

# Electrical Engineering Test Plan

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P13571

Test Strategy:

Hardware Tests:

## 1) Power Board

- i) Supply 24V DC to TPS54260 switch to ensure 3.3V output is supplied to 3.3V rail using test points on PCB
- ii) Check test points for 2.5V and 1.2V Buck converters using test points.
- iii) Apply test load to ensure consistent operation when under load (FPGA Board).
- iv) Connect other boards to ensure continuity to proper pins
- v) Apply power to system via CoaXPress to verify correct operational voltage

## 2) Tx/Rx

- i) Perform Short tests on boards to check fabrication consistency
- ii) Check for correct voltages received when connected to power board
- iii) Check Pin out for connector to components on PCB where possible
- iv) Apply power to system to verify correct operational voltage

## 3) FPGA Board

- i) Check for correct voltages received when connected to power board
- ii) Check Pin out for connector to components on PCB where possible
- iii) Perform Short tests on boards to check fabrication consistency
- iv) Test programming of Spansion Flash memory though JTAG

## 4) Image Sensor Board

- i) Check for continuity between known connections where possible
- ii) Check for correct voltages received when connected to power board
- iii) Check Pin out for connector to components on PCB where possible
- iv) Apply power to system to verify correct operational voltage
- v) Verify parallel image data out to FPGA Board