PEER REVIEW OF PCB DISCOVERY HAT

# Adherence TO Mr. Pead’s basic requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unacceptable  1 | Ok attempt  2 | Reasonable  3 | Good  4 | Excellent  5 |
|  |  |  | √ |  |
| Comment: No 18650 connector. No test points in the power module or sensing module and no 0-ohm resistors to allow for bypassing. Everything else is present. | | | | |

# Adherence TO Mr. Pead’s debugger requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unacceptable  1 | Ok attempt  2 | Reasonable  3 | Good  4 | Excellent  5 |
|  |  |  |  | √ |
| Comment: | | | | |

# Schematic

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unacceptable  1 | Ok attempt  2 | Reasonable  3 | Good  4 | Excellent  5 |
|  |  |  |  | √ |
| Comment: The schematics are neat and easy to follow with good annotations. | | | | |

# PCB Layout

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unacceptable  1 | Ok attempt  2 | Reasonable  3 | Good  4 | Excellent  5 |
|  |  |  | √ |  |
| Comment: Traces seem to be too thin eg R8-IC1 otherwise the layout of the board is good. | | | | |

# Silk Screen

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unacceptable  1 | Ok attempt  2 | Reasonable  3 | Good  4 | Excellent  5 |
|  | √ |  |  |  |
| Comment: Components are labeled but there is no version number, design name, or module names; difficult to see what is what. | | | | |

# Low voltage protection circuit

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unacceptable  1 | Ok attempt  2 | Reasonable  3 | Good  4 | Excellent  5 |
|  |  |  |  | √ |
| Comment: | | | | |

# Physical board design

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unacceptable  1 | Ok attempt  2 | Reasonable  3 | Good  4 | Excellent  5 |
|  |  |  |  | √ |
| Comment: | | | | |

# Test points and recovery approaches

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unacceptable  1 | Ok attempt  2 | Reasonable  3 | Good  4 | Excellent  5 |
|  |  | √ |  |  |
| Comment: Not enough test points. More test points could be added to the digital sensors SCL , and SDA line to test for data transfer; more test points in the power system for bypassing in case module does not work and to check if voltages are correct . | | | | |