Debugging a Current Shunt Monitor Circuit – Downstream Circuitry

TI Precision Labs – Current Sense Amplifiers

QUIZ

TEXAS INSTRUMENTS

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1. When using a current sense amplifier (CSA) connected to a SAR ADC, the bandwidth of the CSA matters.

   a) True

   b) False

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2. When connecting a CSA to a SAR ADC, what must one consider?

   a) Sampling rate of the ADC

   b) CSA output RC filter

   c) CSA bandwidth

   d) All of the above

TEXAS INSTRUMENTS

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3. In a transconductance current sense amplifier, paying attention to downstream load is very important. Why?

    a) The load on the output is what determines the voltage on the output

    b) The load on the output has a major impact on CMRR

    c) The load on the output determines the transconductance

    d) The load on the output is not important

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4. In which case would buffering the output of a CSA be used?

    a) When a high impedance is needed at the CSA output

    b) When higher bandwidth is needed at the CSA output

    c) Always

    d) Both A and B

TEXAS INSTRUMENTS

ANSWERS

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