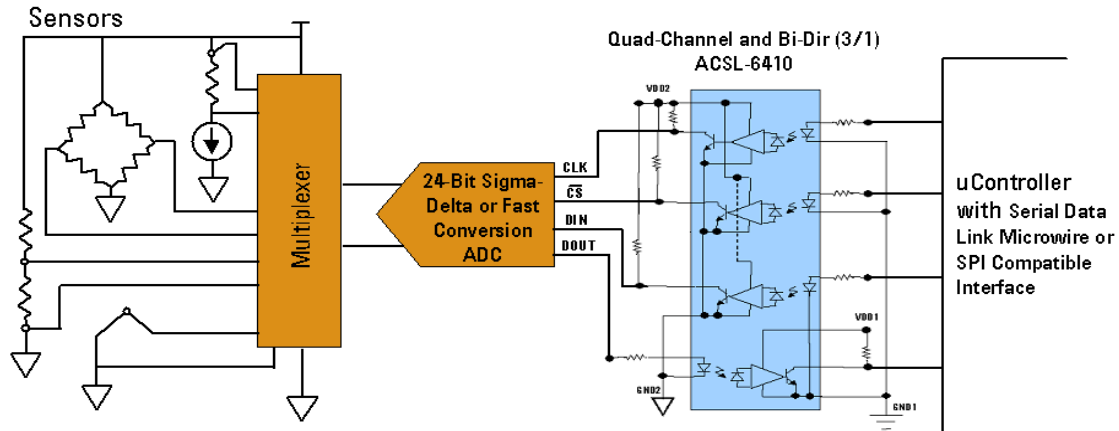


## Application Examples:

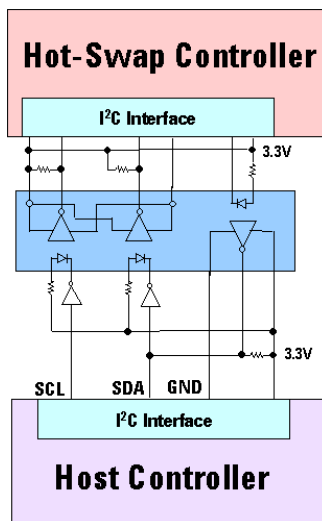
### Digital Isolation for A/D Conversion

#### Application Block Diagram



The isolated data acquisition system is ideal for digitizing the output of the sensors that operate in a noisy environment. The ADC, in this case a 24-bit sigma delta or fast conversion type, converts the analog voltage to a digital number. The quad-channel and bi-directional, ACSL-6410, provides high CMR of 10kV/us and electrical isolation of 2500V rms between the host system and the data acquisition circuitry and sensors. The power supply is also isolated, usually via a transformer to isolate the AC line voltage from the DC voltages generated to power the data acquisition system.

### Digital Isolation for Power-Over-Ethernet via I<sup>2</sup>C Interface



Power-Over-Ethernet is an emerging application that requires digital isolation between its two core digital controllers. The digital logic gate optocoupler, triple channel and bi-directional, ACSL-6310 protect the host controller against high voltage surges that occur during hot swapping.