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Diagnostics; Bibliography; 5 Data Conversion Devices and Errors; 5-0 Introduction; 5-1 Analog Multiplexers; 5-2 Sample-Holds; 5-3 Digital-to-Analog Converters; 5-4 Analog-to-Digital Converters  
Bibliography6 Sampling and Reconstruction with Intersample Error; 6-0 Introduction; 6-1 Sampled Data Theory; 6-2 Aliasing of Signal and Noise; 6-3 Step-Interpolated Data Intersample Error; 6-4 Output Signal Interpolation, Oversampling, and Digital Conditioning; Bibliography; 7 Measurement and Control Instrumentation Error Analysis; 7-0 Introduction; 7-1 Low-Data-Rate Digital Control Instrumentation; 7-2 High-Data-Rate Video Acquisition; 7-3 Computer-Integrated Instrumentation Analysis Suite; Bibliography; 8 Multisensor Architectures and Error Propagation; 8-0 Introduction  
8-1 Multisensor Fusion, Integration, and Error8-2 Sequential Multisensor Architecture; 8-3 Homogeneous Multisensor Architecture; 8-4 Heterogeneous Multisensor Architecture; Bibliography; 9 Instrumentation System Integration and Interfaces; 9-0 Introduction; 9-1 System Integration and Interface Buses; 9-2 Instrument Serial Bus Interfaces; 9-3 Microwave Microscopy Virtual Instrument; 9-4 Analytical Instrumentation in Advanced Control; Bibliography; Index

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#### Sommario/riassunto

A groundbreaking book based on a landmark quality initiative In today's information-driven enterprises, accuracy is essential in computer-integrated measurement and control systems, where academia, government, and industry invest considerable resources in methodologies for achieving and maintaining high performance. Multisensor Instrumentation 6s Design offers a blueprint-drawn from the author's thirty years of experience at federal laboratories, steel producers, and General Electric-for defined-accuracy computer-based measurement and control instrumentation. Based on GE

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