



Electrostatic Discharge Association 7900 Turin Road, Bldg 3 Rome, NY 13440-2069

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ANSI/ESD S8.1-2017 Revision of ANSI/ESD S8.1-2012

For the Protection of Electrostatic Discharge Susceptible Items –

Symbols – ESD Awareness

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ANSI/ESD S8.1-2017

ESD Association Standard for Protection of Electrostatic Discharge Susceptible Items –

> Symbols – ESD Awareness

Approved December 7, 2016 EOS/ESD Association, Inc.



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#### FOREWORD

While a number of symbols have been used over time to designate that an electronic component, device, or item is susceptible to some level of ESD damage, the most recognized symbol is a triangle around a reaching hand that is covered by a diagonal slash. Another symbol is used to designate that a material, item or product has some electrostatic control property as defined by the manufacturer. The protective symbol has a hand inside a triangle without the slash across the hand. An arc is placed around the outside of the triangle to suggest the idea of protection. A third symbol is used to mark the location of a common point ground.

These three symbols have been in wide use since the early 1990's and have gained acceptance globally. The symbols have been used by military and commercial organizations and appear in international standards related to electrostatic control.

This standard<sup>1</sup> was originally designated EOS/ESD S8.1-1993 and approved on June 9, 1993. ANSI/ESD S8.1-2001 was a reaffirmation of EOS/ESD S8.1-1993 and was approved on September 9, 2001. ANSI/ESD S8.1-2007 was a reaffirmation of ANSI/ESD S8.1-2001 and was approved on September 16, 2007. ANSI/ESD S8.1-2012 is a revision of ANSI/ESD S8.1-2007 and was approved on June 10, 2012. ANSI/ESD S8.1-2017 is a revision of ANSI/ESD S8.1-2012 and was approved on December 7, 2016. ANSI/ESD S8.1-2017 was reviewed and revised by EOS/ESD Association, Inc.'s Technical and Administrative Support Committee.

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<sup>&</sup>lt;sup>1</sup> **ESD Association Standards (S):** A precise statement of a set of requirements to be satisfied by a material, product, system or process that also specifies the procedures for determining whether each of the requirements is satisfied.

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# ESD Association Standard

## ANSI/ESD S8.1-2017

ESD Association Standard for the Protection of Electrostatic Discharge Susceptible Items – Symbols – ESD Awareness

### 1.0 PURPOSE AND SCOPE

#### 1.1 Purpose

The purpose of this document is to standardize commonly available and in-use symbols and to clarify the meaning of each of these symbols.

The correct usage of symbols will eliminate confusion between symbols that indicate that an item or material is ESD susceptible and those that indicate that an item is designed to afford some degree of ESD protection. This symbol standard is developed in accordance with international graphical guidelines and standards.

### 1.2 Scope

Three symbols are covered in this document. The first indicates that an electrical or electronic device or assembly is susceptible to damage from an ESD event if not properly handled. The second indicates that the material or product on which the symbol is displayed is intended to provide some level of protection to ESD susceptible devices or assemblies. The third indicates the location of an ESD common point ground terminal or connection point.

The application of these ESD symbols on products is at the discretion of the supplier and does not constitute or imply a specific level of product performance.

## 2.0 REFERENCED PUBLICATIONS

Unless otherwise specified, the following documents of the latest issue, revision or amendment form a part of this standard to the extent specified herein:

ESD ADV1.0, ESD Association Glossary of Terms<sup>2</sup>

ANSI/ESDA/JEDEC JS-001 – ESDA/JEDEC Joint Standard for Electrostatic Discharge Sensitivity Testing - Human Body Model (HBM) – Component Level<sup>2</sup>

ANSI/ESD S6.1, Grounding<sup>2</sup>

Softcopy artwork is available at www.esda.org.

### 3.0 DEFINITIONS

The following definition shall apply for the purposes of this standard in addition to those specified in the ESD Association Glossary of Terms, available for complimentary download at www.esda.org:

**common point ground.** A grounded device or location where the conductors of one or more technical elements are bonded.

<sup>&</sup>lt;sup>2</sup> EOS/ESD Association, Inc., 7900 Turin Road, Bldg. 3, Rome, NY 13440; Ph: 315-339-6937; <u>www.esda.org</u>