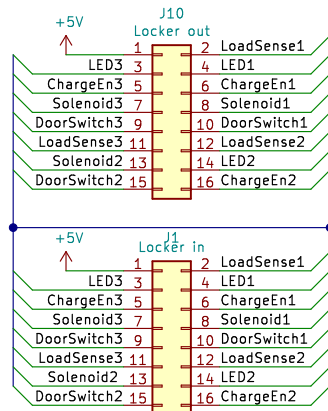
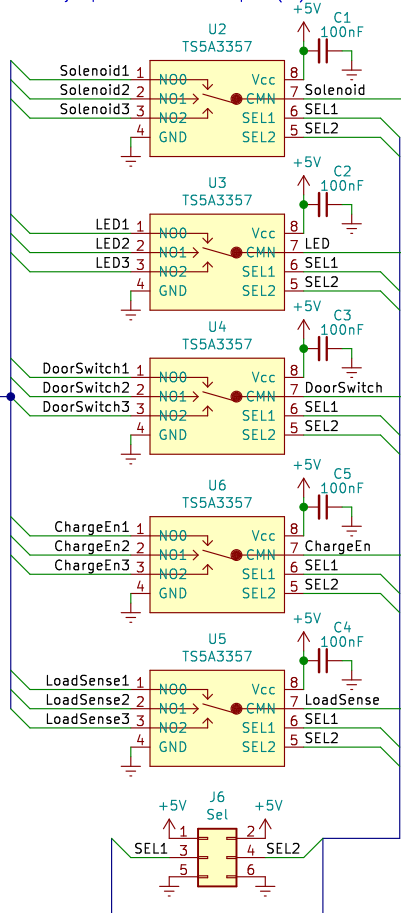


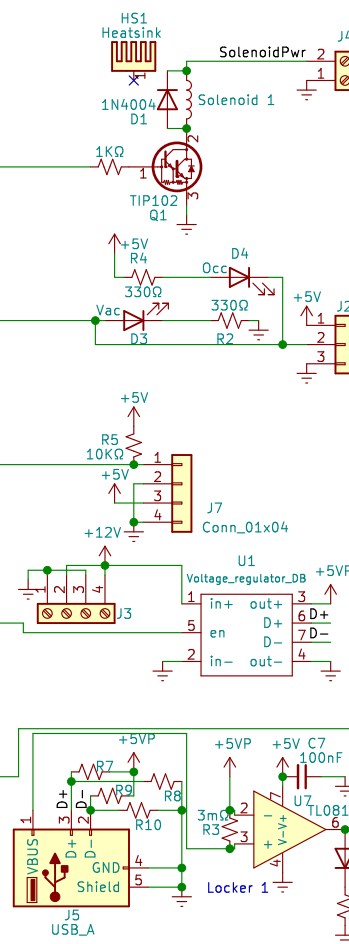
IDC connectors used for signals in and out. Signals for upto 3 lockers are passed and the appropriate signals are selecting with the aid of TS5A3357 switches



TS5A3357 SP3T switches are used to select between the appropriate control signals by providing a BCD control signal. This control can be changed via the use of jumpers on the header pins (J6)



sel2	sel1	Locker selected
0	0	1
1	0	2
1	1	3



TIP102 (Darlington transistor) is used to switch the solenoid when the locker in question is to be accessed. The diode in parallel aids in rectifying reverse current and surges when the solenoid is activated

This is a place holder for a daughterboard that will be mounted on top of this PCB. This daughterboard will include the voltage regulator used to charge the users devices and will also include any over current protection and data-line communication

TL081 is used as a comparator to detect when a device is plugged into the station. The package is purpose selected to be DIP so if the team decides to use a more sophisticated solution to load detection, it may be implemented without having to redo this PCB



Designer: Aditya Sehgal

**SlugCharge**

Sheet: /

File: Locker1.kicad\_sch

**Title: Locker DaughterBoard**

Size: A4

Date: 2020-05-18

**Rev: 4.0**

KiCad E.D.A. kicad (5.99.0-1662-g9db296991)

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