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Autore	Saponara Sergio
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Nota di contenuto	Highly Integrated Low-Power Radars; Contents; Preface; Acknowledgments; 1 Scenarios, Applications, and Requirement; References; 2 Radar Integration Levels, Technology Trends, and Transceivers; 2.1 Radar Integration Levels ; 2.1.1 System-on-a-Single-Chip; 2.1.2 System-in-a-Package; 2.1.3 Single-Board Radar; 2.2 Next Steps in Radar Miniaturization ; 2.3 Integrated Antennas ; 2.4 Semiconductor Technology and Devices for Integrated Radar; 2.5 Trends in IC Radar Design ; 2.5.1 MIC and MMIC Technology; 2.5.2 Si-Based Technology; 2.6 Radar Transceivers ; References. 3 Hardware-Software Implementing Platforms for Radar Digital Signal Processing3.1 Implementing Platforms and Performance Metrics for Radar; 3.1.1 Implementing Platforms for Radar Digital Signal Processing; 3.1.2 Main Performance Metrics for Radar Implementing Platforms; 3.2 Hardware-Software Architecture for a Cost-Effective Radar; 3.3 DSP and GPU for Radar Signal Process; 3.3.
Sommario/riassunto	In recent years, advances in radio detection and ranging technology, sustained by new achievements in the fields of signal processing and electronic components, have permitted the adoption of radars in many civil and defense applications. This resource discusses how highly integrated radar has been adopted by several new markets such as contactless vital sign monitoring (heart rate, breath rate) or harbour

traffic control, as well as several applications for vehicle driver assistance. You are provided with scenarios, applications, and requirements, while focusing on the trade-offs between flexibility, programmability, power consumption, size and weight, and complexity.

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