Arduino Flip&Click +SPWF01SA+ Web Server

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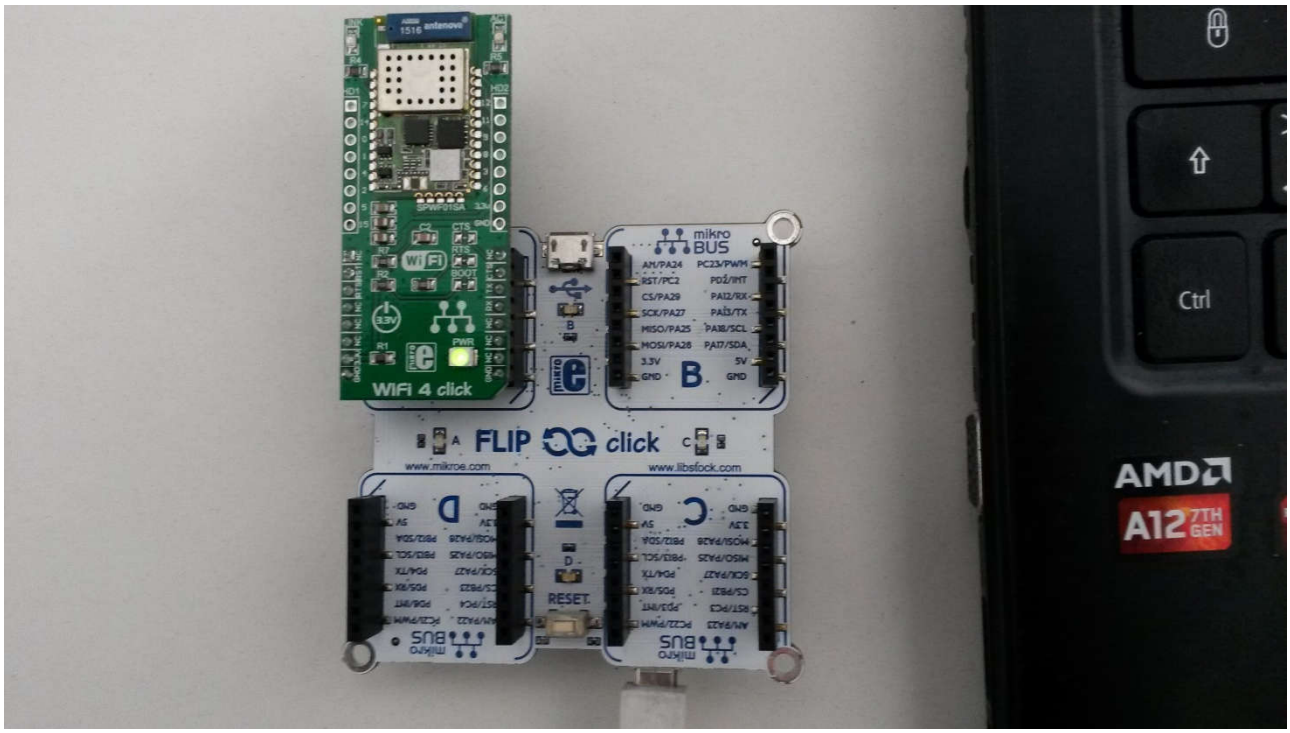

Si vuole caricare sull'Arduino Flip&Click con shield WIFI 4 Click(spwf01sa) una pagina html richiamabile da browser. La pagina HTML presenta dei semplici checkbox e un bottone 'SEND' che invia le opzioni selezionate alla shield, che possono essere tokenizzate per inviare comandi da Arduino (da fare). (Ricordarsi di selezionare nell'IDE di Arduino 'Arduino due Programming port' e la COM corretta, sostiuire nello sketch nella funzione initWIFI() il nome del router e relativa password come indicato).

Sketch:

```
const char BigStr[] PROGMEM="<html>"
"<body>"
"<script>"
"function mySubmit(){"
"  var sCbks = getCkbs();"
"  var xhr = new XMLHttpRequest();"
"  xhr.open('GET', 'output.cgi?text='+sCbks, true);"
"  xhr.send();"
"}"
"function getCbk(val,sDelim,kDelim){"
"  var ckbs = document.getElementsByName(val);"
"  var cbkStr='';"
"  for (var i = 0; i < ckbs.length; i++ ) {"
"       if (ckbs[i].checked == true) {"
"         cbkStr += sDelim + val + '=' + ckbs[i].value;"
"         sDelim=kDelim;"
"       }"
"  }"
"  return cbkStr;"
"}"
"function getCkbs() {"
```

```
"  var kDelim=encodeURIComponent('&');"
"  var txt = document.getElementById ('text');"
"  var cbkAll='';"
"  var ckbs = document.getElementsByName('LU');"
"  var sDelim='';"
"  cbkAll += getCbk('LU',sDelim,kDelim);"
"  sDelim=kDelim;"
"  cbkAll += getCbk('WIN',sDelim,kDelim);"
"  sDelim=kDelim;"
"  cbkAll += getCbk('COND',sDelim,kDelim);"
"  sDelim=kDelim;"
"  cbkAll += getCbk('ALARM',sDelim,kDelim);"
"  return cbkAll;"
"}"
"</script>"
"<button onclick='mySubmit()'>Send</button>"
"<h3>LUCI:</h3>"
"<input type='checkbox' name='LU' value='SA'> Luce Sala<br><br>"
"<input type='checkbox' name='LU' value='CU'> Luce Cucina<br><br>"
"<input type='checkbox' name='LU' value='BA'> Luce Bagno<br><br>"
"<input type='checkbox' name='LU' value='CA'> Luce Camera<br><br>"
"<h3> FINESTRE: </h3>"
"<input type='checkbox' name='WIN' value='SA'> Finestra Sala<br><br>"
"<input type='checkbox' name='WIN' value='CU'> Finestra Cucina<br><br>"
"<input type='checkbox' name='WIN' value='BA'> Finestra Bagno<br><br>"
"<input type='checkbox' name='WIN' value='CA'> Finestra Camera<br><br>"
"<input type='checkbox' name='WIN' value='LU'> Lucernaio<br><br>"
"<h3>CONDIZIONATORE:   <input type='checkbox' name='COND' value='CN'><br>"
"<h3>ALLARME:   <input type='checkbox' name='ALARM' value='ALM'><br><br>"
"</body>"
"</html>\r\n";

void initWIFI(){
Serial1.write("at+s.ssidtxt=SSID\r\n");//Sostituire l'SSID del Router
Serial1.write("at+s.scfg=wifi_wpa_psk_text,PWD\r\n");//Sostituire con la Pwd del Router
Serial1.write("at+s.scfg=wifi_priv_mode,2\r\n");//Set the network privacy mode (0=OPEN, 1=WEP,
2=WPA*)
Serial1.write("at+s.scfg=wifi_mode,1\r\n");// Set the network mode (1* = STA, 2 = IBSS, 3 = MiniAP)
Serial1.write("at+s.scfg=ip_use_dhcp,1\r\n");
Serial1.write("at&w\r\n");
Serial1.write("at+cfun=1\r\n");
}

void uploadScript(String str){
int ls= strlen(BigStr);
char buff[64];
Serial1.write("AT+S.FSD=/my.html\r\n");
delay(1000);
sprintf(buff,"AT+S.FSC=/my.html,%d\r\n",ls);
Serial1.write(buff);
delay(1000);
sprintf(buff,"AT+S.FSA=/my.html,%d\r\n",ls);
Serial1.write(buff);
```

```
delay(1000);

Serial1.write(BigStr);
delay(2000);
Serial1.flush();
}
void setup()
{
Serial.begin(9600);
Serial1.begin(9600);

Serial.print("initWIFI...");
initWIFI();
Serial.println("...OK(WIFI)");
Serial.print("uploadScript...");
uploadScript(BigStr);
Serial.println("...OK(Script)");
Serial.println("Setup Completed!");
}

void loop()
{

 if(Serial.available())
 Serial1.write(Serial.read());
 if(Serial1.available())
  Serial.write(Serial1.read());
}
```

SerialMonitor:

```
initWIFI......OK(WIFI)
uploadScript......OK(Script)
Setup Completed!

+WIND:2
+WIND:1:Poweron (150410-c2e37a3-SPWF01S)

+WIND:13:ST SPWF01SA1 IWM: Copyright (c) 2012-2014 STMicroelectronics, I
+WIND:35:WiFi Scan Complete (0x0)

+WIND:19:WiFi Join:6C:2F:2C:26:07:EF

+WIND:25:WiFi Association with 'AndroidHotspot6678' successful

+WIND:51:WPA Handshake Complete

+WIND:24:WiFi Up:192.168.43.202
```

Browser + SerialMonitor: