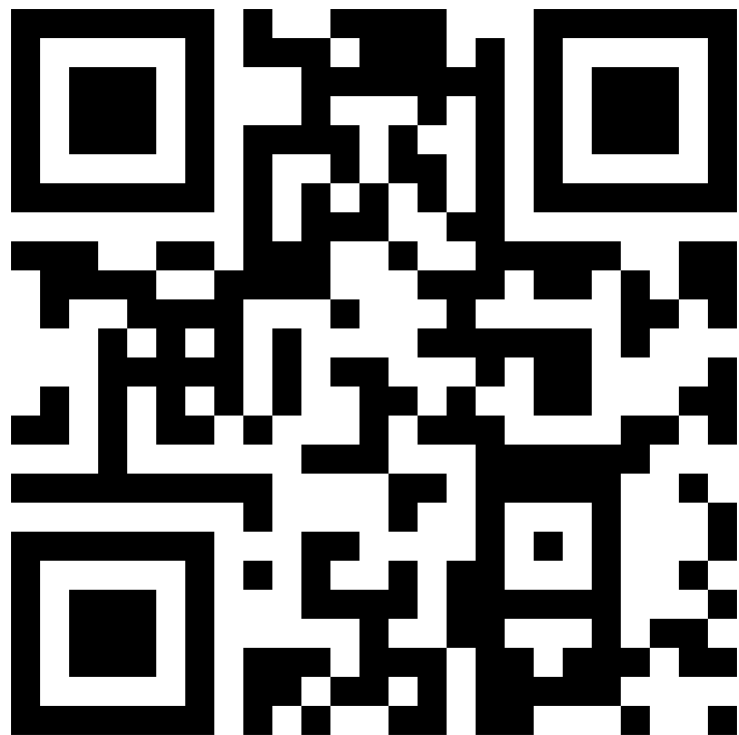


# Week 6

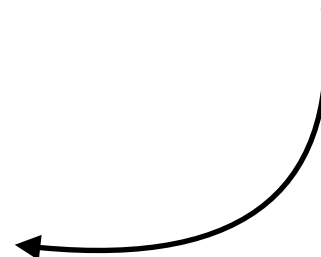
---

Howard Ke

<https://goo.gl/o1fVWj>



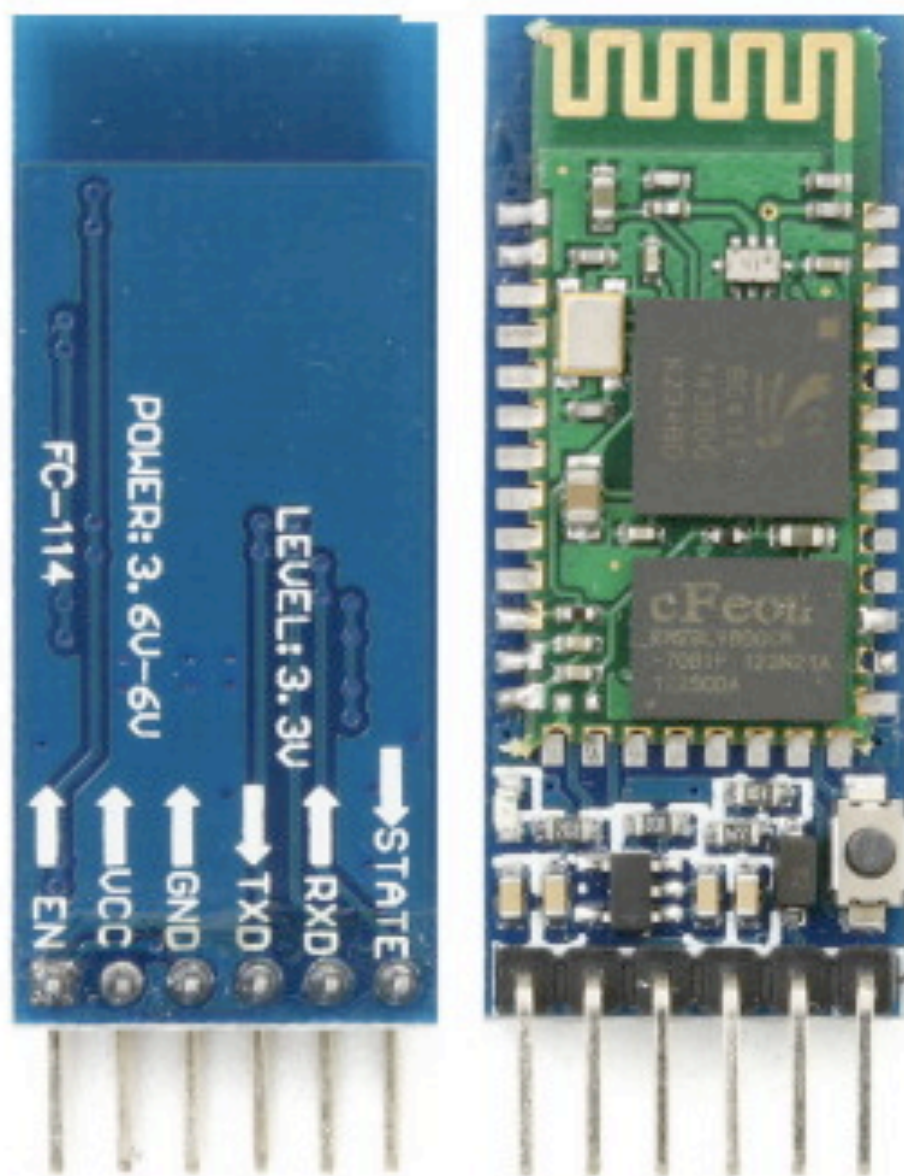
投影片檔案



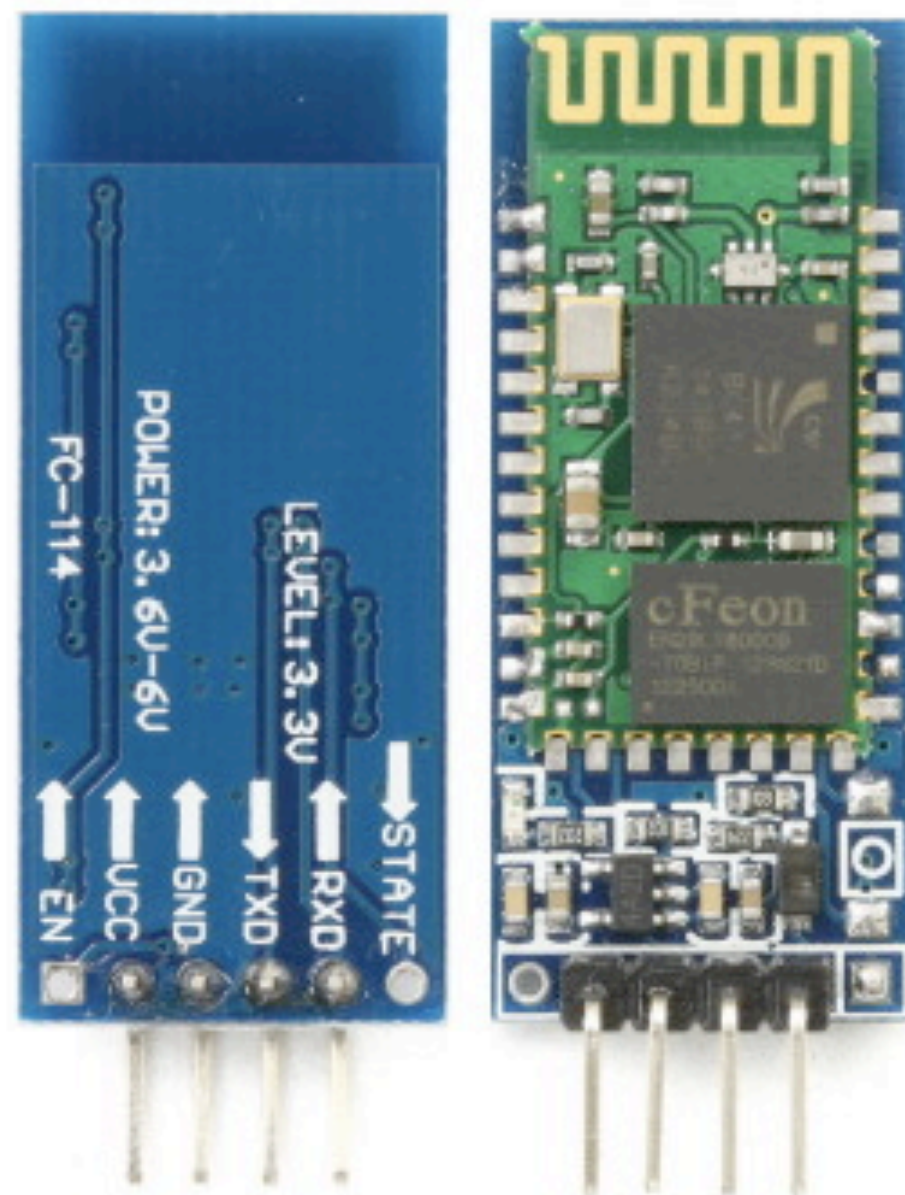
# 藍牙模組

---

HC-05 FC-114



HC-06 FC-114



# 初始化

---

```
#include "SoftwareSerial.h"
#include "Wire.h"

SoftwareSerial I2CBT(11, 12);

void setup()
{
    Serial.begin(9600);
    I2CBT.begin(9600);
}
```

# 字元

---

```
char a = 'a';  
char question_mark = '?';  
char b = '1';
```

```
a = '2';  
b = 'd';
```

# 字符串

---

```
String hello = "helloworld";  
String s = "";
```

```
Serial.println(hello);    // helloworld  
Serial.println("hello"); // hello
```

```
s = "hello";    // s == "hello"  
s += "world";   // s == "helloworld"  
s += '!';       // s == "helloworld!"
```

# 讀取藍牙指令

---

```
String command;  
int insize;  
  
void getBTData()  
{  
    command = "";  
    insize = I2CBT.available();  
    if (insize > 0)  
    {  
        for (int i = 0; i <= insize - 1; i++)  
        {  
            command += char(I2CBT.read());  
        }  
    }  
}
```

# 判斷藍牙指令

---

```
void loop()  
{  
  getBTData();  
  delay(500);  
  
  if (command == "forth")  
  {  
    forward();  
  }  
  else if (command == "back")  
  {  
    backward();  
  }  
  // 左轉、右轉、停止、其他自定義的動作  
}
```

# 指令表

---

字串

說明

forth

前進

back

後退

left

左轉

right

右轉

stop

停止