**Hardware Test Report**

**Project Name:** [Your Project Name] **Test Date:** [DD/MM/YYYY] **Tested By:** [Your Name/Team]

**1. Test Overview**

**Objective:** Describe the purpose of the test and what hardware components are being tested.

**Test Environment:**

* Hardware Version: [Version Number]
* Firmware Version: [Version Number]
* Test Equipment Used: [Oscilloscope, Multimeter, Power Supply, etc.]
* Operating Conditions: [Voltage, Temperature, Load, etc.]

**2. Test Cases & Results**

| **Test Case No.** | **Test Description** | **Expected Outcome** | **Actual Outcome** | **Status (Pass/Fail)** |
| --- | --- | --- | --- | --- |
| 1 | Power-on Test | Device powers on correctly | [Observed Result] | [Pass/Fail] |
| 2 | Voltage Regulation Test | 3.3V & 5V outputs stable | [Measured Voltages] | [Pass/Fail] |
| 3 | Signal Integrity Test | Clean waveforms observed | [Waveform Details] | [Pass/Fail] |
| 4 | Communication Interface Test | UART/SPI/I2C working | [Communication Logs] | [Pass/Fail] |
| 5 | Load Test | No overheating, stable op. | [Temperature & Performance] | [Pass/Fail] |

**3. Issues & Observations**

* List any unexpected behaviors or failures.
* Provide screenshots or waveforms if necessary.
* Suggest possible causes and resolutions.

**4. Conclusion & Recommendations**

Summarize test results and any recommendations for improvement or modifications.

**Next Steps:**

* [Suggested Fixes or Retests]
* [Additional Tests Needed]
* [Final Approval Status]

**Approved By:** [Approver's Name] **Date:** [DD/MM/YYYY]