

Basics of Analog Multiplexer – 3

Multiple choice quiz

TI Precision Labs – Op Amps

Quiz: Basics of Analog Multiplexer – 3

1. Bandwidth of a multiplexer is defined as
 - a. the range of frequencies that are attenuated by > 3 dB when the input is applied to the source pin of an on-channel and the output measured at the drain pin
 - b. the range of frequencies that are attenuated by < 3 dB when the input is applied to the source pin of an on-channel and the output measured at the drain pin
 - c. the range of frequencies that are attenuated by < 10 dB when the input is applied to the source pin of an on-channel and the output measured at the drain pin
 - d. None of the above

2. Multiplexer bandwidth depends on
 - a. the on resistance of the multiplexer
 - b. the load capacitance at the output of the multiplexer
 - c. the multiplexer power supply
 - d. Both a and b

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3. Channel to Channel crosstalk is measured in
 - a. Decibels (dB)
 - b. Hertz (Hz)
 - c. Micro-Volts (μV)
 - d. None of the above

4. Channel to Channel crosstalk of a multiplexer depends on
 - a. the parasitic capacitance of the multiplexer
 - b. the board stray capacitance between adjacent multiplexer channels
 - c. the on resistance of the multiplexer
 - d. all of the above

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5. Off Isolation of a multiplexer
 - a. is a frequency-dependent phenomenon
 - b. caused mainly by the off parasitic capacitance of the multiplexer
 - c. improves with higher load capacitance at the output of multiplexer
 - d. all of the above

6. THD+Noise performance of a multiplexer
 - a. is a measure of signal distortion at the output of the multiplexer
 - b. improves with lower on resistance of the multiplexer
 - c. both a and b
 - d. none of the above

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