

Document Title

Purpose

This test plan provides detailed tests to fully repair and adjust the 000-000 miniPCB (UUT).

Scope

This test plan provides confidence that UUT performance characteristics are within specifications.

Definitions

- UUT – Unit Under Test
- OOT – Out of Tolerance
- TP – Test Point
- Open – High resistance, effectively an open circuit
- Short – Low resistance, effectively a short circuit
- Unable to Adjust – After adjusting through the entire adjustment range, the UUT remains OOT.

Equipment

- Test Device Assembly: N/A
- Test Software: N/A
- Oscilloscope: N/A
- Multimeter: N/A
- Power Supply: N/A

Safety

- Electrical Safety Hazards: N/A
- Thermal Safety Hazards: N/A
- Chemical Safety Hazards: N/A
- Mechanical Safety Hazards: N/A

Failure Mode Assumptions

1. Component values selected during design and development provide targeted test results.
2. One and only one failure mode occurs at any time.
3. Failure modes occur regardless of ambient temperature.
4. Solder-joint failures result in a failure mode attributed to a component.
5. Resistors fail open, fail short, fail out of tolerance high, or fail out of tolerance low.
6. Capacitors fail open, or fail short.
7. Transistors fail with collector-base junction open, or fail with all pins shorted.

Notes

1. Perform a thorough visual inspection of the UUT prior to testing.
2. The UUT must pass a full test sequence for the conclusion END (PASS) to be valid.
3. Each test is performed by (a) applying power, (b) applying stimuli, (c) performing measurement, and (d) proceeding according to acceptance criteria.
4. When proceeding to a new test, maintain applied power if the new test has the same power requirement(s).
5. When proceeding to a new test, maintain applied stimuli if the new test has the same stimuli requirement(s).
6. After replacing parts, restart testing at test T1.

UUT Connections

The 000-000 miniPCB has number (#) test connections.

Designator	Name	Description	Note
J1.1	+V	Power	
J1.2	0V	Ground	
J1.3	NC	No Connection	Reserved for -V power
J1.4	Input	Analog input	
J1.5	Output	Analog output	
TP6	Test Point 1	Q1 base	
TP7	Test Point 2	Q1 collector	
TP8	Test Point 3	Q1 emitter	

Test Setup

Insert a diagram of the test setup.

Testing

Each test is specified in Test Procedure TP.000-000.

Test No.	Test Name
T1	
T2	
T3	
T4	
T5	
T6	
...	...

Test Report

All test results are recorded in the Test Results Form, TRF.000-000.

Test reports are documented in the Test Report Form, TR.000-000.

Supporting Documents

#	Doc. No.	Document Type	Document Title
1	000-000	Datasheet	(Unit Under Test)
2	000-000	Datasheet	(Text Device Assembly)
3	000-000	Application	(Test Device Software)
4	TP.000-000	Test Procedure	
5	TR.000-000	Test Report	
6	TRF.000-000	Test Result Form	

Revision History

Revision	Note	Date
A	Initial Release	DDMMYYYYY