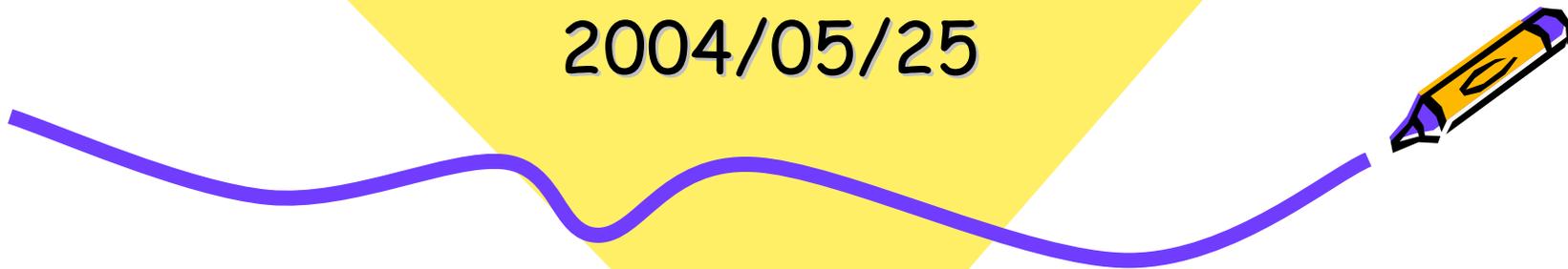


# 無線安全指紋辨識模組

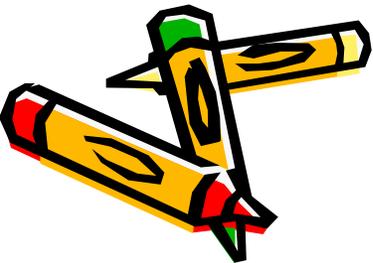
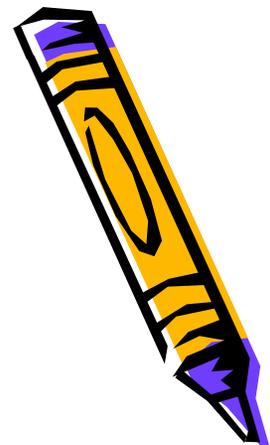
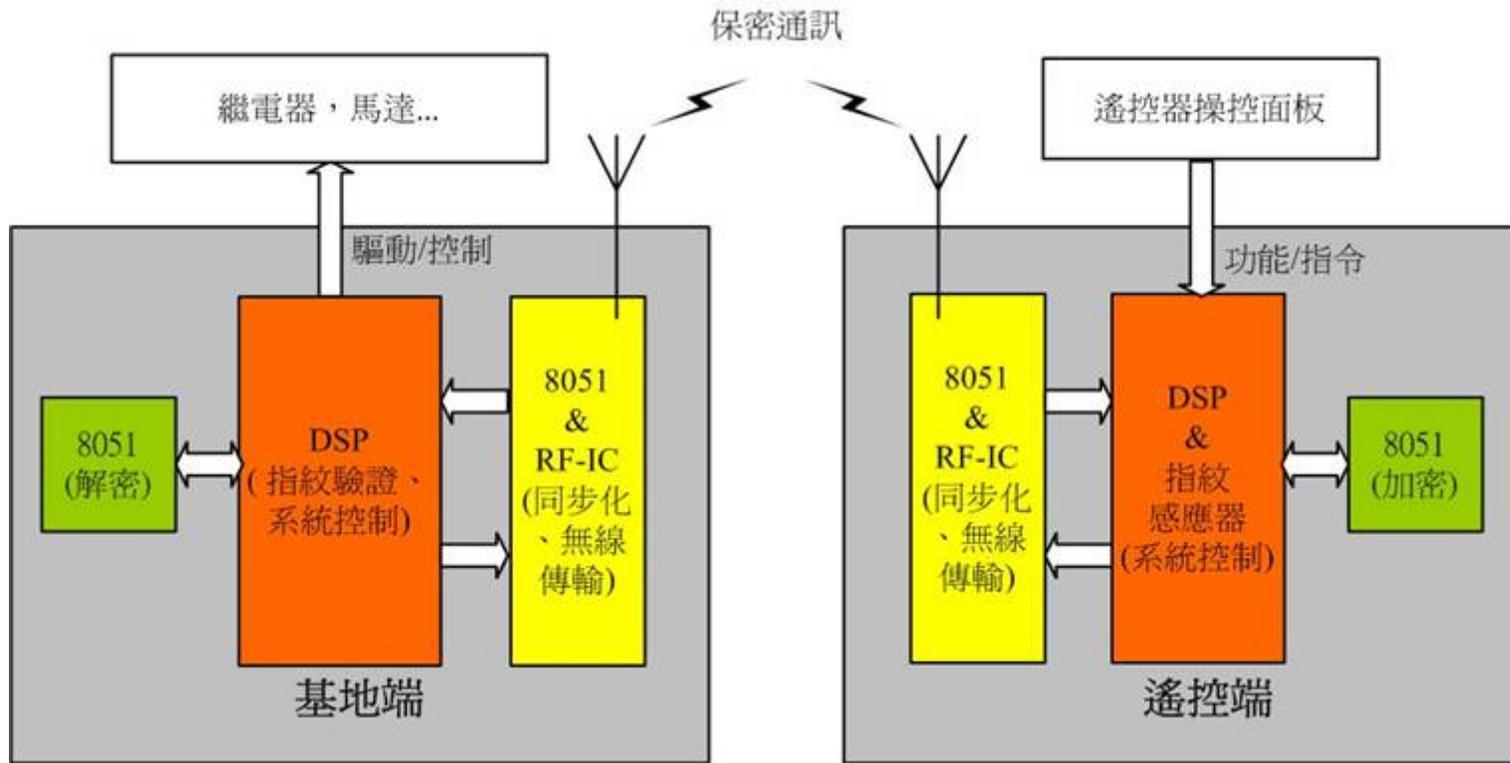
MIAT實驗室 陳慶瀚博士

義守大學電機系

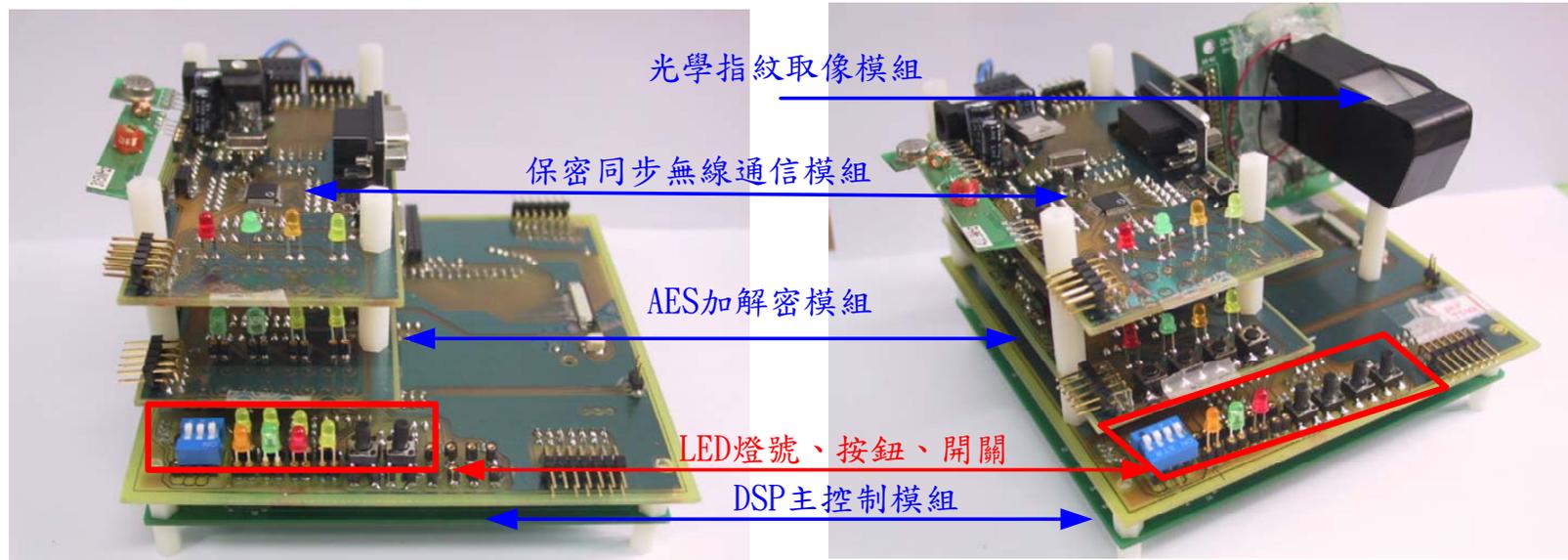
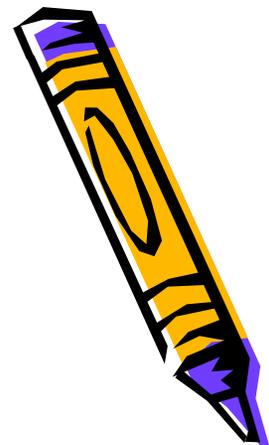
2004/05/25



# 系統方塊圖

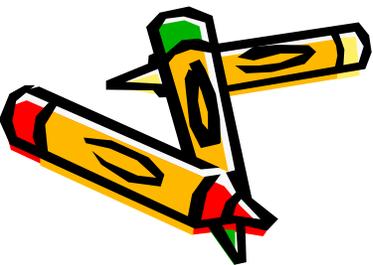


# 實體架構

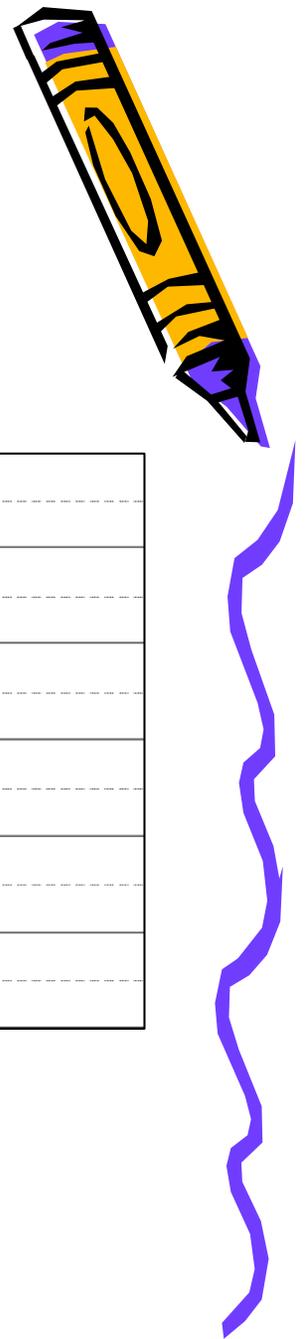


基地端

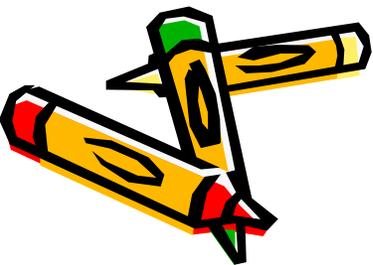
遙控端



# 指紋辨識模組規格



- 54x13=702枚指紋資料庫測試  
EER=1.41%，平均辨識一枚指紋  
時間小於0.5秒。
- Code Memory:
  - 遙控端:33KBytes
  - 基地端:26.5KBytes
- Data Memory:
  - 遙控端:169KBytes
  - 基地端:3.8KBytes
- Flash Memory:
  - 遙控端光學取像校正資料表  
140kbytes
  - 基地端存放註冊特徵佔用  
480bytes



# AES加解密模組規格

Microcontroller :

Cygnal C8051F226 22.1184MHz

I/O Port :

P0.0(TX0)

P0.1(RX0)

P3.6(TX1)軟體模擬

P3.7(RX1)軟體模擬

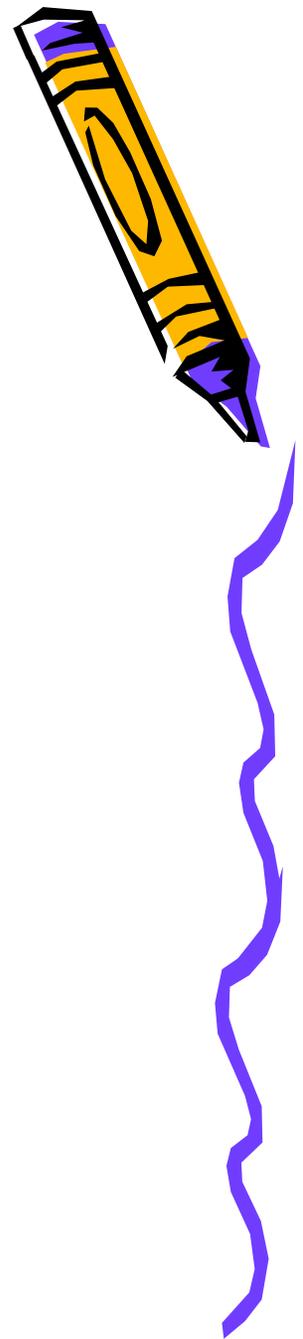
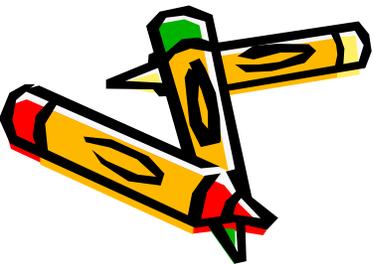
加密速度 :

6.5KBPS (含串列輸出跟輸入時間)

記憶體佔用空間:

Data Memory : 704 Bytes

Code Memory : 6108 Bytes



# 安全通訊模組

Microcontroller :

Cygnal C8051F226 22.1184MHz

I/O Port :

P0.0(TX0)

P0.1(RX0)

P3.6(TX1)軟體模擬

P3.7(RX1)軟體模擬

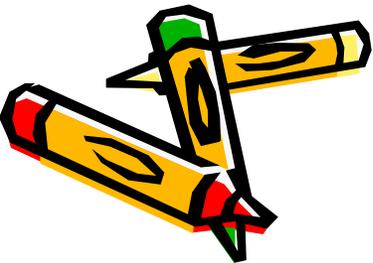
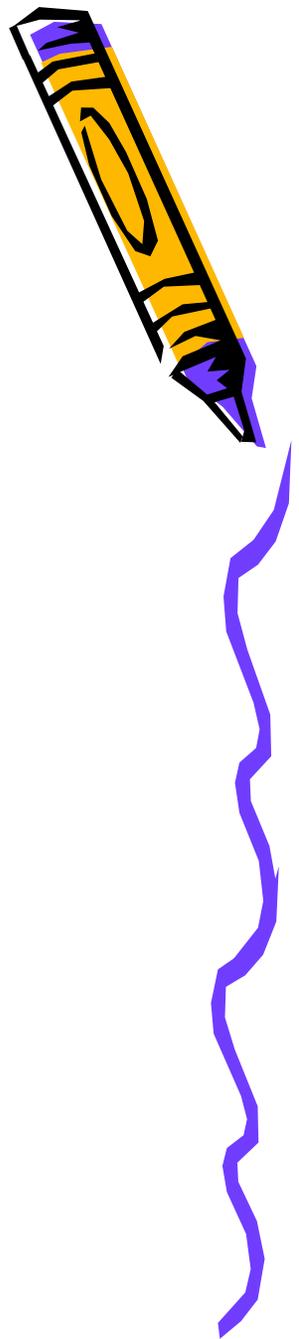
傳輸速度 :

2.4KBPS

記憶體佔用空間:

DataMemory : 1005 Bytes

Code Memory: 6847 Bytes



# 功能展示

1. 指紋註冊
2. 指紋比對與遙控功能
3. 刪除註冊

