

DisplayPort 1.2

ESD & Overcurrent Protection

Solution Products



CDDFN10-0524P



CDSOT236-0504LC



MF-PSMF075X-2

Design Kit



PN-DESIGNKIT-31

Objective

DisplayPort is a royalty-free alternative to HDMI. DisplayPort 1.2 uses 3.3 V differential digital signals that support 1, 2, or 4 differential data pairs (lanes) in a main link. Each lane can operate up to 540 Mhz and deliver 4.32 Gbit/s. This solution provides DisplayPort interface protection from ESD damage and short circuits typically due to cables being plugged and unplugged frequently.

Solution

- 2 TVS Diode Arrays: CDDFN10-0524P
- 1 TVS Diode Array: CDSOT236-0504LC
- 1 Multifuse[®] PPTC Resettable Fuse: MF-PSMF075X-2

Compliance

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

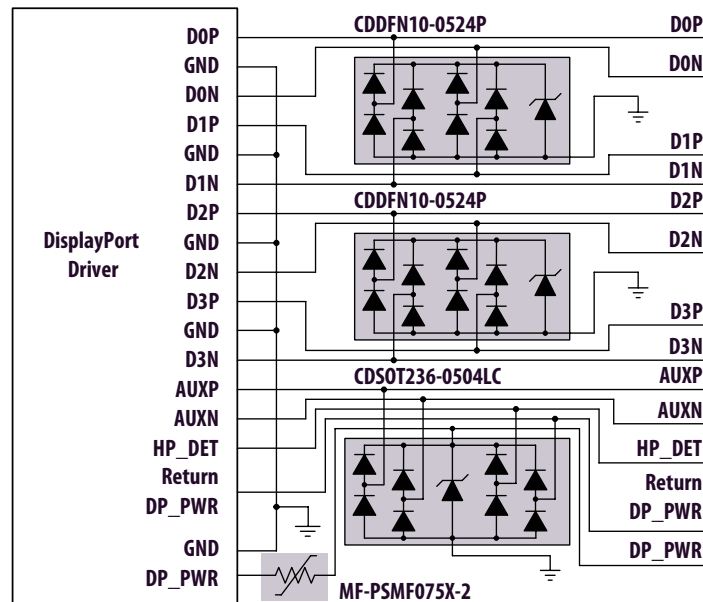
Alternate Recommendations

Other PortNote[®] Solutions:

- HDMI 1.4 - ESD & Overcurrent Protection
- Thunderbolt - ESD & Overcurrent Protection

Benefit

This solution provides IEC 61000 Level 4 ESD protection without impairing the DisplayPort 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.