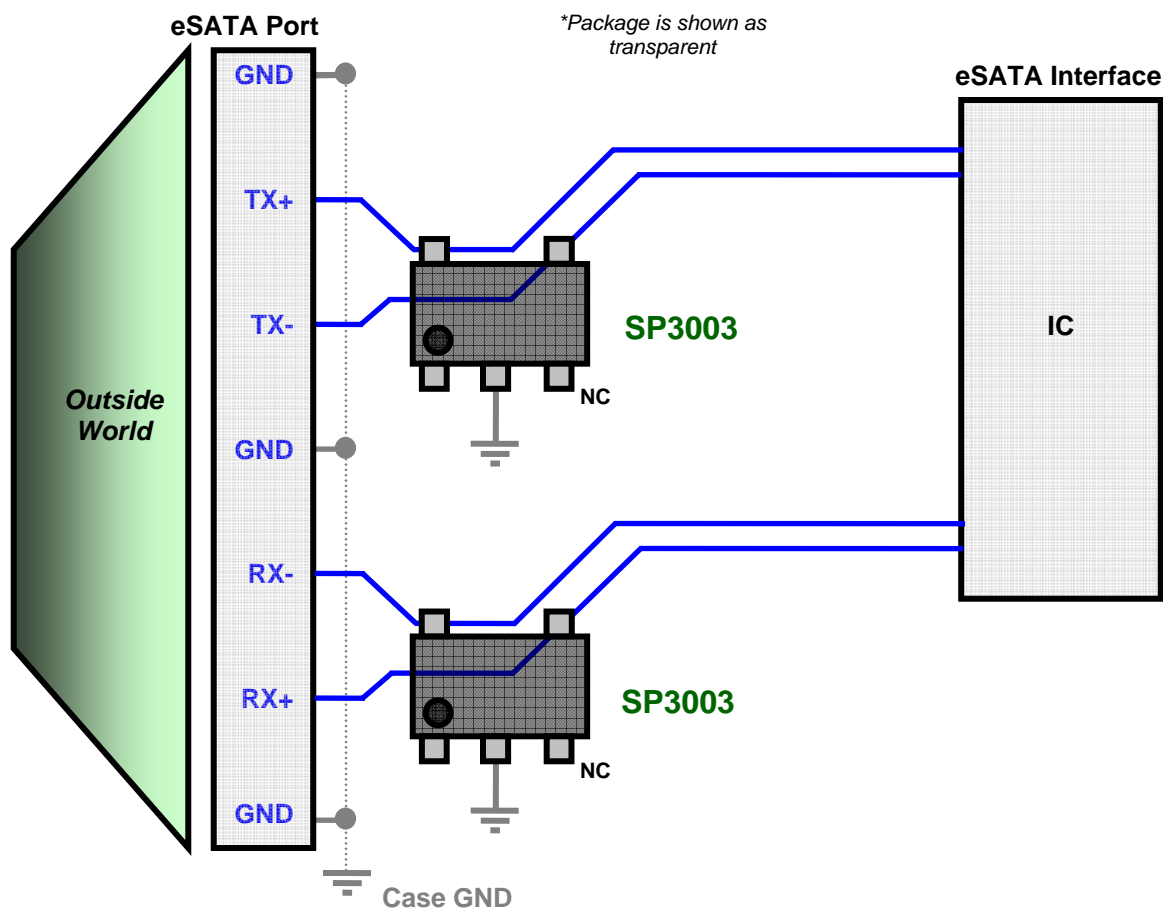


## Application Guide eSATA

### Considerations:

- eSATA is a subset of the SATA protocol that uses 2 differential pairs for communication
  - Four lines need to be protected per port (i.e. **TX+/TX-** and **RX+/RX-**)
  - Currently eSATA is capable of running raw data rates of 1.5Gbps (Gen 1) and 3.0Gbps (Gen 2).
- These high bus speeds require very low capacitance devices to prevent signal degradation
- To maintain the line impedance the designer should avoid using 90° angles and vias

### Application Schematic:



### Recommended SPA Devices:

Ordering Number	ESD Level (Contact)	I/O Capacitance	# of Channels	V <sub>RWM</sub>	Packaging
<a href="#">SP3003-02XTG</a>	±8kV	0.65pF	2	6V	SOT553
<a href="#">SP3010-04UTG</a>	±8kV	0.45pF	4	6V	μDFN-10 (2.5x1.0mm)
<a href="#">SP3003-04JTG</a>	±8kV	0.65pF	4	6V	SC70-6