PORTNOTE®
SOLUTIONS
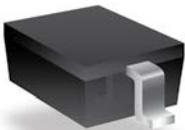
Thunderbolt™ Port
ESD & Overcurrent Protection

Solution Products

CDDFN10-0524P

CDSOD323-T05SC

MF-MSMF260-2

Objective

Thunderbolt™ is an interface for connecting peripheral devices to a computer via an expansion bus. Thunderbolt™ is a 10 Gbps dual-channel, dual-protocol (PCI Express and DisplayPort), bidirectional port. This solution provides ESD and overcurrent protection to this hot-pluggable interface.

Solution

1 TVS Diode Array: CDDFN10-0524P
1 TVS Diode: CDSOD323-T05SC
1 Multifuse® PPTC Resettable Fuse:
   MF-MSMF260-2

Compliance

IEC 61000-4-2 Level 4 (8 kV / 15 kV)
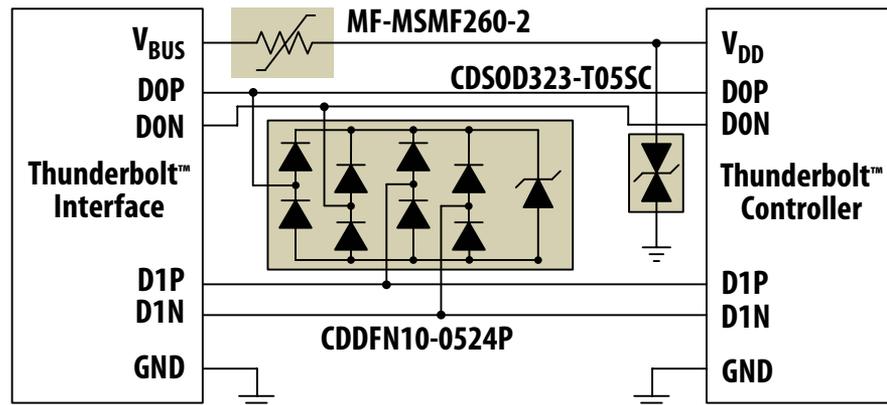
Alternate Recommendations

A model CDMSP10-0504M may be used and would replace both the CDDFN10-0524P and the CDSOD323-T05SC devices.
Other PortNote® Solutions:
• HDMI 1.4 - ESD & Overcurrent Protection
• DisplayPort 1.2 – ESD & Overcurrent Protection
• USB 3.0 - ESD & Overcurrent Protection

Benefit

This solution provides ESD protection without impairing the Thunderbolt™ signal.

The schematic above illustrates the application protection and does not constitute the complete circuit design. Customers should verify actual device performance in their specific applications.

Design Kit

PN-DESIGNKIT-33

Bourns® PortNote® solutions provide protection recommendations for typical port threats.

For more information, go to:
www.bourns.com
or email: protection@bourns.com

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Circuit Protection Kits *category:*

Click to view products by Bourns *manufacturer:*

Other Similar products are found below :

96-501A 1-1393160-1 901-322 STANDARD SAMPLE KIT MITI-7-6-10 MITI-7-10-15 02800.0-01 MC-600 4879275 4879315 4879333 4879338 GSK-260 0RBOX006Z B57888S0888M888 01610.0-01 MF-RG800-2 MF-RG650-2 MF-RG400-2 A-2130 B57999V2999J199 820999 Mini sample kit MS sample kit B72499H9999K199 B57999V5999J199 4030-01 CD-LAB10 CD-LAB11 CD-LAB9 HC-LAB1 KCA-LAB1 LC-LAB1 NR-LAB1 NR-LAB2 PN-DESIGNKIT-22 PN-DESIGNKIT-26 PN-DESIGNKIT-48 PN-DESIGNKIT-50 PN-DESIGNKIT-51 PN-DESIGNKIT-52 PN-DESIGNKIT-54 PN-DESIGNKIT-56 PN-DESIGNKIT-58 PN-DESIGNKIT-59 TBU-LAB2 TEL-NOTEKIT-1 TEL-NOTEKIT-2 MC-250 NO.140