| Sightline Applications | | | | | | |
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| Test Case Name: | | SLA1500CAM Unit Test #1 | | | Test ID#: | SLA1500CAM-UT-01 |
| Description: | | Visual Inspection of SLA1500CAM board | | | Type: | Black Box |
| Tester Information | | | | | | |
| Name of Tester: | | | | | Date: | |
| Hardware Version: | | SLA1500CAM Rev 8.0 | | | Time: | |
| Setup: | | No set up required. | | | | |
| Step | Action | Expected Result | Pass | Fail | N/A | Comments |
| 1 | Board Damage: Visually inspect the board for any cracks, breaks, peeling solder mask, etc. | The board should be clean and free of any defects. | | | | |
| 2 | Solder Inspection: Visually inspect board for any solder bridges, solder-lack, missing parts, etc. | The board should not have any solder defects and all parts should be installed correctly. | | | | |
| 3 | Check label placement and component orientation according to the layout. | Labels should be unobstructed and easily readable, all components should be oriented correctly. | | | | |
| 4 | Check Do Not Populate components | **Top**: R6<br>**Bottom**: R7, R8, R26 | | | | |
| Overall Test Results: | | | | | | |

| Sightline Applications | | | | | | | |
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| Test Case Name: | | SLA1500CAM Unit Test #2 | | | | Test ID#: | SLA1500CAM-UT-02 |
| Description: | | Power Test for SLA1500CAM board | | | | Type: | Black Box |
| Tester Information | | | | | | | |
| Name of Tester: | | | | | | Date: | |
| Hardware Version: | | SLA1500CAM Rev 8.0 | | | | Time: | |
| Setup: | | This test should be performed first using J2 as the main power supply(5VDC in). Then should be repeated using J6 as the main power supply to verify the auxillary power in is working. Test should be conducted using a current limiting power supply. Refer to *Doc for connector information and pin out. | | | | | |
| Step | Action | Expected Result | Pass | Fail | N/A | Comments | |
| 1 | Power SLA1500CAM with 5VDC from a current limiting power supply. | Power indicating LED should be ON | | | | | |
| 2 | Measure voltage at U10 in (pin 1) or C2 | Voltage measured should be 5V +/- 0.15V | | | | | |
| 3 | Measure voltage at U10 out (pin 5) or C9 | Voltage measured should be 3.3V +/- 0.033V | | | | | |
| 4 | Measure voltage at U3 in (pin 4) or C14 | Voltage measured should be 3.3V +/- 0.033V | | | | | |
| 5 | Measure voltage at U3 out (pin 5) or C17 | Voltage measured should be 1.8V +/- 0.018V | | | | | |
| 6 | Measure voltage at U4 in (pin 1) or C20 | Voltage measured should be 5V +/- 0.15V | | | | | |
| 7 | Measure voltage at U4 out (pin 5) or C24 | Voltage measured should be 2.8V +/- 0.028V | | | | | |
| Overall Test Results: | | | | | | | |

| Sightline Applications | | | | | | |
|---|---|---|---|---|---|---|
| Test Case Name: | | SLA1500CAM Unit Test #3 | | | Test ID#: | SLA1500CAM-UT-03 |
| Description: | | Power and Communication Test for SLA1500CAM board with Pixhawk4 and SLA1500OEM | | | Type: | Black Box |
| Tester Information | | | | | | |
| Name of Tester: | | | | | Date: | |
| Hardware Version: | | SLA1500CAM Rev 8.0 | | | Time: | |
| Setup: | | Power Pixhawk4 and connect Telem2 to J2 of SLA1500CAM. After SLA1500CAM is successfully powered on and the input voltage from the Pixhawk is measured and verified, connect the SLA1500 OEM to the SLA1500CAM. | | | | |
| Step | Action | Expected Result | Pass | Fail | N/A | Comments |
| 1 | Measure voltage at J2 pin1 or D2 | Voltage measured should be 5V +/- 0.15V | | | | |
| 2 | Connect SLA1500OEM to SLA1500CAM | | | | | |
| 3 | Using Tera Term verify serial communication between Pixhawk4 and SLA1500OEM | | | | | |
| 4 | Open the SLA-Panel plus, connect to the IP address of our hardware. | Video streaming on Panel Plus | | | | |
| Overall Test Results: | | | | | | |