實現一個運用似MIPS架構之步進馬達控制系統晶片

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摘 要

本研究主要為似MIPS架構研究及步進馬達控制系統晶片應 用。利用演算法狀態機制Algorithmic State Machine (ASM)推演出系 統晶片的行為、混合與結構模式，並以Verilog硬體描述語言來進行 設計，最後配合SynaptiCAD模擬與現場可程式邏輯閘陣列FPGA快 速成型驗證於步進馬達控制電路之應用。

關鍵詞 : MIPS，ASM，Verilog，FPGA

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