

# Solar Cell IV Measurement... to the Moon

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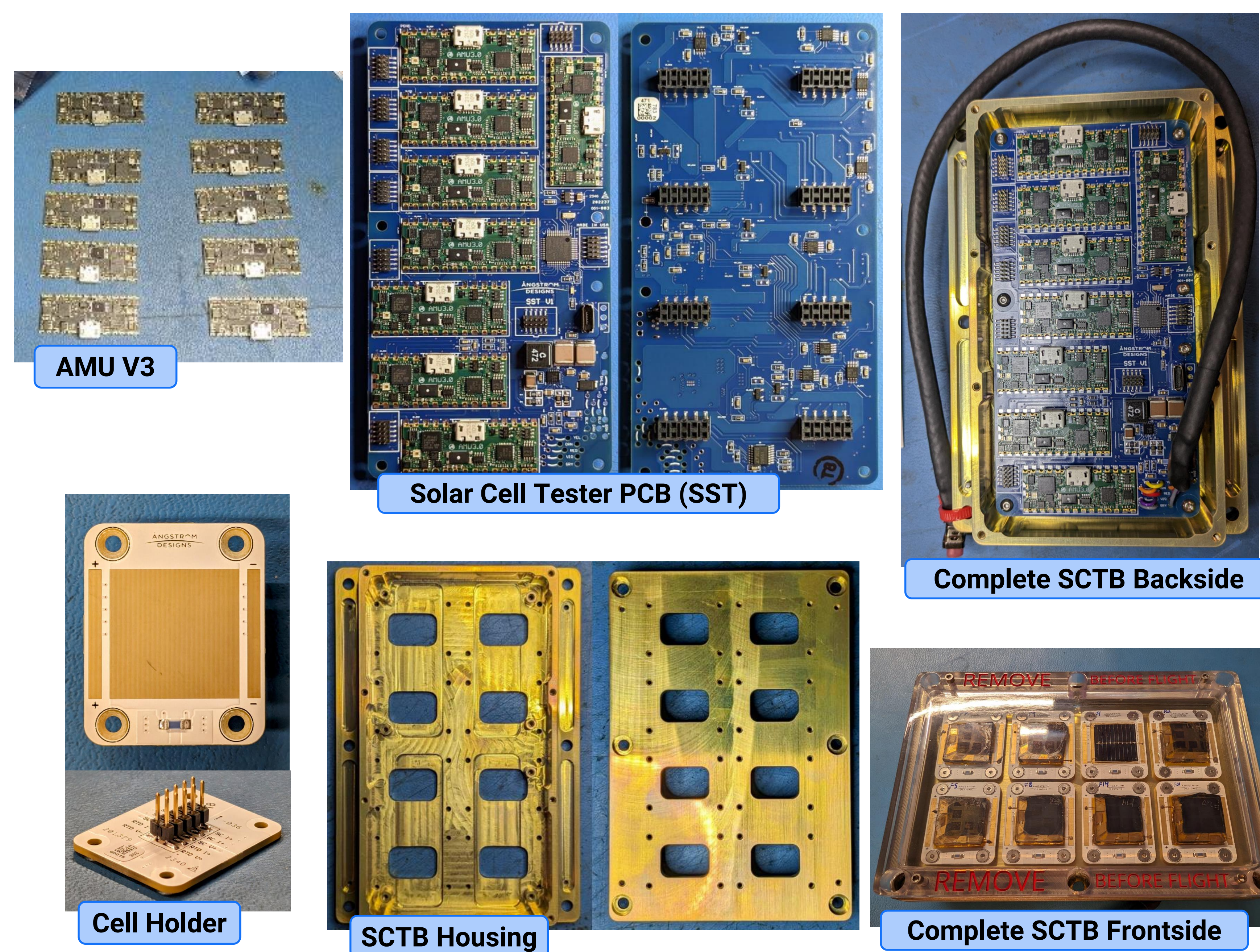
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## More Cell Testing In Space

Angstrom Designs and Aegis Aerospace build the Solar Cell Test Bed (SCTB). The SCTB provides:

- Greater access to space solar cell testing
- Historical trust in the AMU
- Ability to synchronously measure current, voltage, temperature, while sweeping the cell load
- Custom measurements through Angstrom Designs' AMU firmware

The SCTB will launch on the Intuitive Machines' Nova-C lunar lander.



## AMU Measurement Error

### Tests:

- Current Measurement Accuracy
- Voltage Measurement Accuracy
- Temperature Measurement Accuracy
- Load control (sweep IV)

### Results:

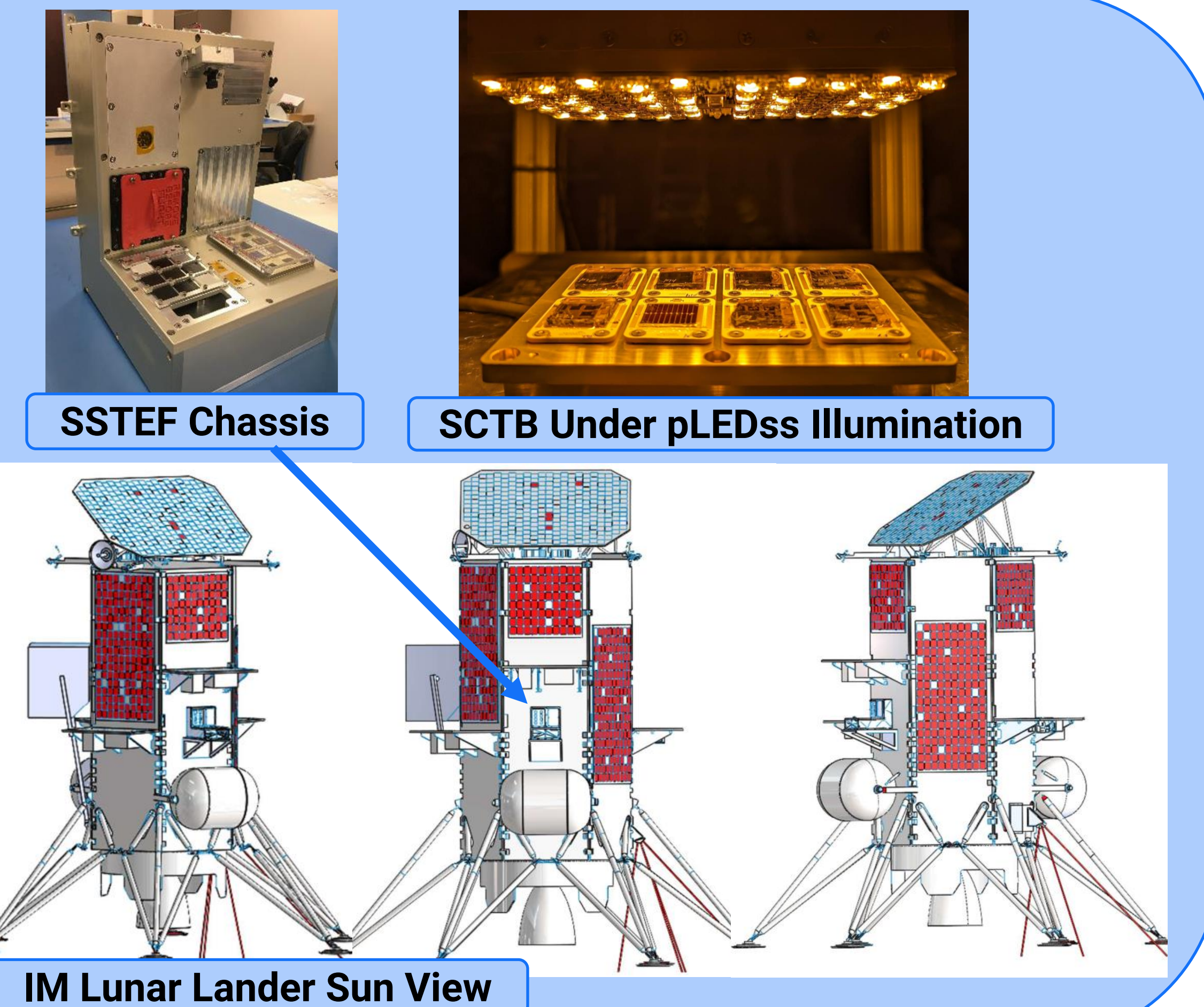
- Some systematic error (correctable)
- Linear error in voltage
- Constant offset error in current

Parameter	Worst Case Measurement
Voltage Accuracy	0.2%
Current Accuracy	500 $\mu$ A



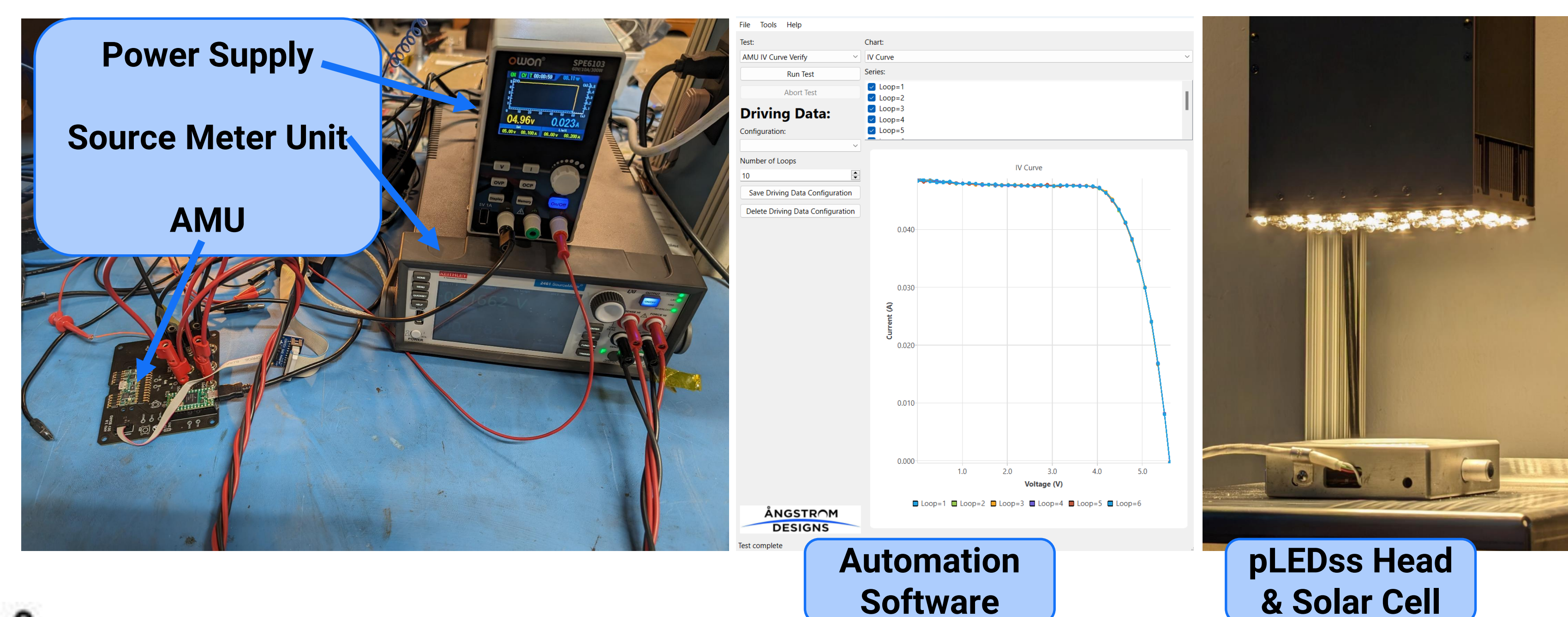
## Lunar Chassis

- SCTB delivered to Aegis
- Integrated into SSTEFL lunar chassis
- Passed vibrate and environmental testing
- Waiting for final delivery to Intuitive Machines



## AMU Manufacturing Tests

- AMU performance verified with Angstrom Designs automated tests
- Test reports are generated for all AD manufactured AMUs



What's next?

## Fly Your Cells on the ISS:

### Orbital Electronics Lab

International Space Station – Solar Cell Test Facility

Angstrom Designs and Aegis Aerospace are partnering to carry this work forward by offering active cell testing on the ISS as a service:

- Turnkey space solar cell testing, you just provide the cells
- 6 months on-orbit with IV, temperature and sun-angle data
- Mid-flight sample pictures
- Timely sample return

Easily test your cells before, during, and after flight in LEO!