

## **Materials Needed to Bring to Competition:**

### Videos and Documentation

- Pdf of all rules questions/waivers submitted
- Video demos of AMS boards
- Pictures of TSV
- Pictures of TSI
- Fuse circuit diagram
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### General

- 16 AWG wire
- Crimping tools
  - Hex die crimp
  - Yellow hand crimp tool/wire stripper
  - Deutsche crimper
- Heat gun
- Heat shrink
- Electrical grease + brush applicator
- Wrenches, Screwdrivers
- Soldering tools
  - Hot air station
  - Soldering iron
  - Flux (soldering)
  - Solder
  - Solder wick
- Multimeters
  - Insulated probes
  - Hook probes
  - Spare batteries
- Containers
- Heat shrink tubing
  - Clear long strips
  - Boxes of strips
- Wire cutters
- Wire strippers
- Bus wire
- Tape
  - Silicone Tape (green black red)
  - Teflon tape
  - Kapton tape
- Hex screw drivers
- Allen key wrench set

- Imperial
- Metric
- Hot glue gun

### TSI

- JTAG Debugger
- Pins for IMD, Deutsch
- IMD connector
- Spare components
- SPL Meter

### TSV

- Chargers
- Charging cables (for manual charging)
- Extra cells
- Garolite
- Garolite cutter
- Extra AMS cables
- JTAG debugger
- Assorted resistors (100K-200K)
- Assorted capacitors (surface mount)
- Hex screws for bars
- 1 Amp fuses
- 25 amp cylinder fuses
- Pickit3
- AMSVU
- Bench Power supply x 2
- Tools for changing cells
- AMS testboard + tester for it

### GLV

- Charger
- Extra cable for connections
- Extra circuit breaker

### SCADA

- Keyboard

All fuses in all systems.

Power supply

Current prob

Oscilloscope (with CAN module)

Powerstrip (extension cord)

Label maker

High voltage sticker

Zip-ties

Safety glasses

Maybe buy more zip-ties and heat shrink