

# HDMI<sup>®</sup> Port

## HDMI 2.0 - ESD & Overcurrent Protection

### Solution Products



CDDFN10-3324P



CDSOT236-0504C



MF-FSMF020X-2

### Design Kit



PN-DESIGNKIT-48

### Objective

HDMI 2.0 offers an enhanced throughput of 18 Gbps for video, audio and Ethernet in applications such as Ultra High Definition Television (UHDTV), set-top boxes, DVD players, PCs, gaming stations, etc. Robust ESD protection that does not affect the impedance of the differential transmission lines is required. Overcurrent and surge protection of the 5 V supply from spikes caused by hot plugging of the connector is also required.

### Solution

- 2 TVS Diode Arrays: CDDFN10-3324P
- 1 TVS Diode Array: CDSOT236-0504C
- 1 Multifuse<sup>®</sup> PTC Resettable Fuse: MF-FSMF020X-2

### Compliance

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

### Alternate Recommendations

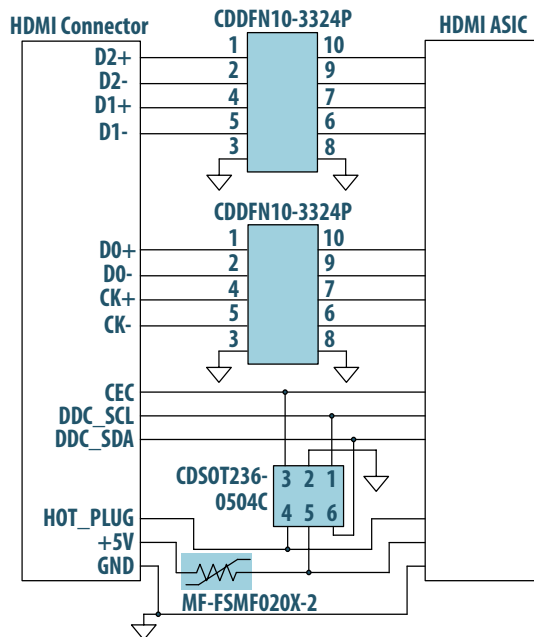
Two TVS Diode Arrays: CDDFN10-0506N with one Multifuse<sup>®</sup> PTC Resettable Fuse: MF-FSMF020X-2.

*Other PortNote<sup>®</sup> Solutions:*

- HDMI: HDMI 1.4 - ESD & Overcurrent Protection

### Benefit

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



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