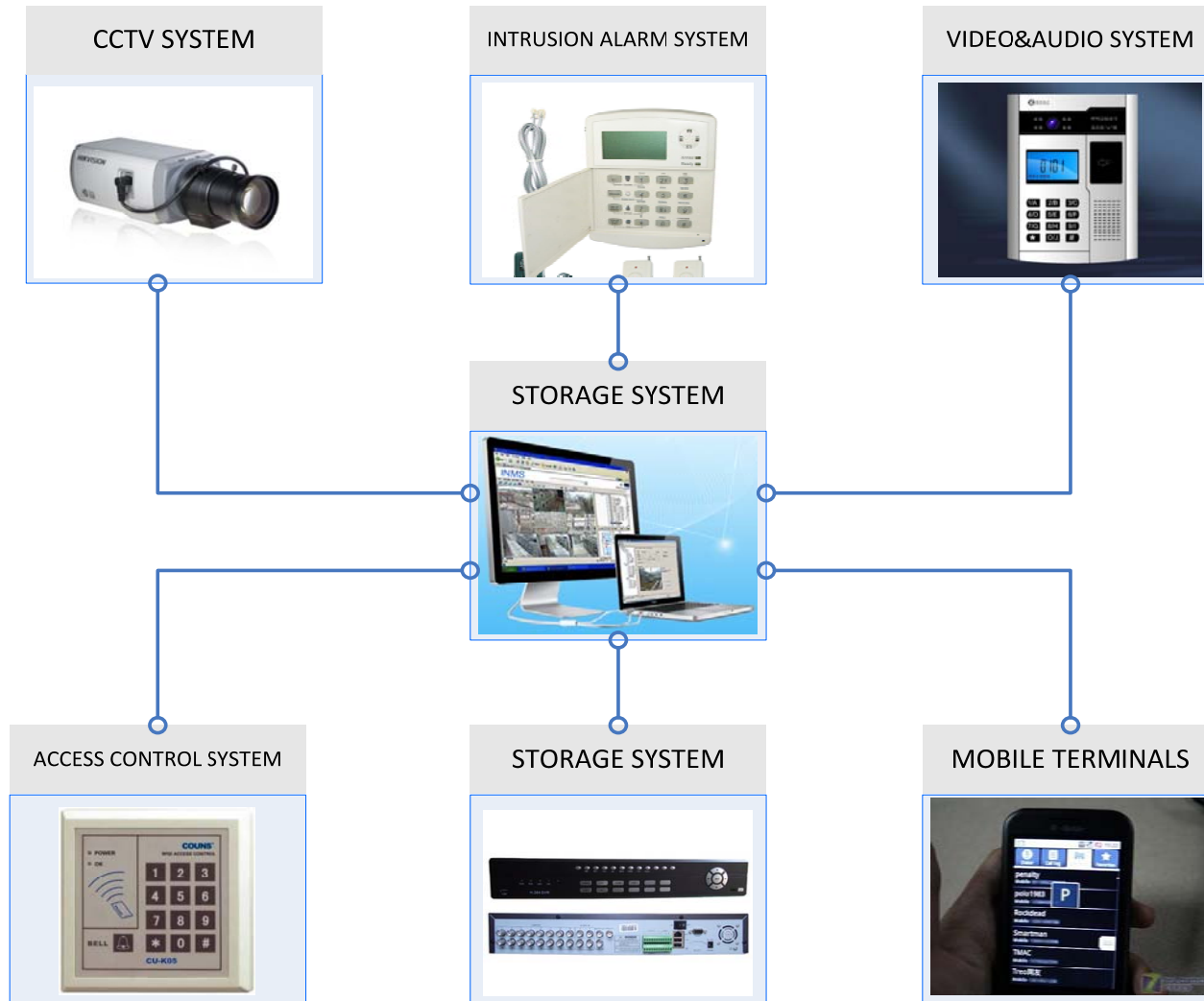




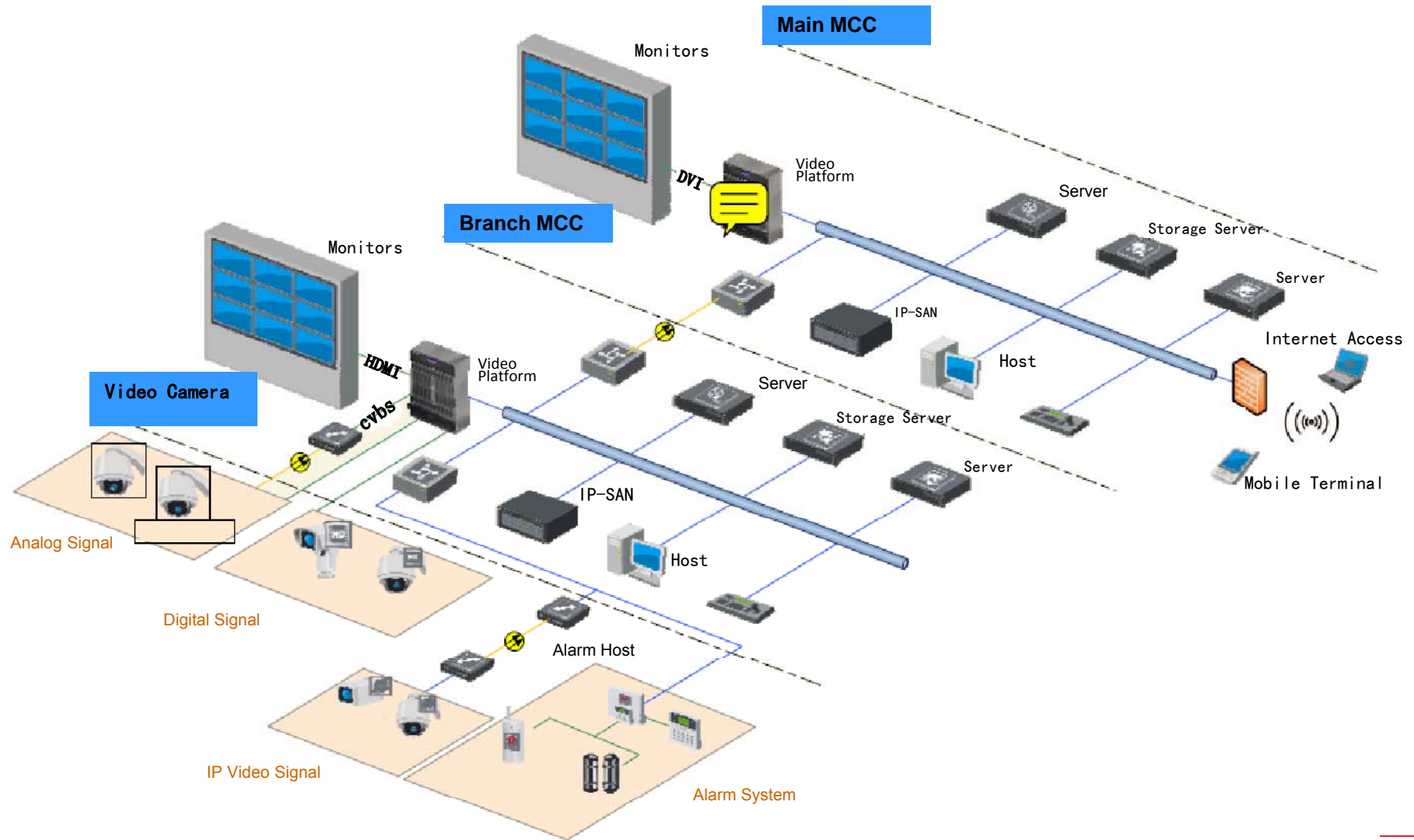
**CYG Wayon Circuit protection Co., Ltd.**

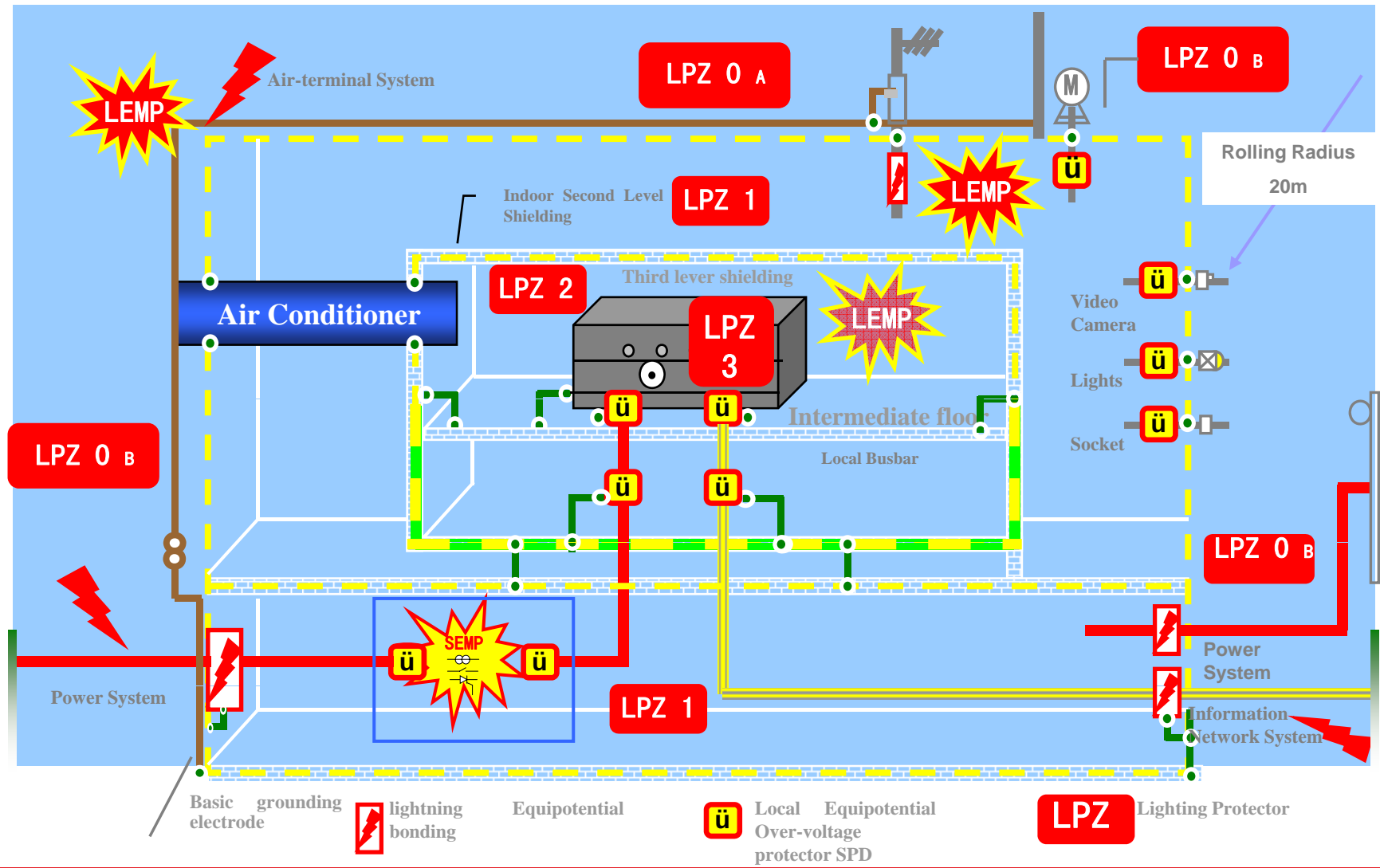
## SECURITY SYSTEM PROTECTION SOLUTIONS

Version: SI-V2.1



# TYPICAL SYSTEM CONSTRUCTION





## 1 VIDEO & AUDIO LINES PROTECTION

- VIDEO & AUDIO TRANSMISSION

## 2 ETHERNET PROTECTION

- DATA COMMUNICATION

## 3 RS485 LINES PROTECTION

- CONTROL LINES

## 4 POWER LINES PROTECTION

- AC&DC

### ➤ Video&Audio Lines

- Analog Video Output
- Digital Video Output
- Analog Audio Input and Output

High-speed Dome



### ➤ Communication Lines

- 100 Mbit/1000 Mbit Ethernet
- RS485 /RS232
- USB2.0/ SD Card
- On-off Input and Output

Dome Camera



### ➤ Power Supply

- Ethernet POE
- DC 12V Power Supply
- AC 24V Power Supply

Gun Camera



Infrared Camera



### ➤ Video&Audio Lines

- Analog Video Input
- Digital Video Input
- Analog Audio Input and Output
- Analog Video Output
- VGA Output
- HDMI Output



DVR/NVR



Mix DVR

### ➤ Communication Lines

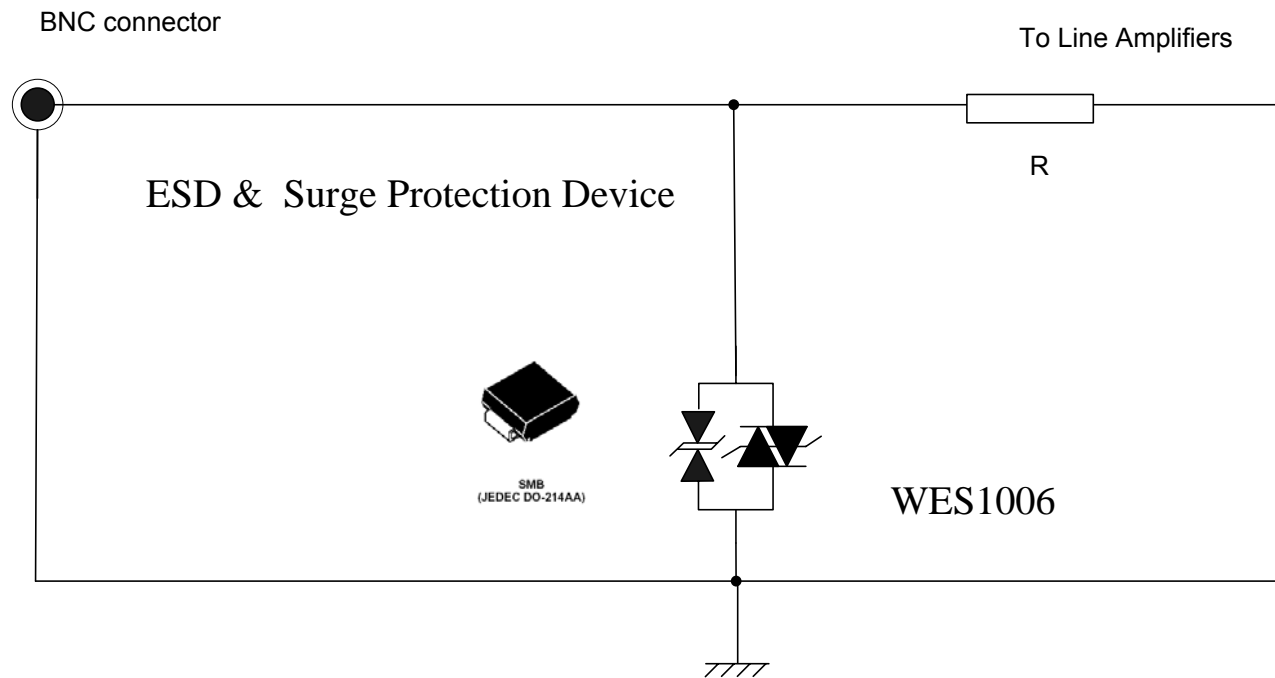
- 100 Mbit/1000 Mbit Ethernet
- RS485 /RS232
- On-off Output and Input
- USB2.0
- SD card



Video Server



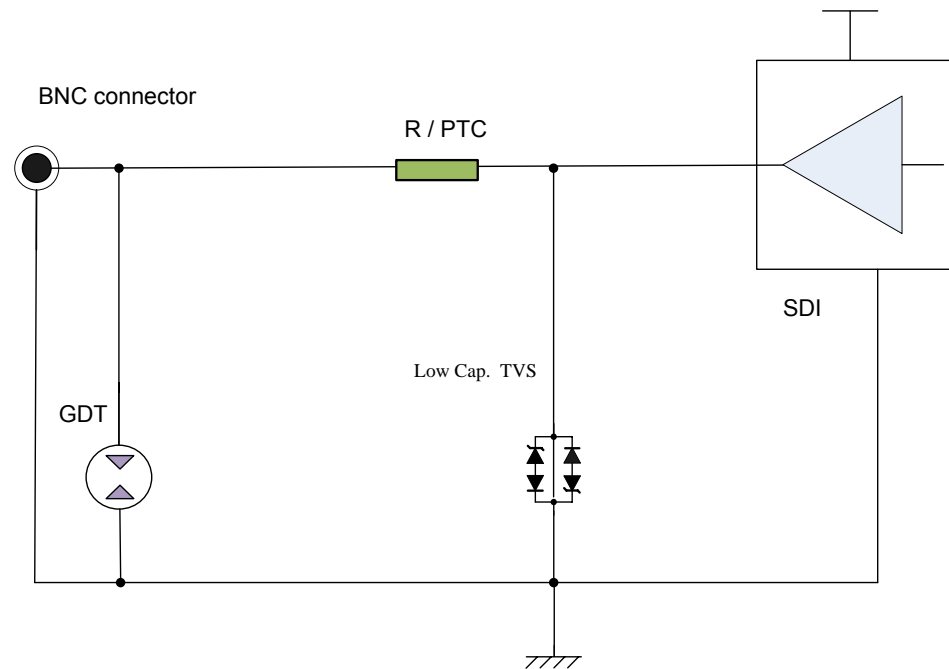
Optical Transmitter  
and Receiver





### Outdoor Superior Level LPZ0B Area

**Line Parasitic Capacitance 1pF, can meet HD-SDI 1.485GHz lighting surge protection.**

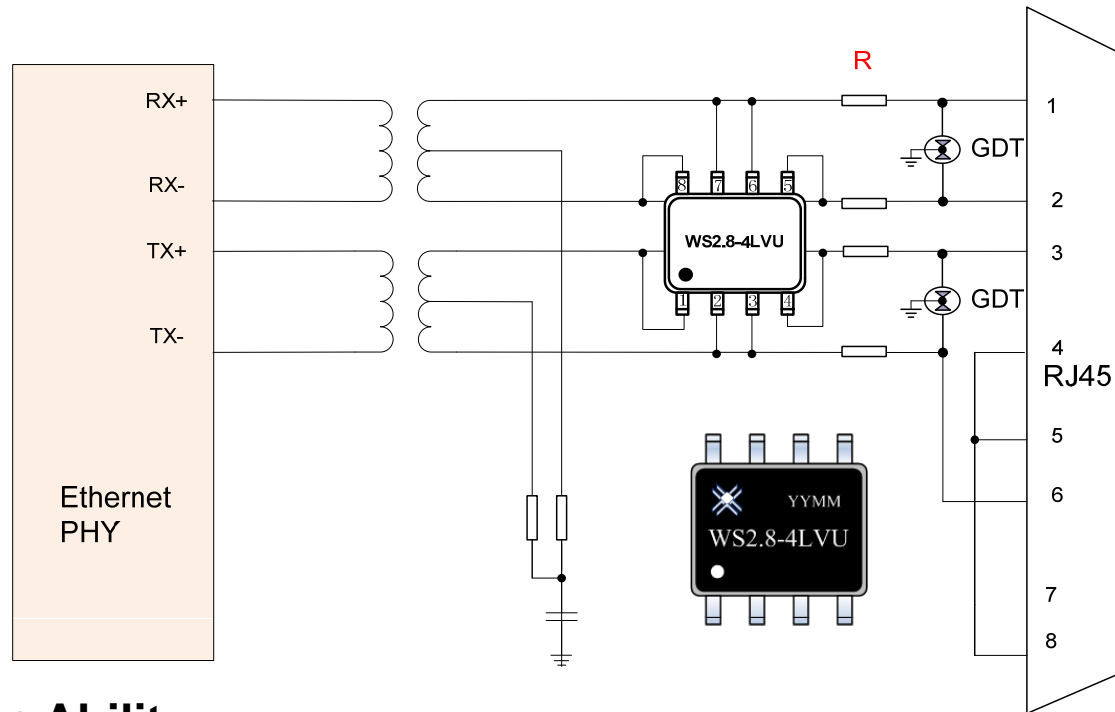


### Protection Ability :

**Common mode: ITU K21 ( 10/700us 40Ω) 6KV/150A**

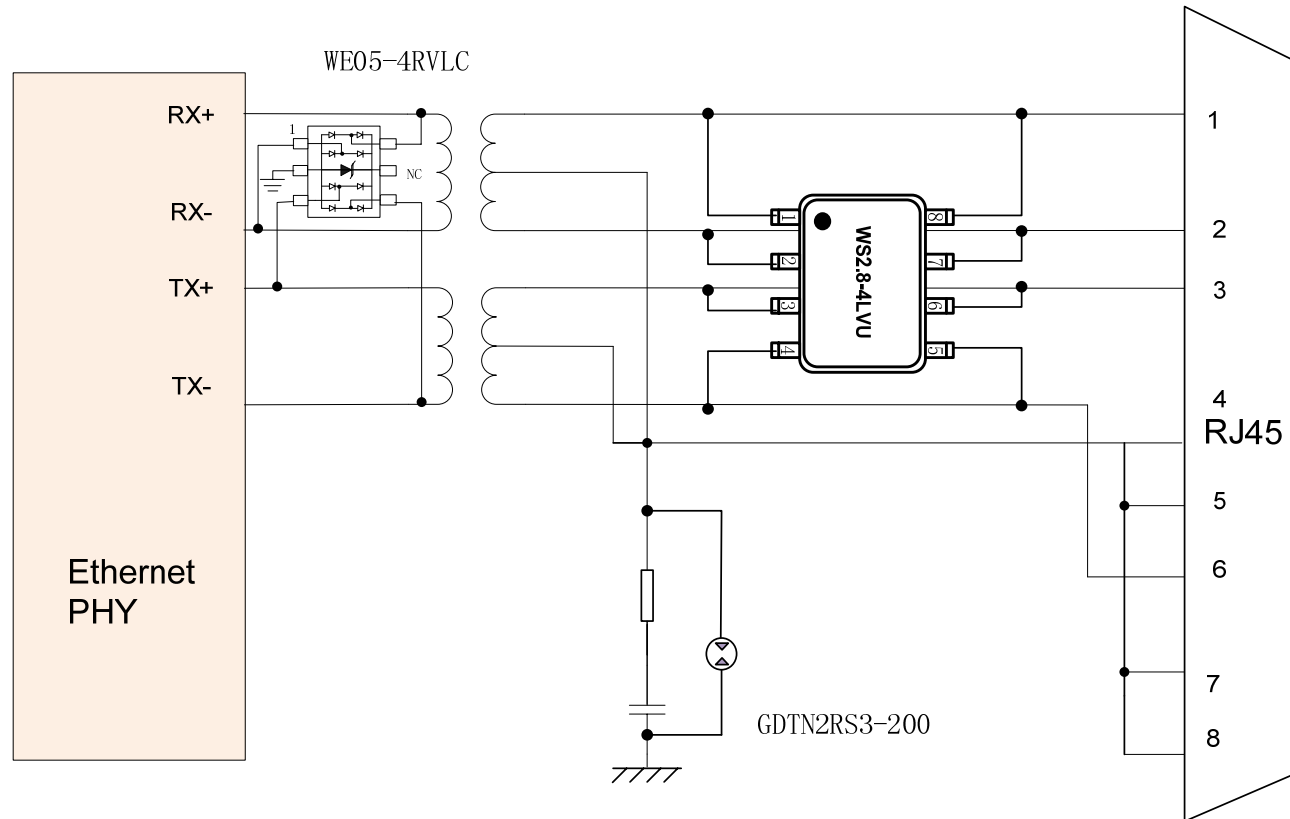
**( Max. Lighting Discharge Current ) IEC61000-4-5 ( 1.2/50us -8/20us Combination wave 2Ω) 6KV/3KA**

## 100M Ethernet Protection



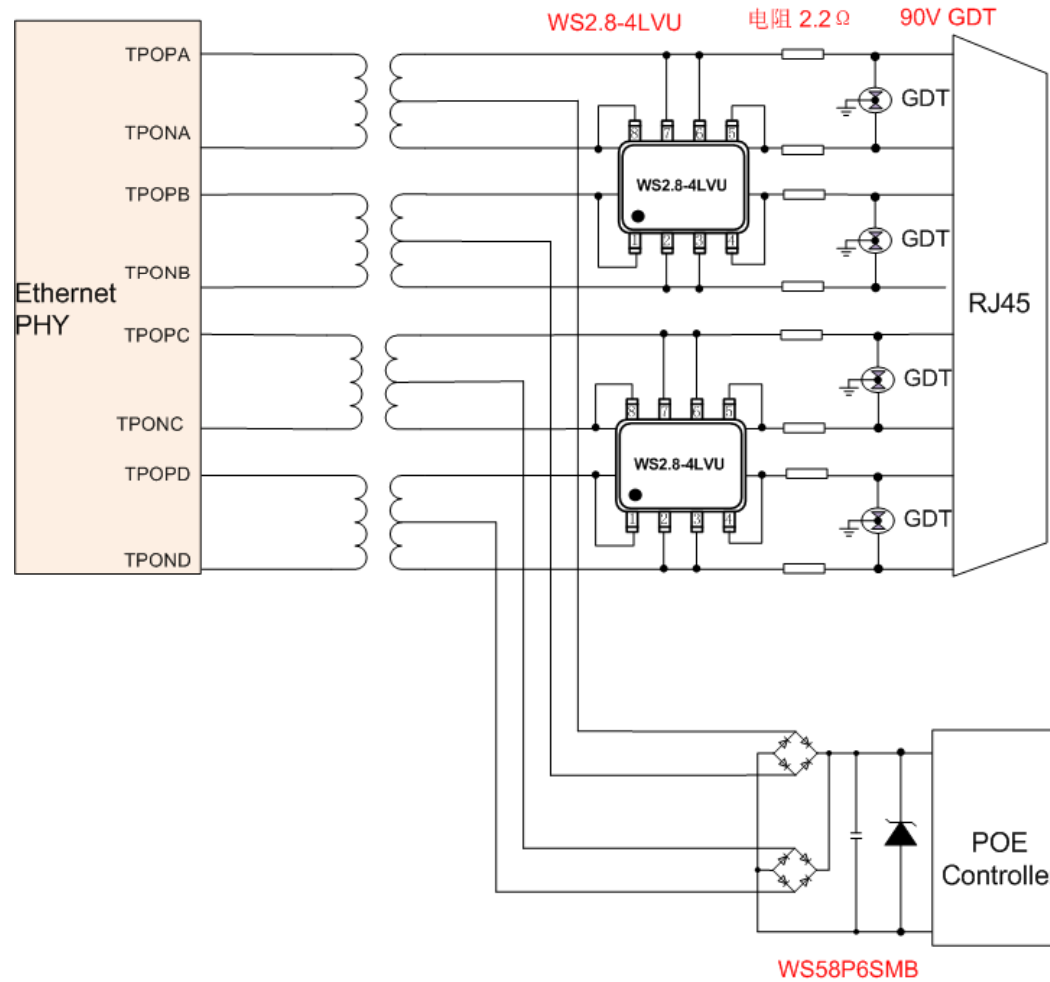
### Protection Ability :

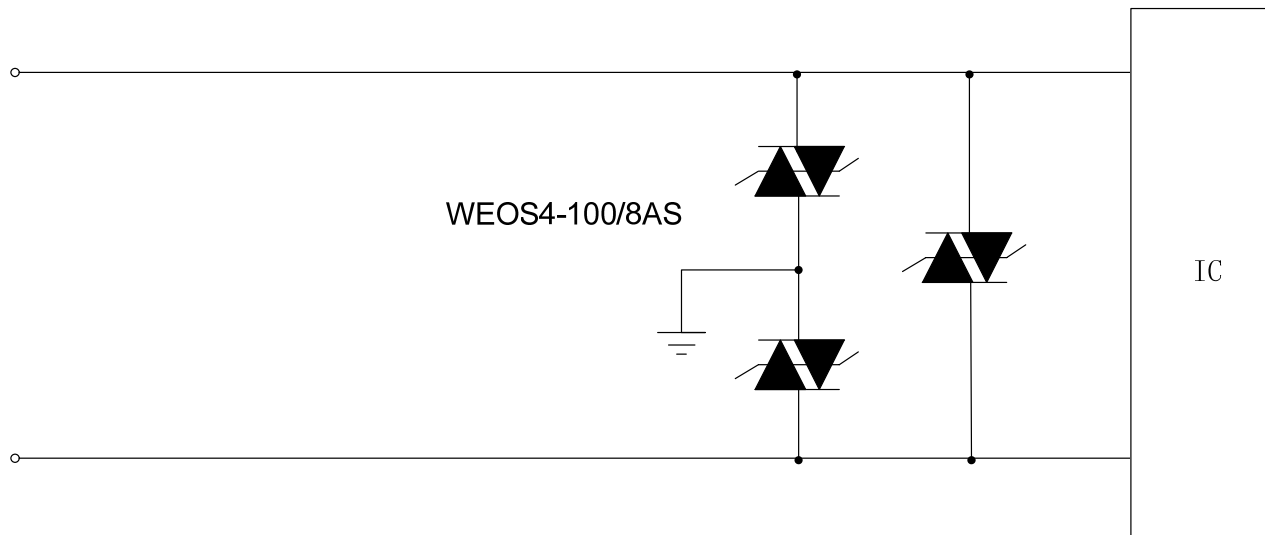
Common mode: **ITU K21** ( 10/700us 40Ω) 6KV/150A ( **Max. Lighting Discharge Current** ) **IEC61000-4-5** (1.2/50us -8/20us Combination wave 2Ω) 6KV/3KA  
 Difference Mode: **ITU K21** ( 10/700us 40Ω) 6KV/150A ( **Max. Lighting Discharge Current** ) **IEC61000-4-5** (1.2/50us -8/20us Combination wave 2Ω) 6KV/3KA

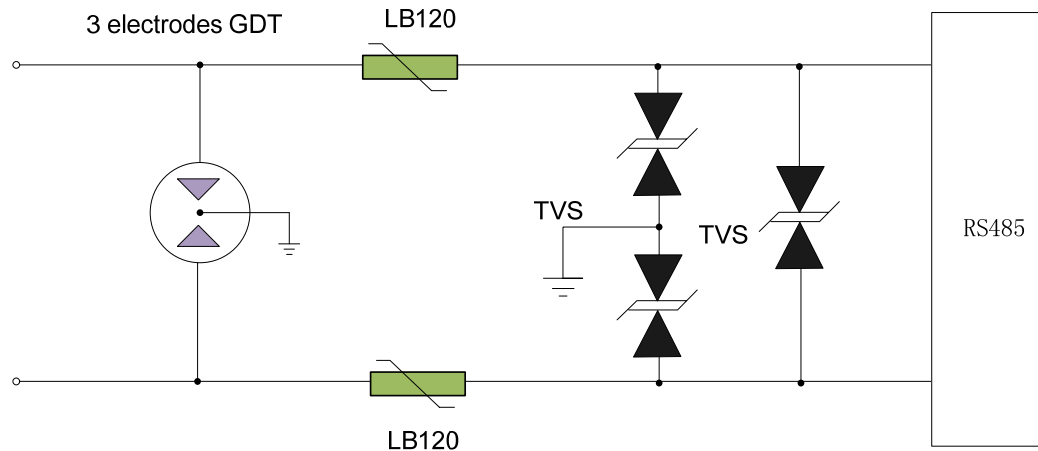


GDT	Connector Low Cap. TVS	Chip Terminal Low Cap. TVS
SMD 1812 GDTNS3-200	SMD 4-line TVS WS2.8-4LVU (SOP8)	SMD 4-line TVS WE05-4RVLC (SOT23-6L)

# Ethernet POE Interface Protection





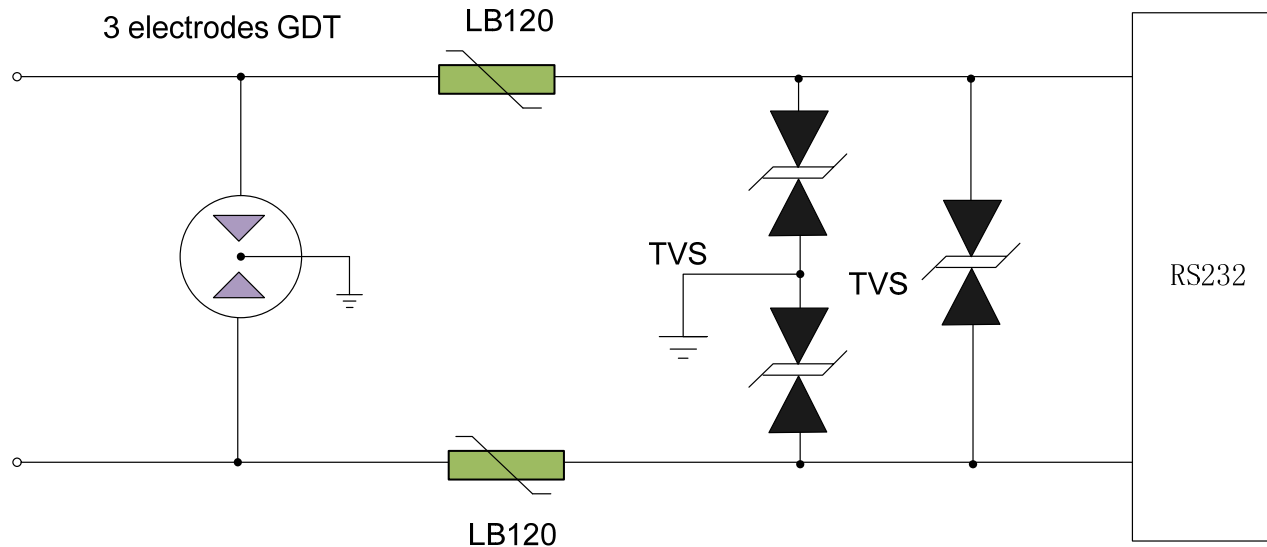


Common Mode: **IEC61000-4-5**( 8/20us 2Ω) 10KV/5KA

Difference Mode: **IEC61000-4-5**( ( 8/20us 2Ω) 10KV/5KA



Item	GDT	PTC	Power TVS
1	GDTN3RD5-90 (SMD, 3electrodes)	LB120	WS6.0P6SMB-B
2	GDTR3RD6-90 (R-line, 3electrodes)	LB120	WS6.0P6SMB-B

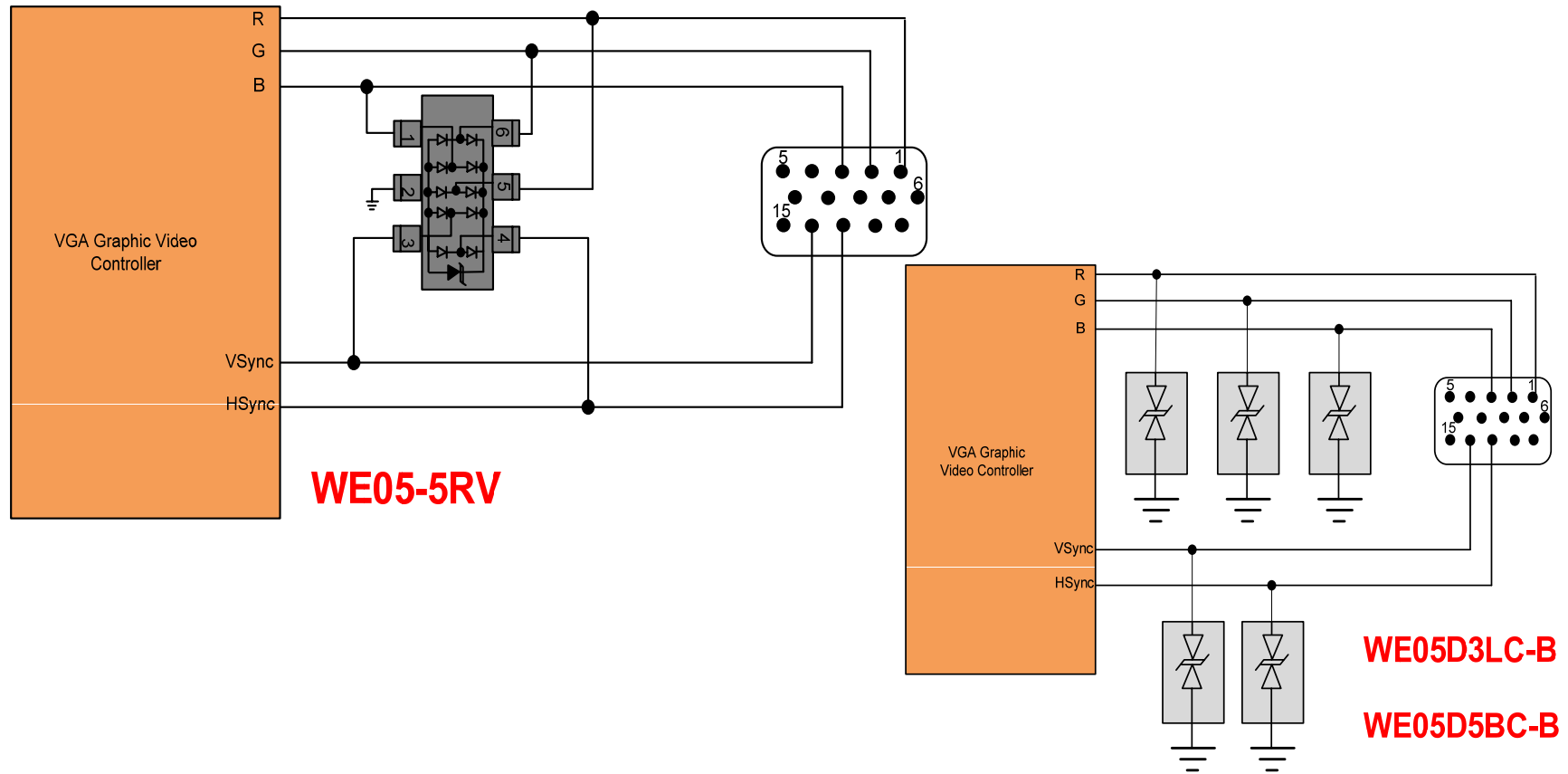


Common Mode: **IEC61000-4-5**( 8/20us 2Ω) 10KV/5KA

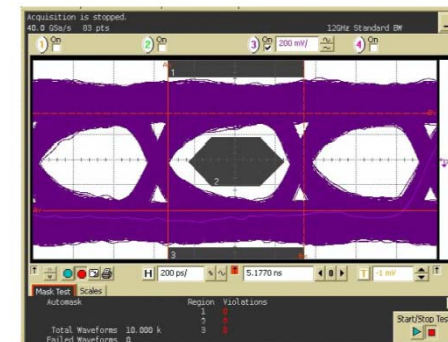
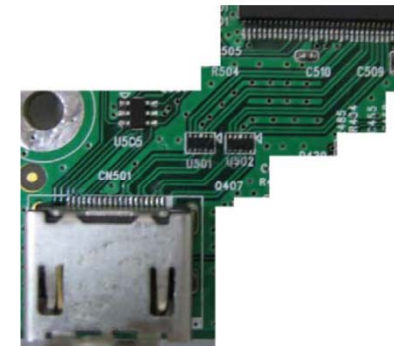
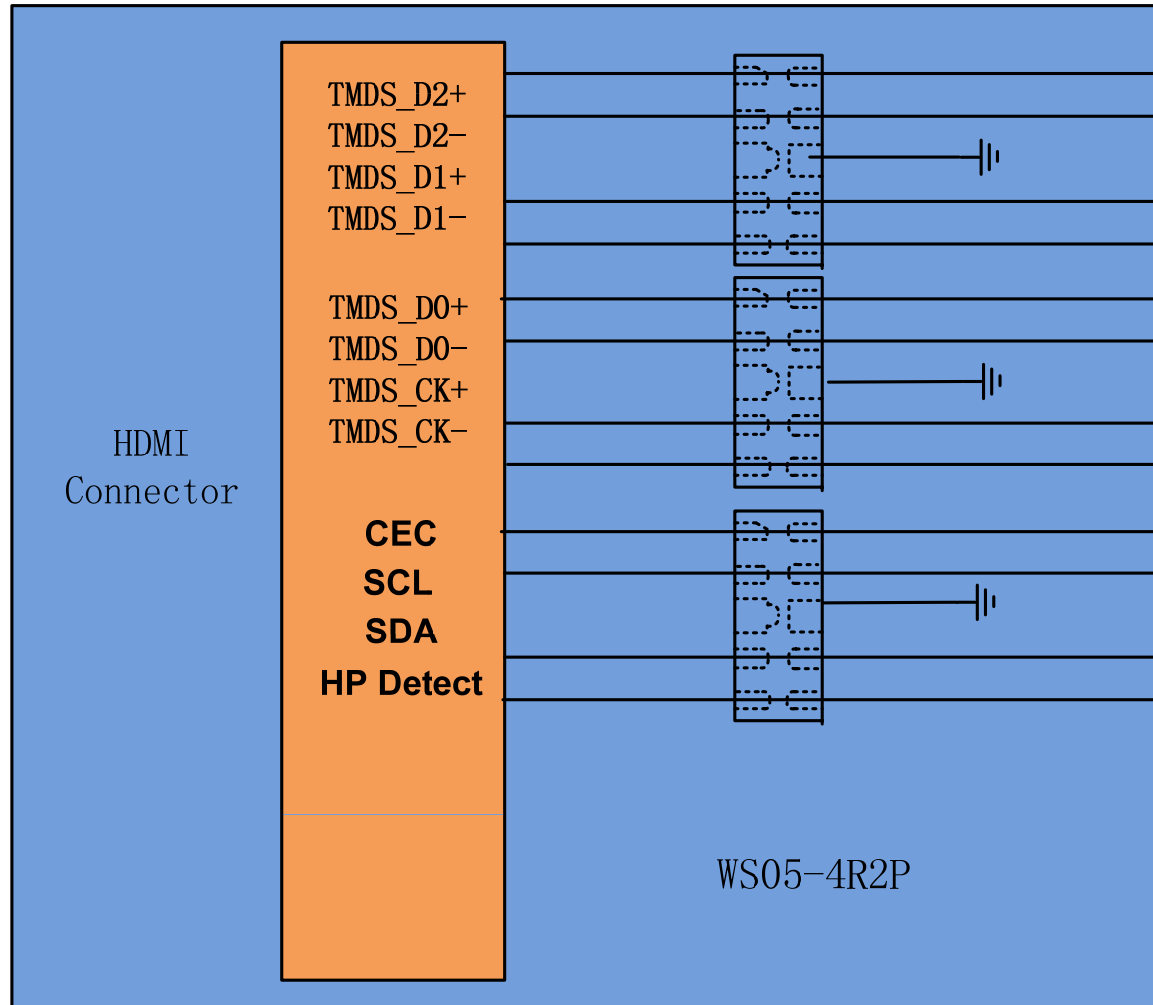
Difference Mode: **IEC61000-4-5**( ( 8/20us 2Ω) 10KV/5KA

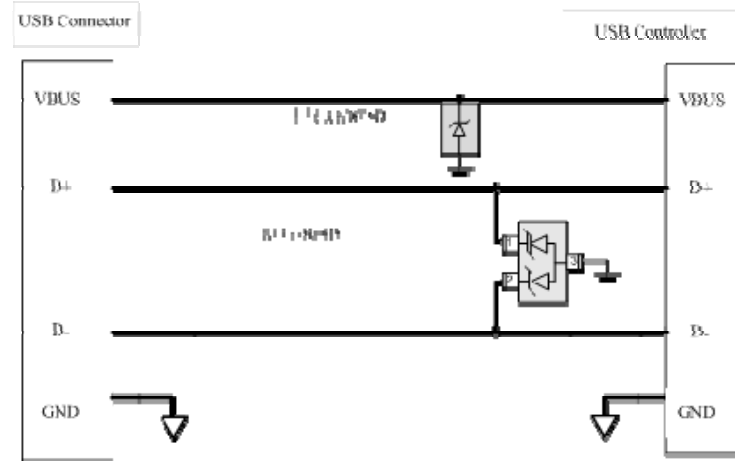
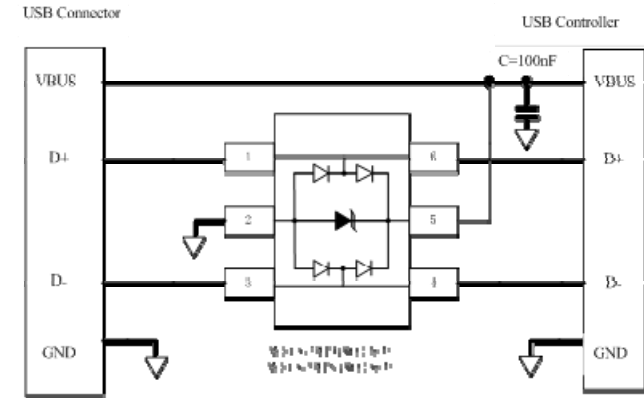
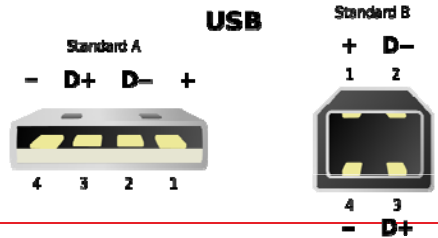
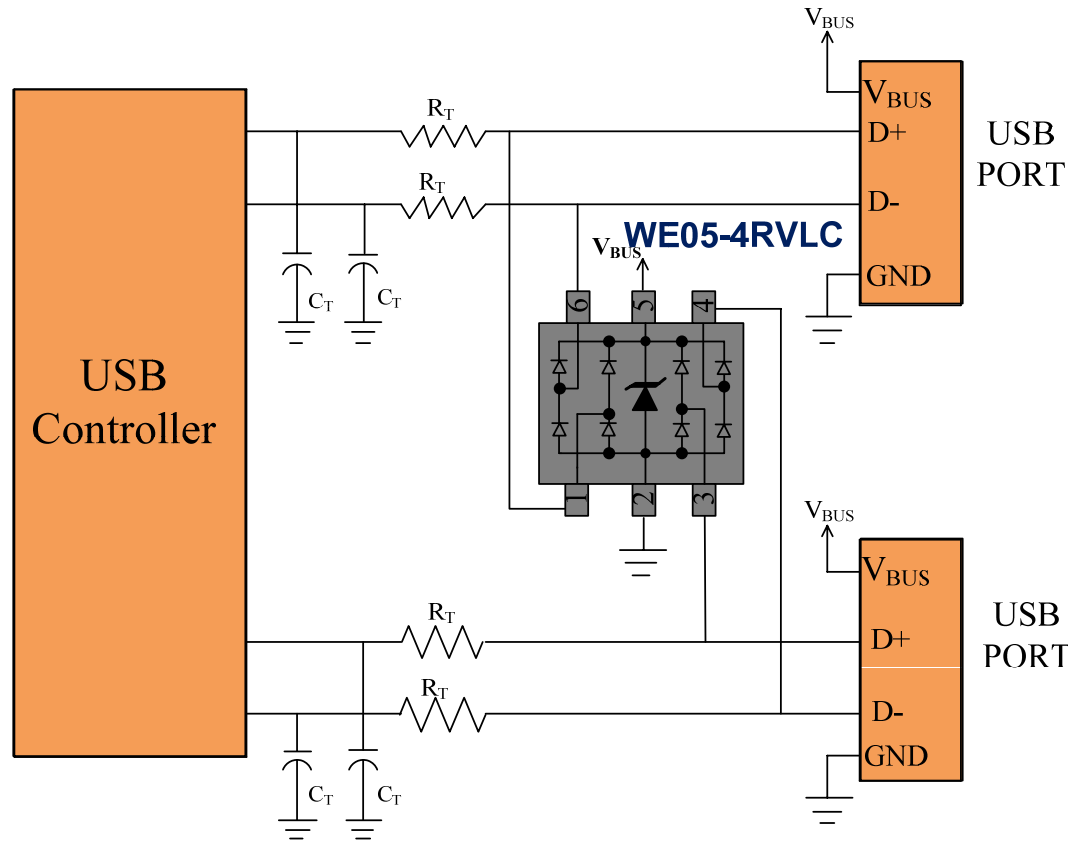


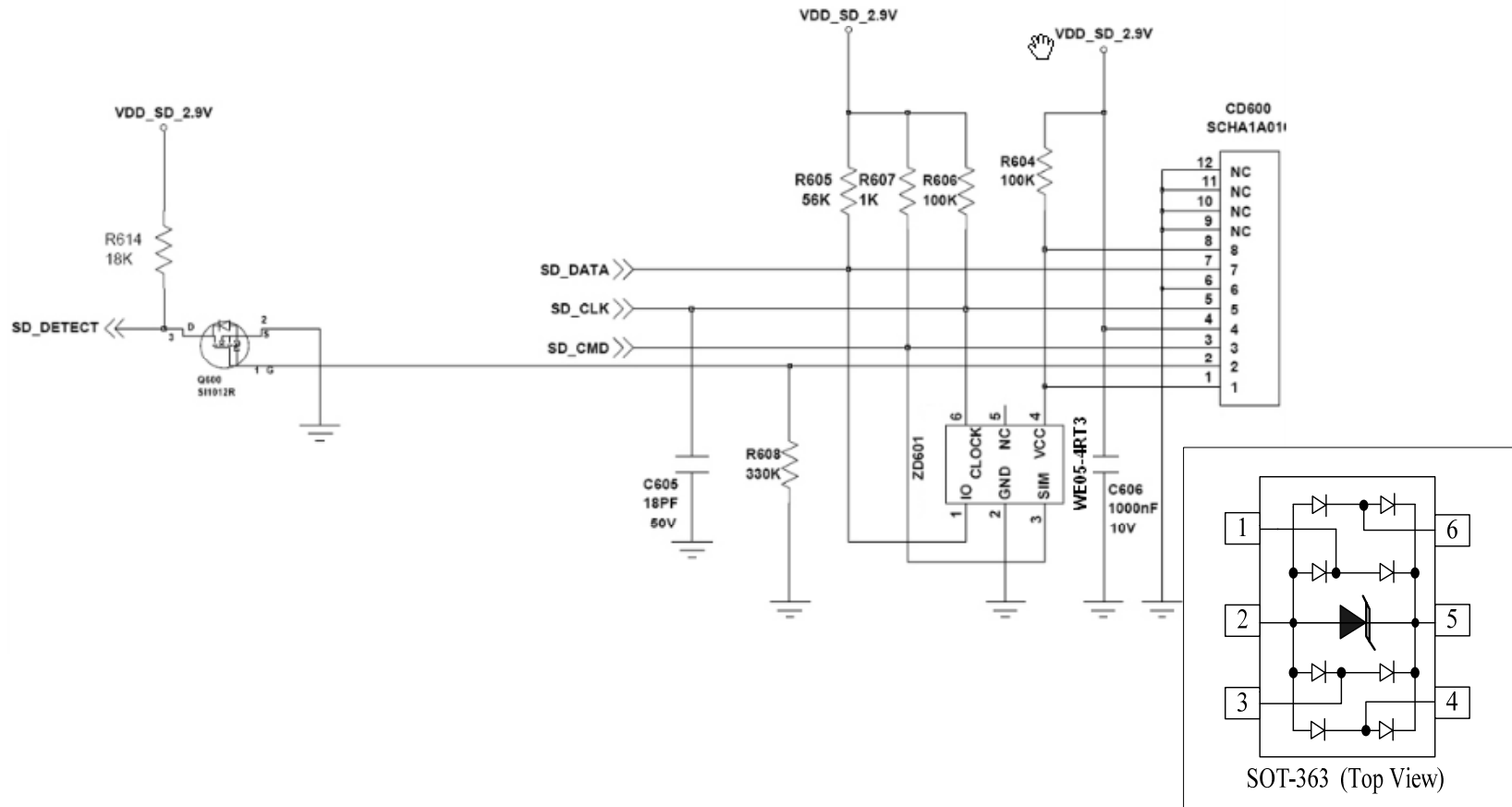
Item	GDT	PTC	Power TVS
1	GDTN3RS5-90 ( SMD, 3electrodes )	LB120	WS18P6SMB-B
2	GDTR3RD6-90 ( R-line, 3electrodes )	LB120	WS18P6SMB-B











**THANK YOU!**