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Sommario/riassunto

An authoritative introduction to the roles of switching and transmission in broadband integrated services networks *Principles of Broadband Switching and Networking* explains the design and analysis of switch architectures suitable for broadband integrated services networks, emphasizing packet-switched interconnection networks with distributed routing algorithms. The text examines the mathematical properties of these networks, rather than specific implementation technologies. Although the pedagogical explanations in this book are in the context of switches, many of the fundamental principles are relevant to other communication networks with regular topologies. After explaining the concept of the modern broadband integrated services network and why it is necessary in today's society, the book moves on to basic switch design principles, discussing two types of circuit switch design - space domain and time domain - and packet switch design. Throughput improvements are illustrated by some switch design variations such as Speedup principle, Channel-Grouping principle, Knockout principle, and Dilation principle. Moving seamlessly into advanced switch design principles, the book covers switch scalability, switch design for multicasting, and path switching. Then the focus moves to broadband communications networks that make use of such switches. Readers receive a detailed introduction on how to allocate network resources and control traffic to satisfy the quality of service requirements of network users and to maximize network usage. As an epilogue, the text shows how transmission noise and packet contention have similar characteristics and can be tamed by comparable means to achieve reliable communication. *Principles of Broadband Switching and Networking* is written for senior undergraduate and first-year postgraduate students with a solid background in probability theory.

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Sommario/riassunto	"Written by one of the premier professionals in the field, Construction Calculations Manual provides end users with the calculations necessary for ensuring the on-time project delivery, within-budget projects. The proposed book will provide an owner, planning a construction project, with detailed calculations regarding site work, piping and pipe fitting, cost estimation, and overall project management. The only book of its kind on the market today, this guide gives you all essential calculations used on the construction site. Day-to-day construction work calculations are presented in plain easy to read language. Time Saving

calculations include: Complete Stair calculations for Risers, Treads, Stringer Length and Incline Angle Set Riser Height and solve for Stairwell Opening Built-in Right-Angle Functions for Square-ups, Slopes Area, Volume and Perimeter solutions with Length, Width and Height Keys Drywall, Siding and Paneling Key calculates Roof Function finds Area, Bundles, Squares and 4x8 Sheathing for Flat or Pitched Roofs Compound Miter - Store Crown Angle and Enter Wall Corner Angle to calculate the Blade Tilt and Angle for Miters cuts Board Feet Lumber estimating All calculations are categorized according to equipment type--and sample calculations, applications and examples are provided. With this book in hand, owners, construction managers, construction engineers, architects, and contractor will find manual a valuable guide to some of the most common and difficult calculations in all aspects of construction"--
