1. Record Nr. UNINA9910450009303321

Titolo	Intelligent sustainment and renewal of Department of Energy facilities and infrastructure [[electronic resource] /] / Committee on the Renewal of Department of Energy Infrastructure, Board on Infrastructure and the Constructed Environment, Division on Engineering and Physical Sciences, National Research Council of the National Academies
Pubbl/distr/stampa	Washington, D.C., : National Academy Press, c2004
ISBN	1-280-17579-6 9786610175796 0-309-54652-4
Descrizione fisica	1 online resource (121 p.)
Soggetti	Administrative agencies - United States - Management - Evaluation Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.

2. Record Nr. UNISA996389778403316

Autore	W. W
Titolo	Encheiridion paradeigmatikeon or, A manual of examples, assisting youth in their school-exercise of making theams [[electronic resource]] : A work hitherto much wanting unto schools. / / By W.W. .
Pubbl/distr/stampa	London, : Printed for the author, and are to be sold by Benjamin Tooke ..., 1679
Descrizione fisica	[4], 3, 8-9, 6-7, 12-13 p
Soggetti	Characters and characteristics in literature
Lingua di pubblicazione	Latino
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	First two words of the title are tranliterated Greek. Text is continuous despite pagination. Reproduction of original in the British Library.
Sommario/riassunto	eebo-0018

3. Record Nr. UNINA9910784360603321

Autore	Ball Stuart R. <1956->
Titolo	Analog interfacing to embedded microprocessor systems [[electronic resource] /] / Stuart R. Ball
Pubbl/distr/stampa	Amsterdam ; ; Boston, : Newnes, c2004
ISBN	1-280-96433-2 9786610964338 0-08-046997-3
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (335 p.)
Collana	Embedded technology series
Altri autori (Persone)	BallStuart R. <1956->
Disciplina	004.16
Soggetti	Embedded computer systems - Design and construction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Rev. ed. of: Analog inter-facing to embedded microprocessors. 2001. Includes index.
Nota di contenuto	Cover; TOCContents; Preface; CH1. System Design; Dynamic Range; Calibration; Bandwidth; Processor Throughput; Avoiding Excess Speed; Other System Considerations; Sample Rate and Aliasing; CH2. Analog-to-Digital Converters; ADCs; Types of ADCs; ADC Comparison; Sample and Hold; Real Parts; Microprocessor Interfacing; Clocked Interfaces; Serial Interfaces; Multichannel ADCs; Internal Microcontroller ADCs; Codecs; Interrupt Rates; Dual-Function Pins on Microcontrollers; Design Checklist; CH3. Sensors; Temperature Sensors; Optical Sensors; CCDs; Magnetic Sensors; Motion/Acceleration Sensors Strain GaugesCH4. Time-Based Measurements; Measuring Period versus Frequency; Mixing; Voltage-to-Frequency Converters; Clock Resolution and Range; Extending Accuracy with Limited Resolution; CH5. Output Control Methods; Open-Loop Control; Negative Feedback and Control; Microprocessor-Based Systems; On-Off Control; Overshoot; Proportional Control; Proportional, Integral, Derivative Control; Motor Control; Predictive Control; Measuring and Analyzing Control Loops; PID Software Examples; Things to Remember in Control Design; CH6. Solenoids, Relays, and Other Analog Outputs; Solenoids; Heaters CoolersLEDs; DACs; Digital Potentiometers; Analog Switches; CH7. Motors; Stepper Motors; DC Motors; Tradeoffs between Motors; Power-

Up Issues; Motor Torque; A Real-World Stepper Application; CH8. Electromagnetic Interference; Ground Loops; Electrostatic Discharge; CH9. High-Precision Applications; Input Offset Voltage; Input Resistance; Frequency Characteristics; Temperature Effects in Resistors; Voltage References; Temperature Effects in General; Noise and Grounding; Printed Circuit Board Layout; Statistical Tolerancing; Supply-Based References; Summary; CH10. Standard Interfaces IEEE 1451.2Fieldbus; CH11. Analog Toolbox; Microcontroller Supply and Reference; Resistor Networks; Multiple Input Control; AC Control; Voltage Monitors and Supervisory Circuits; Driving Bipolar Transistors; Driving MOSFETs; Reading Negative Voltages; Example Control System; Appendix A Opamp Basics; Opamp Configurations; General Opamp Design Equations; Nonresistive Elements; Reversing the Inputs; Comparators; Hysteresis; Instrumentation Amplifiers; Appendix B Pulse Width Modulation; Why PWM?; Real Parts; Frequency Limitations; Resolution Limitations; Power-Supply Considerations; PWM and EMI Audio ApplicationsPWM Hardware; PWM Software; Appendix C Useful URLs; Semiconductors; Motors; Other; Appendix D Python Code for Chapter 11; Excel Data for Chapter 4; Glossary; IDXIndex

Sommario/riassunto

Analog Interfacing to Embedded Microprocessors addresses the technologies and methods used in interfacing analog devices to microprocessors, providing in-depth coverage of practical control applications, op amp examples, and much more. A companion to the author's popular Embedded Microprocessor Systems: Real World Design, this new embedded systems book focuses on measurement and control of analog quantities in embedded systems that are required to interface to the real world. At a time when modern electronic systems are increasingly digital, a comprehensive source on interfacing the re