

# Critical Isolated Gate Driver Specifications

Multiple Choice Quiz

TI Precision Labs – Isolation

# Quiz: Critical Isolated Gate Driver Specifications

**1. Propagation delay is determined by:**

- a. The speed of electrons through copper
- b. The specific circuitry within the gate driver
- c. The speed of light
- d. The cost of the process used

**2. Pulse duration distortion is conventionally:**

- a. Measured as an absolute value
- b. Measured by both positive and negative distortion
- c. Measured according to the manufacturer's conventions
- d. Not measured at all

**3. Timing skew is important for systems with \_\_\_\_\_**

- a. Very low switching frequencies
- b. Only a single switch (such as single phase boost PFC)
- c. Bridge topologies with high efficiency and minimal dead time requirements
- d. Systems that use IGBTs

# Quiz: Critical Isolated Gate Driver Specifications

4. **Common-mode transient immunity is primarily determined by the \_\_\_\_\_ between the sides of the isolation barrier.**
- a. Parasitic capacitance
  - b. Parasitic inductance
  - c. Parasitic resistance
  - d. Parasitic BJT
5. **In an application environment, the most common cause for drift in isolated gate driver specifications is:**
- a. Changes in supply voltage
  - b. Changes in output load
  - c. Changes in semiconductor characteristics over the lifetime of the IC
  - d. Changes in temperature

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Multiple Choice Quiz – Solutions

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