1. Record Nr. UNINA9910963859603321

Titolo	Essential simulation in clinical education / / edited by Kirsty Forrest, Judy McKimm, Simon Edgar
Pubbl/distr/stampa	Chichester, West Sussex, : John Wiley & Sons, 2013
ISBN	9781118659366 1118659368 9781118748039 1118748034 9781118659359 111865935X
Descrizione fisica	xv, 288 p. : col. ill
Collana	Essentials
Altri autori (Persone)	EdgarSimon ForrestKirsty McKimmJudy
Disciplina	610.71
Soggetti	Medicine - Study and teaching - Simulation methods Simulated patients
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Essential simulation in clinical education / Judy McKimm and Kirsty Forrest -- Medical simulation : the journey so far / Aidan Byrne -- The evidence what works, why and how? / Doris Ostergaard and Jacob Rosenberg -- Pedagogy in simulation-based training in health care / Peter Dieckmann and Charlotte Ringsted -- Assessment / Thomas Gale and Martin Roberts -- The roles of faculty and simulated patients in simulation / Bryn Baxendale, Frank Coffey, and Andrew Buttery -- Surgical technical skills / Rajesh Aggarwal and Amit Mishra -- The non-technical skills / Nikki Maran, Simon Edgar, and Alistair May -- Teamwork / Jennifer Weller -- Designing effective simulation activities / Joanne Barrott ... [et al.] -- Distributed simulation / Jessica Janice Tang ... [et al.] -- Providing effective simulation activities / Walter J Eppich, Lanty O'Connor, and Mark Adler -- Simulation in practice / edited by Jean Keri -- The future for simulation.

Sommario/riassunto	This book provides a broad, general introduction to the topic of simulation within clinical education. An ideal tool for both teaching and learning, it provides a theoretical and practical introduction to the subject of simulation, whilst also offering strategies for successful use of simulators within general clinical education and demonstrating best practice throughout. It provides The latest information on developments in the field, all supported by an evidence-base ; Content written by a global team of experts ; Discussion of policy and strategy initiatives to ground simulation within the healthcare context ; Practical examples of cases, including inter-professional learning.

2.

Record Nr.	UNINA9910965275203321
Autore	Williams Tim <1954->
Titolo	The circuit designer's companion
Pubbl/distr/stampa	this is from the 264 field
ISBN	9786611009397 9781281009395 1281009393 9780080476513 0080476511
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (354 p.)
Disciplina	621.3815
Soggetti	Electronic circuit design Electrical & Computer Engineering Engineering & Applied Sciences Electrical Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. [329]-331) and index.
Nota di contenuto	Cover; The Circuit Designer's Companion; Contents; Introduction; Introduction to the second edition; Chapter 1 Grounding and wiring; 1.1 Grounding; When to consider grounding; 1.1.1 Grounding within one unit; 1.1.2 Chassis ground; 1.1.3 The conductivity of aluminium; Other materials; 1.1.4 Ground loops; 1.1.5 Power supply returns;

Varying loads; Power rail feed; Conductor impedance; 1.1.6 Input signal ground; Connection to 0V elsewhere on the pcb; Connection to 0V within the unit; External ground connection; 1.1.7 Output signal ground; Avoiding the common impedance
1.1.8 Inter-board interface signalsPartitioning the signal return; 1.1.9 Star-point grounding; 1.1.10 Ground connections between units; Breaking the ground link; 1.1.11 Shielding; Which end to ground for LF shielding; Electrostatic screening; Surface transfer impedance; 1.1.12 The safety earth; 1.2 Wiring and cables; 1.2.1 Wire types; Wire inductance; Equipment wire; 1.2.2 Cable types; 1.2.3 Power cables; 1.2.4 Data and multicore cables; Data communication cables; Structured data cable; Shielding and microphony; 1.2.5 RF cables; 1.2.6 Twisted pair; 1.2.7 Crosstalk; Digital crosstalk
1.3 Transmission linesTransmission line effects; Critical lengths for pulses; 1.3.1 Characteristic impedance; 1.3.2 Time domain; Forward and reflected waves; Ringing; The Bergeron diagram; The uses of mismatching; 1.3.3 Frequency domain; Standing wave distribution vs. frequency; Impedance transformation; Lossy lines; Chapter 2 Printed circuits; 2.1 Board types; 2.1.1 Materials; Epoxy-glass; 2.1.2 Type of construction; 2.1.3 Choice of type; 2.1.4 Choice of size; Sub-division boundaries; Panelisation; 2.1.5 How a multilayer board is made; 2.2 Design rules; 2.2.1 Track width and spacing
Conductor resistanceVoltage breakdown and crosstalk; Constant impedance; 2.2.2 Hole and pad size; Vias; Through hole pads; Surface mount pads; 2.2.3 Track routing; 2.2.4 Ground and power distribution; Ground rail inductance; Gridded ground layout; The ground plane; Inside or outside layers; Multiple ground planes; 2.2.5 Copper plating and finishing; 2.2.6 Solder resist; Screen printed resists; Photo-imaged film; 2.2.7 Terminations and connections; Two-part connectors; Edge connectors; 2.3 Board assembly: surface mount and through hole; 2.3.1 Surface mount design rules; Solder process
Printed circuit board qualityThermal stresses; Cleaning and testing; 2.3.2 Package placement; 2.3.3 Component identification; Polarity indication; 2.4 Surface protection; Variations in surface resistance; Circuit design vs. surface resistance; 2.4.1 Guarding; 2.4.2 Conformal coating; Coating vs. encapsulation; Steps to take before coating; Application; Test and rework; 2.5 Sourcing boards and artwork; 2.5.1 Artwork; Using a bureau; Disadvantages of a bureau; 2.5.2 Boards; Chapter 3 Passive components; 3.1 Resistors; 3.1.1 Resistor types; Surface mount chip; Metal film; Carbon; Wirewound
Precision resistors

Sommario/riassunto

Tim Williams' Circuit Designer's Companion provides a unique masterclass in practical electronic design that draws on his considerable experience as a consultant and design engineer. As well as introducing key areas of design with insider's knowledge, Tim focuses on the art of designing circuits so that every production model will perform its specified function - and no other unwanted function - reliably over its lifetime. The combination of design alchemy and awareness of commercial and manufacturing factors makes this an essential companion for the professional electronics designer.