

智慧家庭控制系統

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摘要

本研究使用Arduino搭配Xbee、Ethernet模組、繼電器、光敏電阻及紅外線遙控器設計一個智慧家庭自動化控制系統。本系統在感測與控制模組間以ZigBee為主要傳輸協定，對外則以Gateway(由Arduino與Ethernet組成的模組)提供TCP/IP協定與伺服器連接。經由整合實驗結果證明本系統確實可行，且由於Arduino開放原始碼的特性也提供智慧家庭控制系統一個簡易且快速的開發環境。

關鍵詞：Arduino、Xbee、WSN、Smart Home

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