



### Meet the Team

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**Kyle Collins**  
Team Leader  
Project Manager

**Phummin Rotphan**  
ME Quality Engineer

**Brandon Lipscomb**  
ME Design Engineer  
Lead

**Grace Fraser**  
Manufacturing Engineer  
Lead

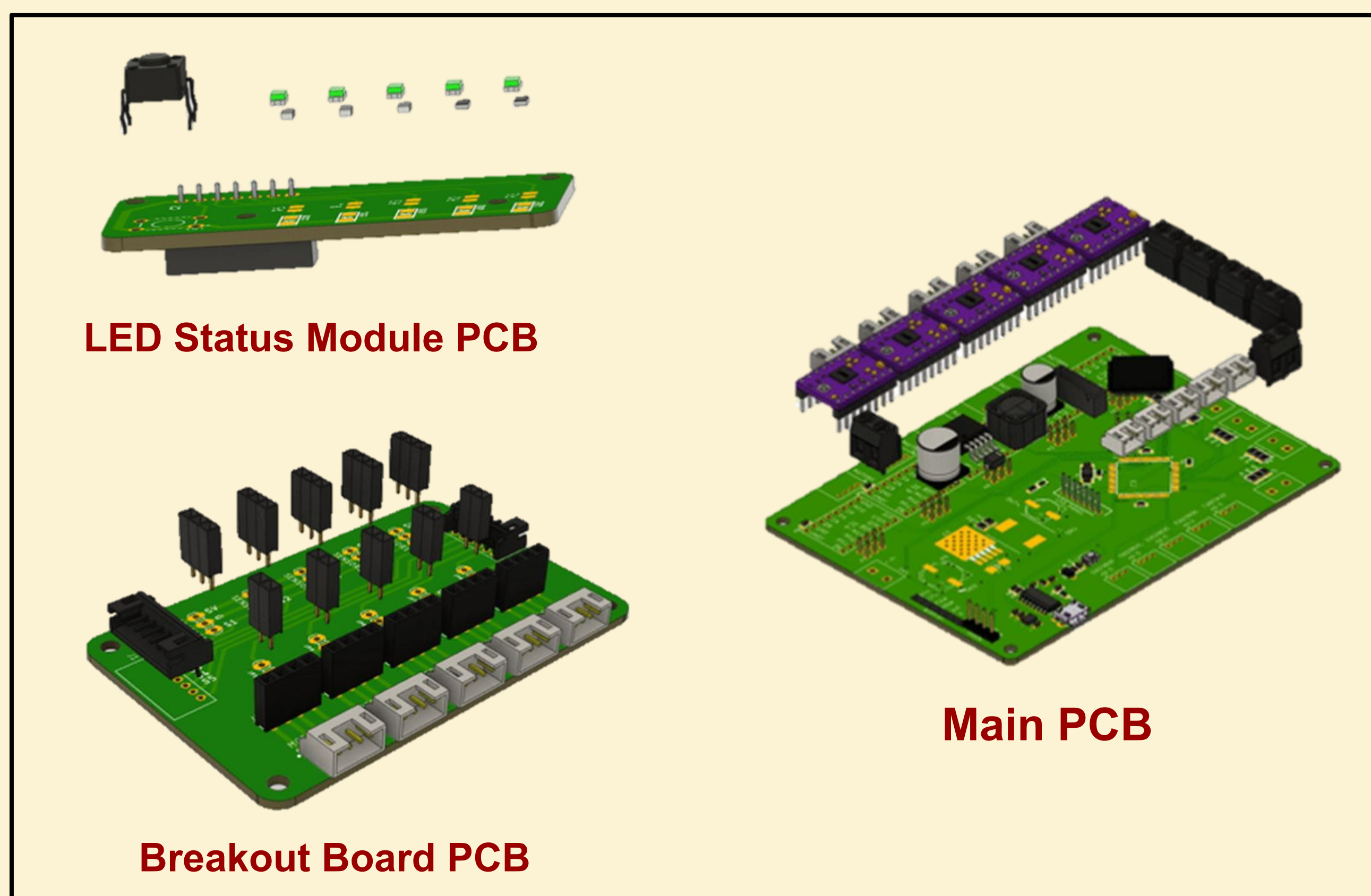
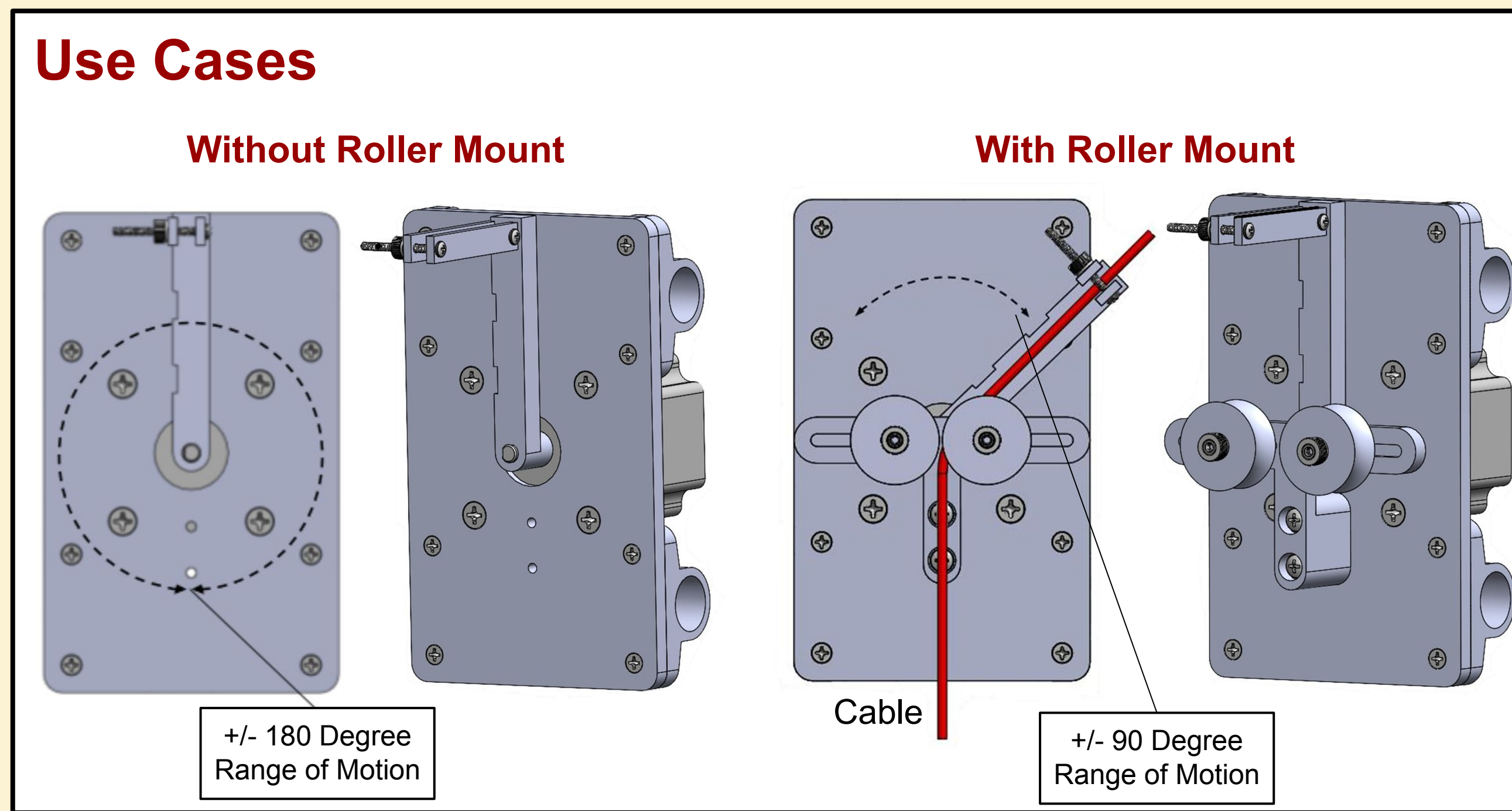
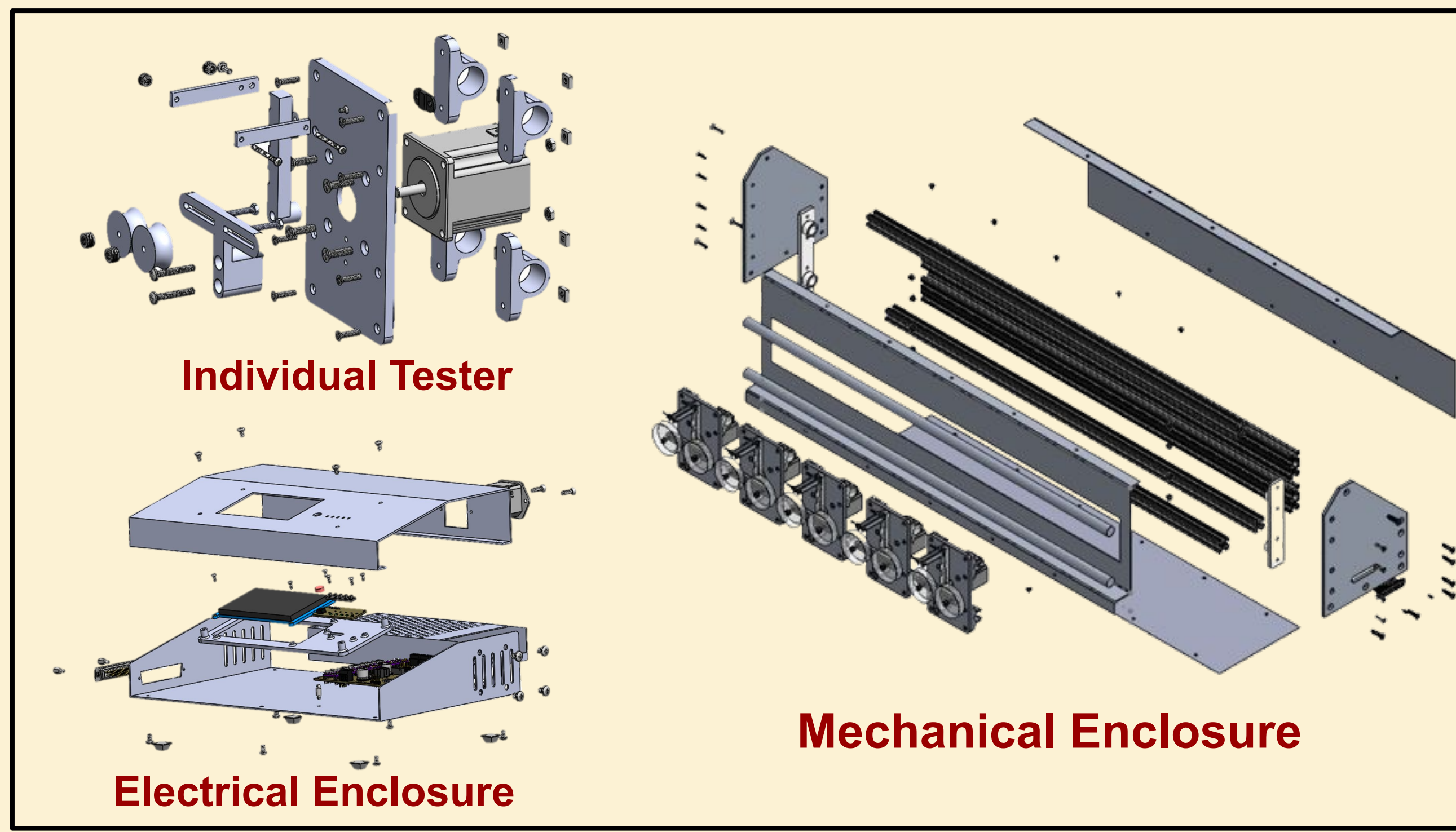
**Joseph Marquez**  
ECE Engineer

**Jeremy Minimo**  
ECE Design Engineer  
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**Frank Slewa**  
ECE Quality Engineer

**Abdulwahab Alqurtas**  
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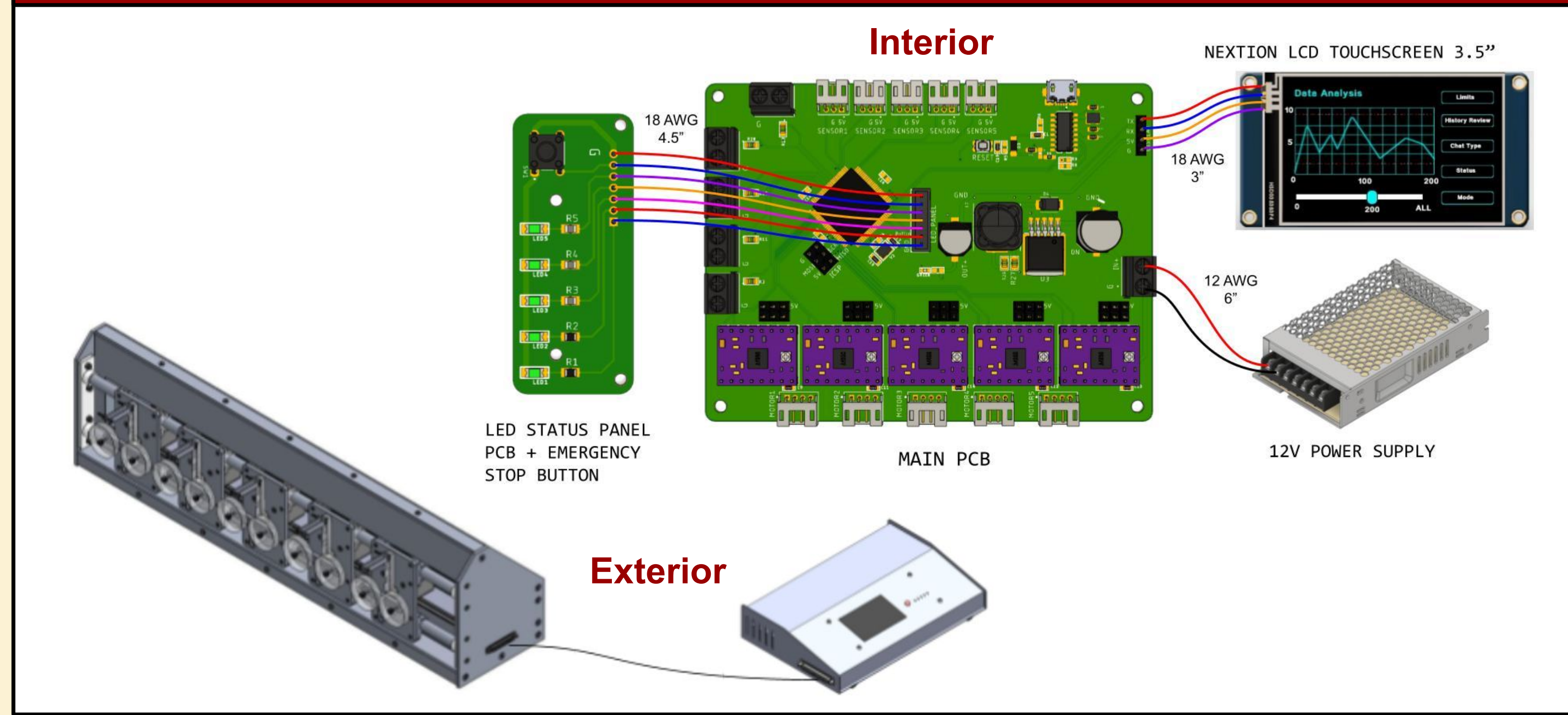


### Project Overview

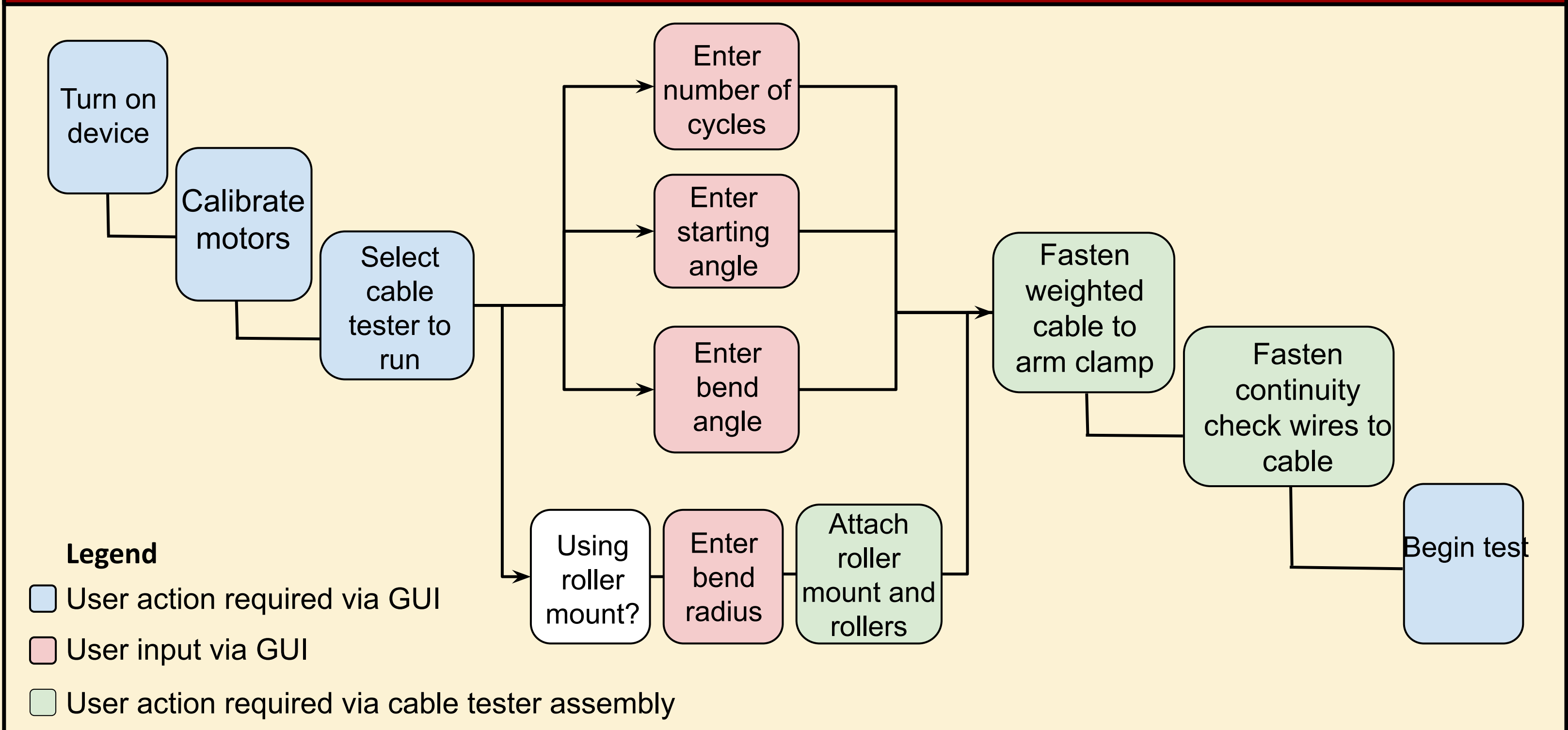
**Problem:** Masimo's current method for testing cables and strain reliefs takes too much time and requires a large amount of work from their technicians.

**Need:** Design a device that can accommodate a wide variety of multi-conductor electrical cables and strain reliefs simultaneously. This device must be able to program the number of bend cycles, the bend cycle speed, and the bend cycle start angle. This device must notify lab staff upon completion of testing or if cable break/short is detected.

### System Integration



### User Actions Required to Initiate Cable Test



### Meet the Sponsor

**Masimo:** A global medical technology company headquartered in Irvine, CA that develops and manufactures noninvasive patient monitoring technologies, medical devices, and hospital and ventilation automation solutions.

### Acknowledgments

The team thanks Dr. Shaffar and Professor Dorr for arranging and advising this project. In addition, the team thanks everyone at Masimo who supported this project, specifically Glenn Pohly, Desmond Mok, and Jonathan Truesdell.

### Manufacturing

