

Application Guide 10/100/1000 Ethernet (ESD only)

Considerations:

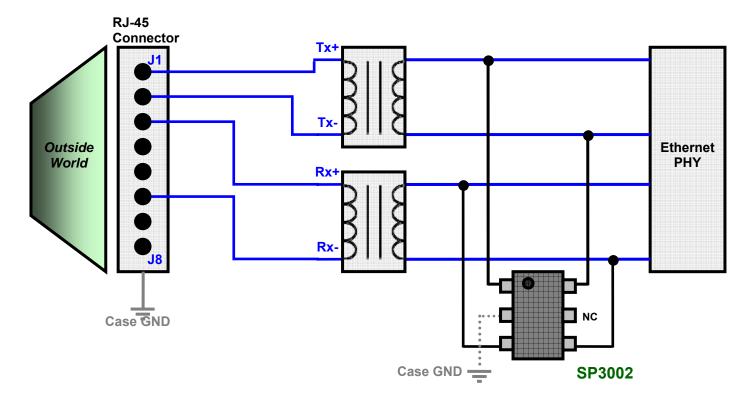
Some Ethernet ports only need be protected for ESD and not for lightning induced transients
→ These are sometimes referred to as "2M" ports or 2 Meter ports

• Parasitic capacitance should be taken into account especially for Gigabit Ethernet

• The 4 data lines below (Tx+/- and Rx+/-) are being protected against ESD by a low capacitance SP3002 which is suitable for all Ethernet data rates

 \rightarrow In fact, any low capacitance SP30xx device is suitable for any "ESD only" Ethernet application

Application Schematic:



Recommended SPA Devices:

Ordering Number	ESD Level (Contact)	Lightning (t _P =8/20µs)	I/O Capacitance	# of Channels	V _{RWM}	Packaging
SP3002-04JTG	±12kV	4.5A	0.85pF	4	6V	SC70-6
SP3003-04XTG	±8kV	2.5A	0.65pF	4	6V	SOT563
SP3004-04XTG	±12kV	4A	0.85pF	4	6V	SOT563