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Nota di contenuto	A hardware model -- Notation and bit vectors -- Numeric definitions and operations -- The verification approach -- FM8501: A conventional description -- Commonly used functions -- The ALU -- Instruction fields -- Update and accessor functions -- The FM8501 hardware interpreter -- FM8501: A formal specification -- Correctness of FM8501 -- Expansion of FM8501 -- Conclusions.
Sommario/riassunto	The FM 8501 microprocessor was invented as a generic microprocessor somewhat similar to a PDP-11. The principal idea of the FM 8501 effort was to see if it was possible to express the user-level specification and the design implementation using a formal logic, the Boyer-Moore logic;

this approach permitted a complete mechanically checked proof that the FM 8501 implementation fully implemented its specification. The implementation model for the FM 8501 was inadequate for industrial hardware design but the effort was an important step in the evolution to the design verification methodology now employed by the author. The original version of this monograph was submitted as a dissertation at the University of Texas at Austin under the advisorship of R. Boyer and J. Moore.