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	Cooperating objects (Computer systems)
	Microprocessors
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Nota di contenuto	An Introduction: New Trends in Computing -- Numerical Computing -- Parallel Computing: OpenMP, MPI, and CUDA -- Deep Learning and Cognitive computing: Pillars and Ladders -- Approximate Computing: Towards Ultra Low Power Systems Design -- Near-Memory/In-Memory Computing: Pillars and Ladders -- Quantum Computing and DNA Computing: Beyond Conventional Approaches -- Cloud, Fog and Edge Computing -- Reconfigurable and Heterogeneous Computing -- Conclusion -- Index.
Sommario/riassunto	This book discusses and compares several new trends that can be used to overcome Moore's law limitations, including Neuromorphic, Approximate, Parallel, In Memory, and Quantum Computing. The author shows how these paradigms are used to enhance computing capability as developers face the practical and physical limitations of scaling, while the demand for computing power keeps increasing. The discussion includes a state-of-the-art overview and the essential details of each of these paradigms. Introduces in one volume all the

trends that can be used to overcome Moore's law limitations; Describes in detail Neuromorphic, Approximate, Parallel, In Memory, and Quantum Computing concepts, in a manner accessible to a wide variety of readers; Compares tradeoffs between the various paradigms discussed.