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Titolo	Analog and digital circuits for electronic control system applications [[electronic resource]] : using the TI MSP430 microcontroller / / by Jerry Luecke
Pubbl/distr/stampa	Amsterdam ; ; Boston, : Elsevier/Newnes, c2005
ISBN	1-281-00991-1 9781417549742 9786611009915 0-08-047581-7
Descrizione fisica	1 online resource (329 p.)
Disciplina	629.8/9
Soggetti	Electronic circuit design Electronic control Programmable controllers Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Cover; Contents; Foreword; Preface; Acknowledgments; Chapter 1: Signal Paths from Analog to Digital; Introduction; A Refresher; Accuracy vs. Speed-Analog and Digital; Interface Electronics; The Basic Functions for Analog-to-Digital Conversion; Summary; Chapter 1 Quiz; Chapter 2: Signal Paths from Digital to Analog; Introduction; The Digital-to-Analog Portion; Filtering; Conditioning the Signal; Transducing the Signal; Summary; Chapter 2 Quiz; Chapter 3: Sensors; Introduction; Temperature Sensors; Angular and Linear Position; Rotation; Magnetoresistor Sensor; Pressure; Light Sensors Other SensorsSummary; Chapter 3 Quiz; Chapter 4: Signal Conditioning; Introduction; Amplification; Bipolar NPN Amplifier; Amplifier Frequency Response; Coupling; Small-Signal vs. Large Signal; Classes of Amplifiers; Field-Effect Transistor Amplifiers; A N-Channel JFET Amplifier Design; An NPN MOSFET Amplifier; Operational Amplifiers; Conditioning the Output of a Pressure Sensor; A More Sophisticated Pressure Sensor Amplifier; Current Mirror; Applications of

Op Amps; Oscillators; Power Amplifiers; Class B Audio Power Amplifier; Special Signals; RC Time Constants; Frequency Selection
 Typical Application of FiltersSummary; Chapter 4 Quiz; Chapter 5: Analog-to-Digital and Digital-to-Analog Conversions; Introduction; Decimal Equivalent of a Binary Number; Digital Codes of ADC; A Resistor Network DAC; A Simple Resistor-String DAC; A Simple Current-Steering DAC; Analog-to-Digital Converters (ADC); Successive Approximation Register (SAR) ADC; Capacitor Charge-Redistribution ADC; Highest Speed Conversions; Sample and Hold and Filters; Summary; Chapter 5 Quiz; Chapter 6: Digital System Processing; Introduction; Digital Processor or Digital Computer; What is a Microprocessor?
 What is a Microcomputer?System Clarifications; Digital Signal Representations; Clock, Timing and Control Signals; Interrupts; Status Bits; More About Software; Sophisticated Programming Languages; How Parts of a Processor Perform Their Functions; Memory and Input/Output; Addressing Modes; Summary; Chapter 6 Quiz; Chapter 7: Examples of Assembly-Language Programming; Introduction; A Processor for the Examples; About the MSP430 Family; The CPU; Program Memory and Data Memory; Peripherals; Operation Control and Operating Modes; Watchdog Timer; System Reset; Interrupts Oscillators and Clock GeneratorsTimers; Addressing Modes; More on MSP430 Control; Further Thoughts; Labels; Instructions; Operands; Hexadecimal Numbers; Comments; Programming Examples; Subprogram No. 1; Subprogram No. 2; Subprogram No. 3; Variation of Threshold; Summary; Chapter 7 Quiz; Chapter 8: Data Communications; Introduction; The Data Transmission System; Parallel and Serial Transmission; Protocols; High-Speed Data Transmissions; Serial Data Communications Advances; A Return to the Format; Shift Registers; USART Serial Communications; The UART Function with Software.
 Technology Advances

Sommario/riassunto

Today's control system designers face an ever-increasing "need for speed? and accuracy in their system measurements and computations. New design approaches using microcontrollers and DSP are emerging, and designers must understand these new approaches, the tools available, and how best to apply them.This practical text covers the latest techniques in microcontroller-based control system design, making use of the popular MSP430 microcontroller from Texas Instruments.The book covers all the circuits of the system, including:
 ·Sensors and their output signals·Design and app

2. Record Nr.	UNINA9910304138603321
Titolo	Evidence-Based Approaches in Positive Education : Implementing a Strategic Framework for Well-being in Schools // edited by Mathew A. White, A. Simon Murray
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2015
ISBN	94-017-9667-X
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (xxxiii, 181 pages) : illustrations
Collana	Positive Education, , 2468-0273
Disciplina	150 150.1988 155.4 155424 306 370.15
Soggetti	Positive psychology Educational psychology Education—Psychology Quality of life Child psychology School psychology Positive Psychology Educational Psychology Quality of Life Research Child and School Psychology
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 at the end of each chapters and index.
Nota di contenuto	Foreword; Martin Seligman -- Preface -- Chapter 1. Building a Positive Institution; Mathew White and Simon Murray -- Chapter 2. A Comparison between Theological Christian Approaches to Wisdom and Peterson and Seligman's Classification of Character Strengths and Virtues; Theodore McCall, Lea Waters and Mathew White -- Chapter 3. Leading Whole-School Change; Lea Waters, Mathew White and Simon

Murray -- Chapter 4. Measuring Whole School Well-Being in Students and Staff; Margaret Kern, Alejandro Adler, Lea Waters and Mathew White -- Chapter 5. Positive School Psychology; Zoë Alford and Mathew White -- Chapter 6. Strengths-Based Approach in the Classroom and Staffroom; Mathew White and Lea Waters -- Chapter 7. Character Education: A Role for Literature in Cultivating Character Strengths in Adolescence; Emily FitzSimons -- Chapter 8. Student Leadership and PERMA; John Vrodos, Tom McNeil with Mathew White -- Chapter 9. Future Directions in Well-Being; Mathew White and Simon Murray.

Sommario/riassunto

Based on action research and implementation at one of the world's great schools, this book provides a much-needed exploration of how to implement positive education at a whole school level. Evidence-Based Approaches in Positive Education summarises the integration of a whole-school mental health and well-being strategy, positive psychology programs and pastoral care models from 3 – 18 years of age. Positive education is the teaching of scientifically validated programs from positive psychology and character education that have an impact on student and staff well-being. It is an approach that focuses on teaching, building and embedding social and emotional learning throughout a student's experience. St Peter's College - Adelaide is the only institution in the world to integrate Martin Seligman's well-being theory throughout all aspects of both its strategic intent and positive education programs. The School's vision is to be a world-class school where all boys flourish. Its mission is to provide an exceptional education that brings out the very best in every boy. This is done within an intellectually and spiritually rich environment that nurtures international-mindedness, intercultural understanding, respect and a commitment to social justice. This book captures the developments of the St Peter's College journey. It focuses on the integration of well-being across seven strategic goals: Academics; Well-being; Student Life; Entrepreneurship; Innovation and Partnerships; People, Culture and Change; Sustainability and Environment; Community Engagement, Advancement, and Philanthropy. A uniquely Australian school, the impact of a St Peter's College education is to build great men: who believe safety, service and integrity and fundamental parts of their lives; who are active members of communities that are socially and culturally diverse; who engage in political, ethical, and environmental challenges as good citizens. Since 1847, St Peter's College alumni have had global and life-changing impact in all fields of human endeavour. The School's alumni include three Nobel Laureates, 42 Rhodes Scholars, Olympians and Archbishops, artists and scientists, educators and journalists, actors and politicians, philanthropists and physicians, CEOs, diplomats and soldiers, explorers, painters and poets. This book shares evidence-based practices and makes a substantial contribution to the rapidly developing field of positive psychology and its application in schools. .
