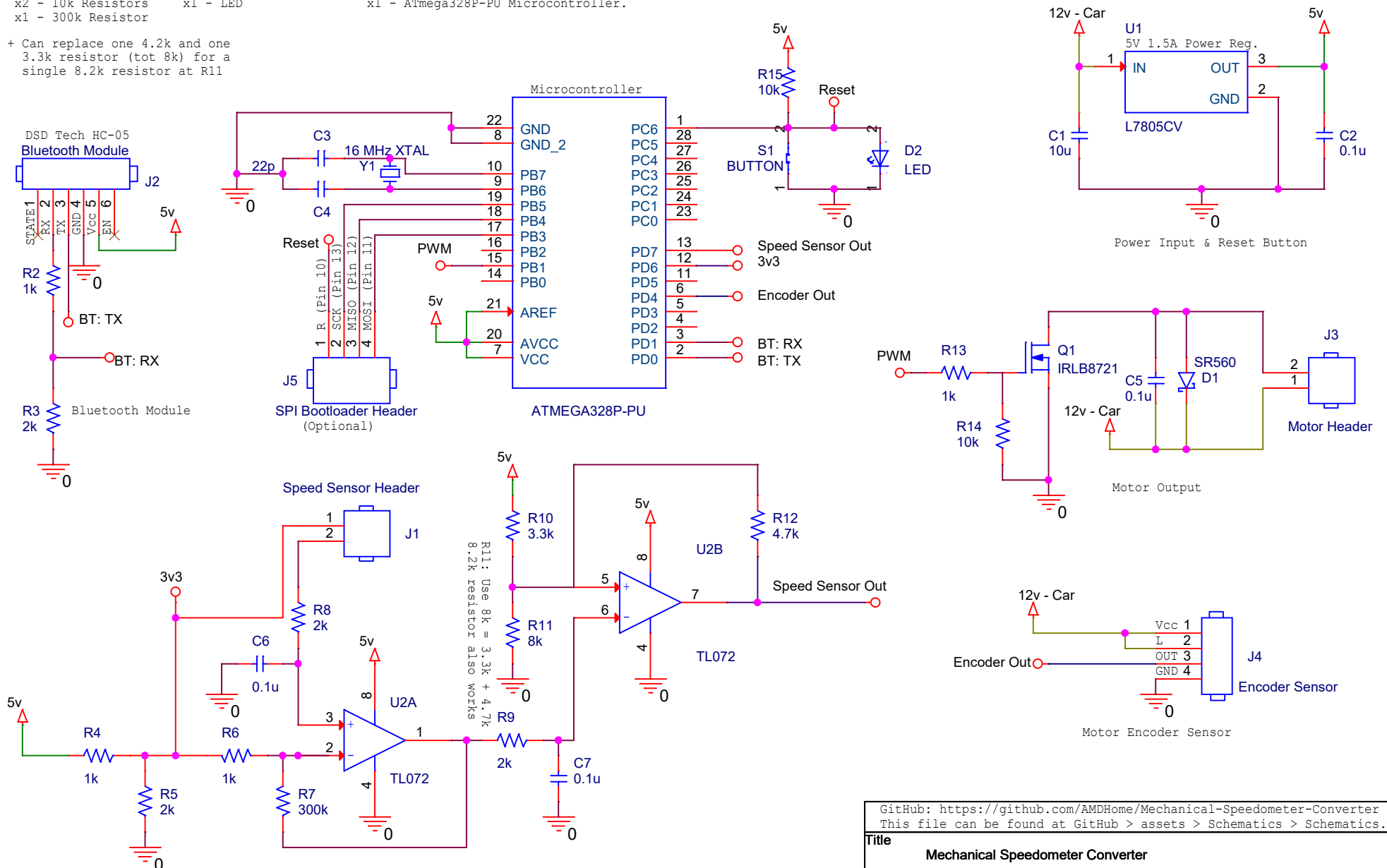
Parts:

x5 - 1k Resistor
x4 - 2k Resistors
x2 - 3.3k Resistors
x2 - 4.7k Resistors
x2 - 10k Resistors
x1 - 300k Resistor
x2 - 22pF Capacitor
x4 - 0.1uF Capacitor
x1 - 10uF Capacitor
x1 - 16 MHz Crystal
x1 - LED
x1 - Power Regulator (Out 5V, Min: 250mA) [L7805CV]
x1 - Schottky Diode (Min. 15V, 2.5A) [SR560]
x1 - MOSFET/Transistor (Min. 15V, 2.5A) [IRLB8721]
x1 - TL072x Op-Amp (or equivalent)
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x1 - ATmega328P-PU Microcontroller.

+ Can replace one 4.2k and one 3.3k resistor (tot 8k) for a single 8.2k resistor at R11

Connected Devices:

- BT Module: DSDTech HC-05
- Speed Sensor: Rostra 250-4165
- Motor: TSiny Motor TRS-775W
- Encoder Sensor: EE-SX672 Photo Interrupter (\$ 20.00) elsewhere.
* Buy the photo interrupter at adafruit.com (\$ 2.95). It is much more expensive



Speed Sensor Signal Input
& Signal Processing Unit

U2A: Amplify Signal x300
U2B: Schmitt Trigger

GitHub: <https://github.com/AMHome/Mechanical-Speedometer-Converter>
This file can be found at GitHub > assets > Schematics > Schematics.pdf

Title		
Mechanical Speedometer Converter		
Size	Document Number	Rev
A	Alpha Version	v1.1
Date:	Wednesday, June 12, 2019	Sheet 1 of 1