

# MLESD08A-2510

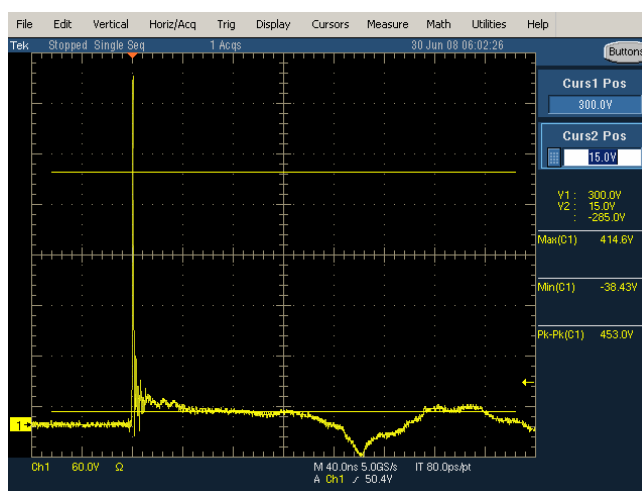
## Electrical Characteristics

| Electrical Characteristics   |          |                                    |      |      |     |       |
|------------------------------|----------|------------------------------------|------|------|-----|-------|
| Parameter                    | Symbol   | Conditions                         | Min  | Typ  | Max | Units |
| Continuous operating voltage | $V_{DC}$ | ---                                | ---  | ---  | 8   | V     |
| Trigger voltage              | $V_T$    | IEC61000-4-2 8KV contact discharge | ---  | 300  | --- | V     |
| Clamping voltage             | $V_C$    | IEC61000-4-2 8KV contact discharge | ---  | 15   | --- | V     |
| Leakage current              | $I_L$    | 8V $V_{DC}$                        | ---  | 0.10 | 10  | nA    |
| Capacitance                  | $C_P$    | VR = 0V, f = 1MHz                  | ---  | 0.15 | 0.3 | pF    |
| Operating Temperature        | ---      | ---                                | -40  | ---  | 90  | °C    |
| Storage Temperature          | ---      | ---                                | -55  | ---  | 150 | °C    |
| ESD pulse withstand          | Pulses   | IEC61000-4-2 8KV contact discharge | 2000 | ---  | --- | ---   |

Notes:

1, Trigger and clamping voltage measure per IEC 61000-4-2, 8KV contact discharge method

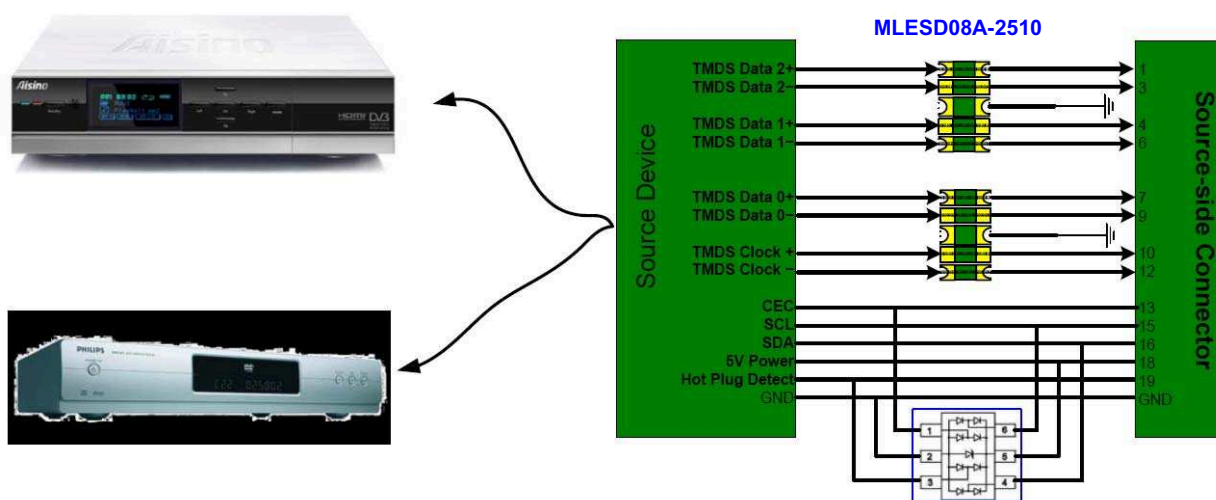
## Typical MLESD clamping for +8KV pulse per IEC61000-4-2



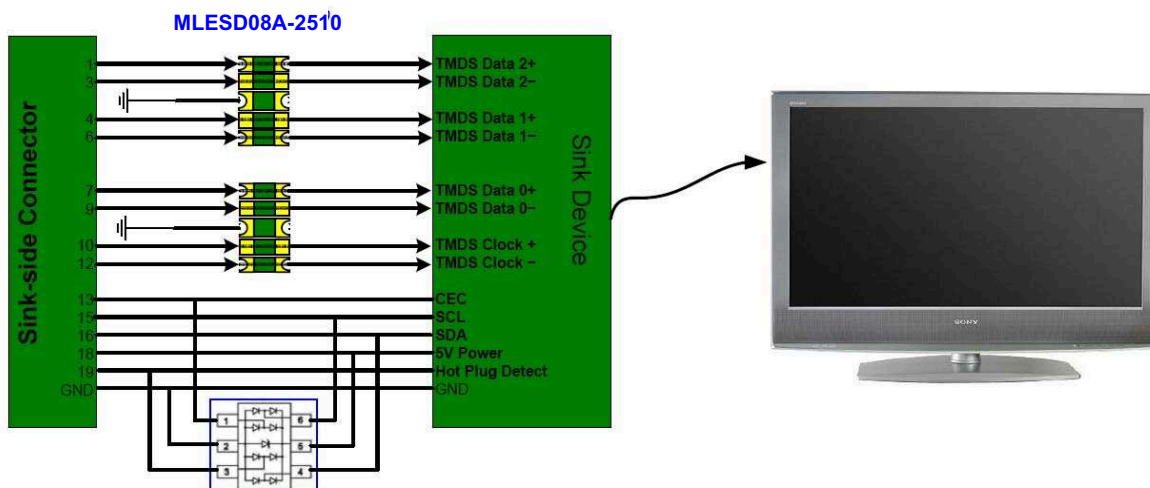
# MLESD08A-2510

## Design Recommendations for HDMI

For HDMI Source Device



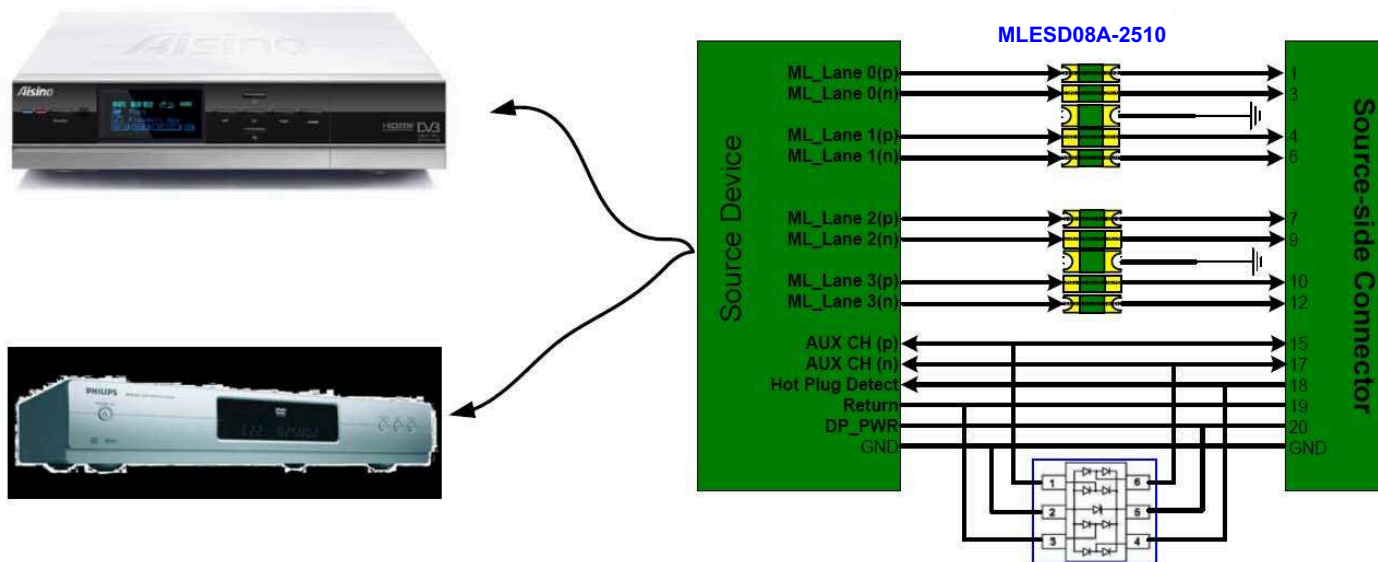
For HDMI Sink Device



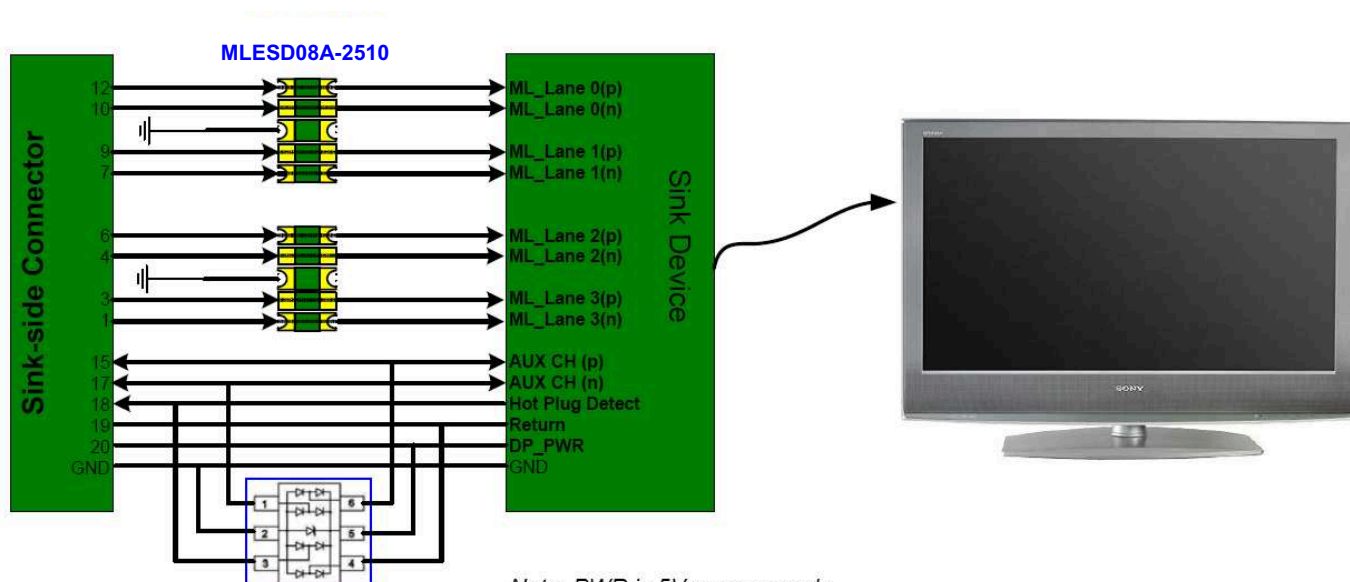
# MLESD08A-2510

## Design Recommendations for Display Port

For Display Port Source Device



For Display Port Sink Device

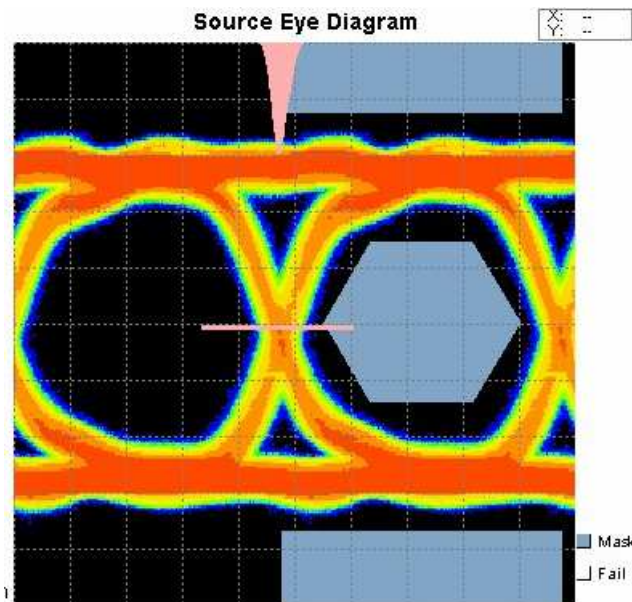


Note: PWR is 5V power supply.

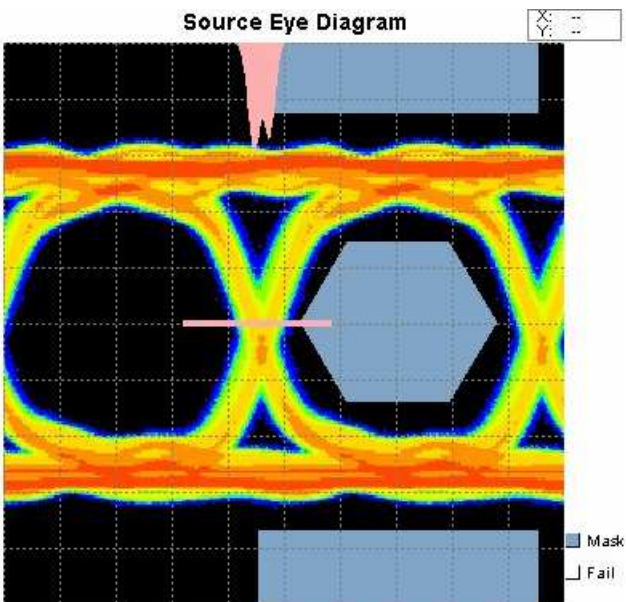
# MLESD08A-2510

## Eye Pattern Test

HDMI Port lane was protected with MLESD08A-2510, tested for 2.25G bps

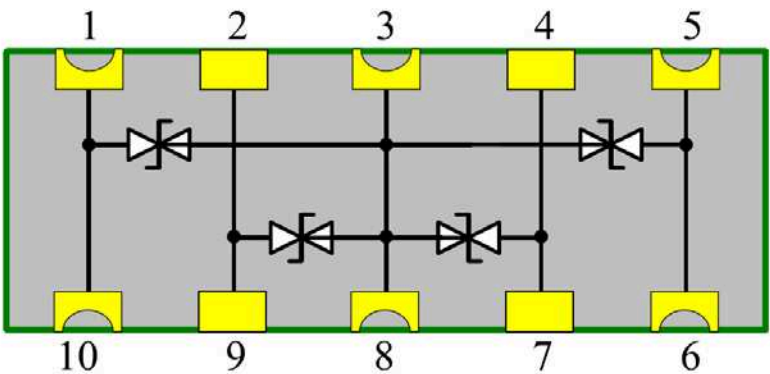


HDMI Port without MLESD08A-2510



HDMI Port with MLESD08A-2510

## Circuit diagram



## Pin configuration

| Pin        | Identification |
|------------|----------------|
| 1, 2, 4, 5 | Input lines    |
| 6, 7, 9,10 | Output lines   |
| 3, 8       | Ground         |

## Ordering Information

| Device           | Packing              |
|------------------|----------------------|
| (Part Number)-TP | Tape&Reel;3Kpcs/Reel |

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