

What is the ESD Control of CSPI Products for RMA?

Model:

All ARC (A,B,C,D, and E)Series Network Adapters (10G-PCIE-2A-S, 10G-PCIE2-2B-S, 10G-PCIE2-2C-2S, 10G-PCIE3-2D-2S, and 10G-PCIE3-2E-2S)

Software:

N/A

Operating Systems:

N/A

References:

ANSI/ESD S20.20-2007

MIL-STD-1686C

Definitions:

ESD- Electro Static Discharge

EPA- ESD Protected Area

ESDS- Electrostatic Device Sensitivity

HBM- Human Body Model

Information:

Purpose- The purpose of this procedure is to document the handling and packaging of ESD sensitive devices.

Scope- This procedure applies to all handling packaging and returning of CSPI ESD sensitive products.

Responsibilities- CSPI has assigned an ESD Coordinator who is the owner of this document and shall be responsible for ensuring compliance with this procedure.

ESD Control Program:

This procedure meets the requirements of ANSI/ESD S20.20-2007 and MIL-STD-1686C. The controls referenced in this document have been selected to ensure that ESD sensitive devices (ESDS) that are susceptible to Human Body Model discharges of 250 volts or greater will not be damaged. For the purpose of this ESD program, it is assumed that all ESDS have a Human Body Model ESD sensitivity of greater than or equal to 250 volts. ESDS devices that are more sensitive may require additional control measures.

Products shall be designed with protective components that will help assure circuits immune to ESD damage as part of the design hardening plan.

The basic guidelines that comprise the CSPI ESD Control Program are as follows:

1. All semi-conductor electronic devices are considered to be ESD sensitive.
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2. All employees that handle unprotected ESD-sensitive products shall have successfully completed the company initial ESD training class.
3. All employees shall be grounded when handling unprotected ESD sensitive devices.
4. ESD sensitive products shall be move between grounded workstations in metalized shielding bags. ESD Sensitive products are only to be handled in an ESD protected area by grounded employees.
5. Non-essential insulators must be removed from the ESD Protected Area (EPA).

ESD Protected Area Requirements:

ESD sensitive products should be handled in an ESD Protected Area.

Unprotected ESD sensitive devices shall only be handled at an ESD protective workstation by grounded, ESD certified employees.

Non-essential insulators (insulated items not required in the manufacturing process), including packaging materials, shall be removed from all ESD protected workstations.

Grounding Plan- Equipment (AC) ground shall be used as the ground reference for all ESD control items used by CSPI. All wrist strap connection points, and work surfaces shall be connected to ground via a common point ground. All newly installed work surfaces and wrist strap connection points shall be tested before use to ensure that they are connected to ground.

The ESD floor shall be connected directly to AC ground.

Personnel Grounding Plan- Personnel shall be connected to ground with either a wrist strap system or, for standing operations, through the ESD floor when wearing approved ESD footwear.

Wrist Strap System: The wrist band must be worn such that there is 360 degrees of contact with the employee's skin. The wrist cord must be plugged into the wrist strap receptacle that is located at every ESD protected work station.

Footwear Station- Employees working at standup operations while handling ESDS must wear ESD footwear or heel grounders that have been qualified by the ESD coordinator.

Packaging- Only metalized shielding bags shall be used to transport ESD sensitive products from one ESD protected workstation to another. ESD sensitive products must be completely enclosed by the shielding bad. ESD sensitive products are to be removed from the packaging only at an ESD protected work surface by grounded employees. Once the ESD sensitive product has been tested it will be returned to the shielding bag and sealed. The sealed shielding bag will then be placed in a protective container for shipment to the customer.

In the case where specific ESD protective packaging is specified by the customer, by either contract or purchase order, these materials shall be used.

Marking- In order to ensure that the customer is aware that the product is ESD sensitive the following label will be used to seal the metalized shielding bag that is used to ship all products to the customer.



Revision:	Date:	Change:
1	6/29/2016	Initial Draft
2	7/20/2016	Feedback

