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Class D amplifiers; Wideband voltage amplification circuits; Sine wave and other oscillator circuits; Other crystal oscillators; Astable, monostable and bistable circuits; Radio-frequency circuits; Modulation circuits; Optical circuits; Linear power supply circuits; Switch-mode power supplies; Chapter 8. SENSORS AND TRANSDUCERS; Introduction; Strain and pressure; Direction and motion; Light, UV and IR radiation; Temperature; Sound; Chapter 9. DIGITAL LOGIC; Introduction; Logic families; Combinational logic; Number bases; Sequential logic; Counters and dividers; Chapter 10. PROGRAMMABLE DEVICES; Memory; Read-only memory (ROM); Programmable read-only memory (PROM); Volatile memory (RAM); Programmable logic; Complex programmable logic devices (CPLD); Field programmable gate array (FPGA); Hardware description language (HDL); Other programmable devices; Other applications of memory devices; Useful websites; Chapter 11. MICROPROCESSORS AND MICROCONTROLLERS; Introduction; Binary stored program computers; Microprocessor systems; Power-up reset and program execution; Programming; The ARM processor; Developing microprocessor hardware; Microcontroller manufacturers; Chapter 12. MICROPROCESSOR INTERFACING; Output circuits; Input circuits; Chapter 13. DATA CONVERTERS; Introduction; Digital-to-analogue converters (DACs); Analogue-to-digital converters; Voltage references for analogue-to-digital converters; Connecting a serial ADC to a PC; Useful websites; Chapter 14. TRANSFERRING DIGITAL DATA; Introduction; Parallel transfer; IEEE 1284 Centronics printer interface; The IEEE-488 bus; Serial transfer; EIA/TIA 232E serial interface; RS-422/RS-485; Wireless links; Useful websites; Chapter 15. MICROCONTROLLER APPLICATIONS; Introduction; Configuration; Clock Setting up I/O ports

Sommario/riassunto

Ian Sinclair's Practical Electronics Handbook combines a wealth of useful day-to-day electronics information, concise explanations and practical guidance in this essential companion to anyone involved in electronics design and construction. The compact collection of key data, fundamental principles and circuit design basics provides an ideal reference for a wide range of students, enthusiasts, technicians and practitioners of electronics who have progressed beyond the basics. The sixth edition is updated throughout with new material on microcontrollers and computer assistance, and a new chapter
