
TABLE OF CONTENTS

1.0 SCOPE AND PURPOSE.....	1
1.1 PURPOSE	1
1.2 SCOPE	1
2.0 REFERENCED PUBLICATIONS.....	1
3.0 DEFINITION OF TERMS.....	1
4.0 PERSONNEL SAFETY	1
5.0 REQUIRED EQUIPMENT	1
5.1 MM ESD TESTER	1
5.2 WAVEFORM VERIFICATION EQUIPMENT	2
5.2.1 <i>Oscilloscope</i>	2
5.2.2 <i>Evaluation Loads</i>	2
5.2.3 <i>Current Transducer</i>	2
6.0 EQUIPMENT, WAVEFORM, AND QUALIFICATION REQUIREMENTS	2
6.1 EQUIPMENT CALIBRATION	2
6.2 TESTER QUALIFICATION AND RE-QUALIFICATION	2
6.3 TEST FIXTURE BOARD QUALIFICATION	3
6.4 DAILY TESTER FUNCTIONALITY CHECK.....	3
7.0 ESD TESTER SCHEMATIC AND WAVEFORM PARAMETERS.....	3
8.0 WAVEFORM VERIFICATION PROCEDURES	5
8.1 WAVEFORM CAPTURE PROCEDURE	5
8.2 TESTER QUALIFICATION AND RE-QUALIFICATION PROCEDURE	6
8.3 TEST FIXTURE BOARD QUALIFICATION PROCEDURE	6
8.4 DAILY TESTER FUNCTIONALITY CHECK PROCEDURE	6
9.0 MM STRESS LEVELS	7
9.1 COMPONENT HANDLING	7
9.2 COMPONENT STATIC AND DYNAMIC TESTS.....	7
9.3 TEST TEMPERATURE	7
9.4 SAMPLE SIZE	7
9.5 PIN COMBINATIONS.....	7
10.0 MM ESD STRESS TESTING PROCEDURE	8
11.0 REPORTING RESULTS	9

ANNEXES

Annex A (Informative) – Example of Pin Combinations	10
Annex B (Informative) – MM ESD SP5.2 Procedure Flow	11
Annex C (Informative) – ESD SP5.2-2019 Revision History	12

TABLES

Table 1: Characteristics Parameters of Waveform through a Short Circuit	4
Table 2: Characteristics Parameters of Waveform through a 500-ohm Resistor.....	5
Table 3: Pin Combinations for all Digital, Analog, and Hybrid Integrated Circuit Components	8
Table 4: Example of Pin Combinations	10

FIGURES

Figure 1: Simplified MM Simulator Circuit with Loads	3
Figure 2: Current Waveform through a Shorting Wire for a 400 Volt Discharge	4
Figure 3: Current Waveform through a 500-ohm Resistor for a 400 Volt Discharge	5
Figure 4: MM ESD SP5.2 Procedure Flow	11