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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction to Power Management IC -- Introduction to TEG-based Power Management Unit -- TEG-based Power Management Designs and Characterizations -- Dual Outputs Switched Capacitor Voltage Regulator -- Ratioed Logic Comparator-Based Digital LDO Regulator -- Conclusions and Future Work.
Sommario/riassunto	This book describes power management integrated circuits (PMIC), for power converters and voltage regulators necessary for energy efficient and small form factor systems. The authors discuss state-of-the-art PMICs not only for battery powered wearable devices, but also energy harvesting-based devices. The circuits presented support voltage scaling to reduce the overall average power consumption of a wearable device, resulting in longer device operating time. The discussion includes many designs, control techniques and approaches to distribute efficiently the power among different blocks in the device. •

Demonstrates for readers how to innovate in designing power management integrated circuits (PMIC) suitable for wearable devices, powered by either battery or harvesting energy; • Introduces a dual outputs switched capacitor, using a single voltage regulator to minimize the area overhead and discusses the effect of having more than two outputs on the area and power efficiency; • Introduces a novel clock-less digital LDO regulator that eliminates the use of the clocked comparator and serial shift register in the conventional design; • Presents experimental results of energy harvesting-based power management units (PMU), using different combinations of power converters and voltage regulators, providing a guide for designers to select the appropriate option based on device requirements.