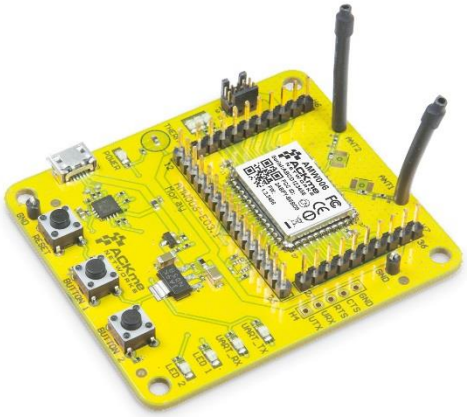
AMW006
Evaluation Guide



AMW006-E03
'Moray'

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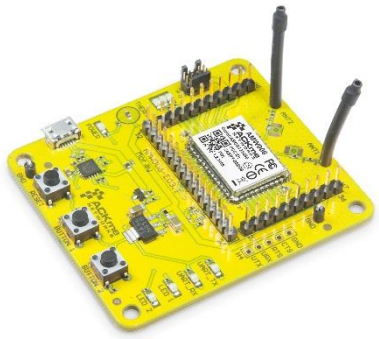
1 Introduction

The AMW006 'Numbat' module is a fully certified small form factor, low power Wi-Fi networking module perfectly suited to deeply embedded applications requiring medium/high data throughput in medium to high volume.

The module runs WiConnect firmware, ACKme Networks' easy-to-use and reliable serial Wi-Fi networking application that includes an embedded TCP/IP networking stack with SSL/TLS/HTTPS security.

Evaluation of WiConnect and the AMW006 module is available with the AMW006-E03 'Moray' evaluation board. The evaluation board is shown in Figure 1 and its features are shown in Table 1.

Figure 1. AMW006 Moray Evaluation Board



AMW006-E03 'Moray'
(with AMW006 surface mount module)

Table 1. AMW006 Evaluation Board Features

Feature	AMW006-E03 'Moray'
Product Number	AMW006-E03
Module style	Surface mount
Serial Interface	USB-UART
Power supply	from USB
User LEDs	2 + 3
User Buttons	2
Reset Button	Yes
Expansion Headers	1 x 35-pin

Note! Customers that wish to evaluate the AMW006 module using WICED should obtain an alternative evaluation board that provides AMW006 program and debug capability. See the AMW006-E01 'Seabass' WICED eval board.

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2 Feature Identification

2.1 AMW006-E03 'Moray'

The Moray evaluation board comes complete with a surface mount AMW006 'Numbat' module. Each pin on the Numbat module is connected to the expansion header. Schematics for the board are provided in Appendix B.

Figure 2. AMW006-E03 Features

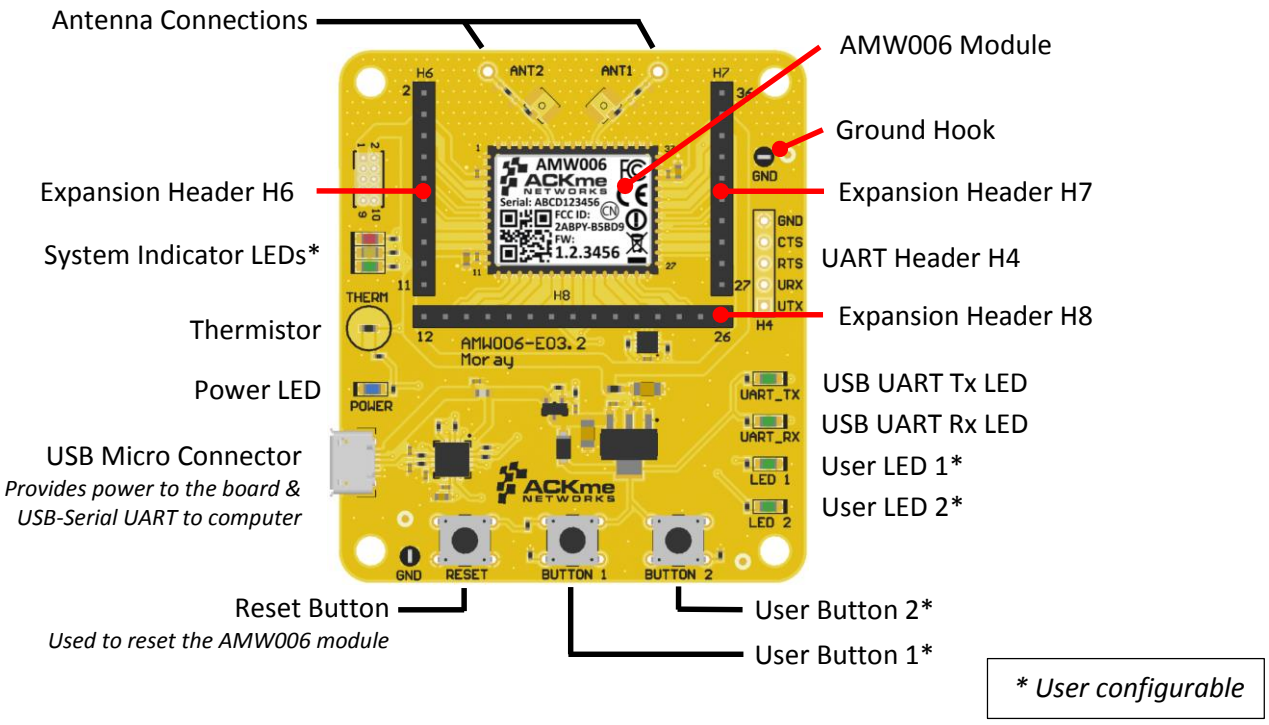


Table 2. AMW006-E03 Expansion Header Connections

AMW006	H6
GND	2
VDD_DUT	3
GPIO 0	4
GPIO 1	5
GPIO 2	6
GPIO 3	7
GPIO 4	8
OSC_32K	9
VDD_DUT	10
GND	11

AMW006	H8
GND	12
GPIO 5	13
GPIO 6	14
GPIO 7	15
GPIO 8	16
UART0_RTS	17
UART0_CTS	18
UART0_RX	19

AMW006	H8
UART0_TX	20
GPIO 13	21
GPIO 14	22
GPIO 15	23
GPIO 16	24
GPIO 17	25
GND	26

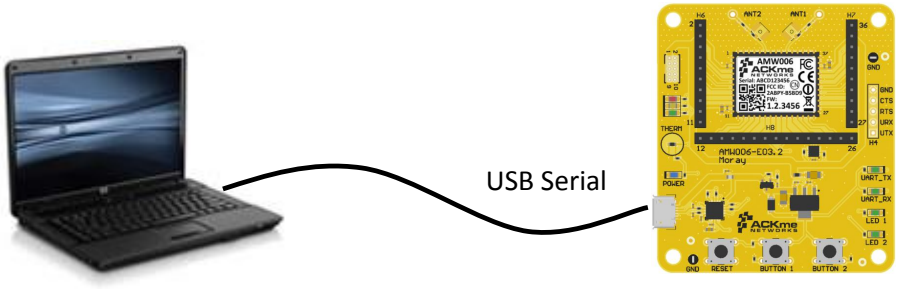
AMW006	H7
GND	27
GPIO 18	28
GPIO 19	29
GPIO 20	30
GPIO 21	31
GPIO 22	32
GPIO 23	33
RESET_N	34
VDD_DUT	35
GND	36

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3 Using WiConnect

To get started with WiConnect, plug the AMW006 evaluation board into the USB port of the computer and open a terminal emulator as described in Appendix A. The USB cable provides the evaluation board with power and a serial UART connection to the computer.

With the board connected to the computer, verify the power LED is illuminated. If the power LED is NOT illuminated, try re-plugging the USB cable, or try a different USB cable.



Computer with Terminal Emulator **Moray Evaluation Board**

Note! Be sure to use a quality USB cable. Inferior cables may result in reduced or intermittent operation of the evaluation board.

3.1 Getting Help

WiConnect provides extensive help for each command and variable. To obtain a list of help options, type the `help` command.

```
> help
The following help options are available ...
  help all        -> Print a list of all Commands and Variables
  help commands   -> Print a list of Commands
  help variables  -> Print a list of Variables
  help <command>  -> Print help for a specific Command
  help <variable> -> Print help for a specific Variable

  Additional help is available online at http://wiconnect.ack.me
```

To obtain help for a particular command or variable, type `help <command>` or `help <variable>`.
To obtain help for the `wlan_scan` variable, type `help wlan_scan`.

```
> help wlan_scan
Usage   : wlan_scan [-v] [<channel> [ssid]]
Shortcut: scan
Brief   : Initiate a Wi-Fi scan and return results; optionally specify
a channel and AP SSID to scan for. For verbose scans, -v must be the first argument
```


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3.2 Scanning for Wi-Fi Networks

To scan for Wi-Fi networks in range, use the `wlan_scan` command. Each AP in range is listed on a separate line.

```
> wlan_scan -v
!3 networks found
!   # Ch RSSI MAC BSSID           Rate Security    Mode Len Network (SSID)
#   0 06  -27 84:1B:5E:29:9D:F7 450.0 WPA2-Mixed  Inf  17 YOUR_NETWORK_NAME
#   1 11  -73 2C:B0:5D:31:6F:6A 300.0 WPA2-AES    Inf   6 button
#   2 11  -73 EC:1A:59:36:5B:6C 144.4 WPA2-Mixed  Inf   5 ACKme
```

3.3 Joining a Wi-Fi Network

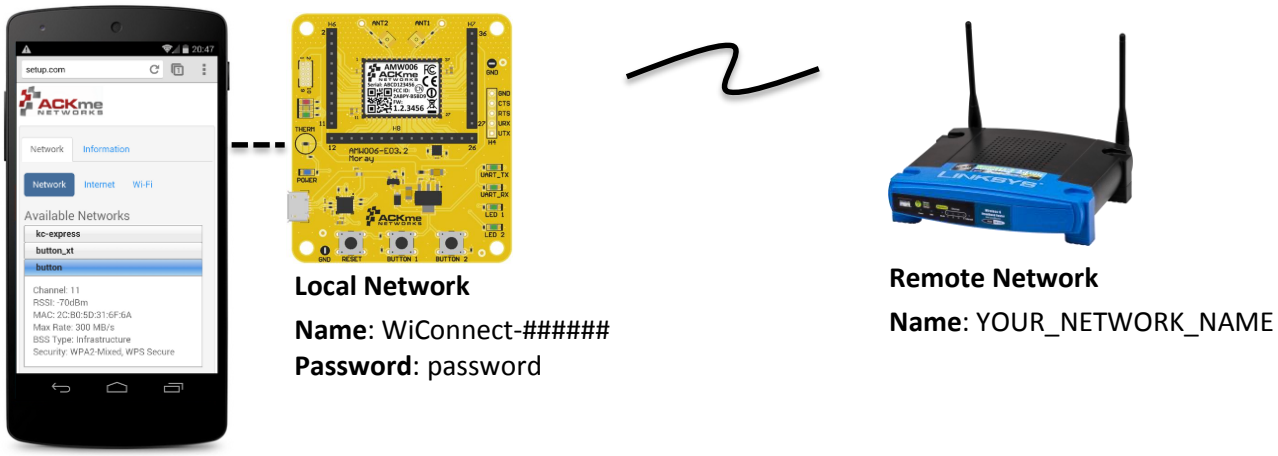
Several methods are available to configure and join the AMW006 module to a Wi-Fi network.

3.3.1 Web Setup

WiConnect provides the option to use a web browser running on a network client (such as a smartphone, tablet or computer) to select the remote Wi-Fi network the AMW006 module should join, and to enter a password for the remote network.

When web setup is used, it is helpful to think of the network client as the keyboard and display for the module as shown in Figure 3.

Figure 3. Web setup using a network client



To start web setup mode, enter the command `setup web`. WiConnect starts the local network and web server as indicated by the final message: `In progress`.

```
> setup web
[Disassociated]
IPv4 address: 10.10.10.1
Web setup started with the SSID: WiConnect-102F1A
In progress
```


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Open the Wi-Fi settings on your smartphone, tablet or computer and join the network called `WiConnect-######` (where `######` are the last 6 digits of the Wi-Fi module MAC address). The password for the network is simply: `password`. The local network name and password, and the web address may be customised to suit your needs, see the online WiConnect Reference Manual for further information.

After joining the local network, open a web browser on the network client and go to setup.com. The WiConnect web page appears (see Figure 3), and a scan begins for Wi-Fi access points in range. Select the remote network you wish to join, enter the network password then select **Save & Exit** and follow the prompts.

Once the settings are successfully saved, WiConnect prints `Web Setup Mode exited` to the terminal. Check that the settings were successfully saved using `get wlan.ssid` and `get wlan.passkey`.

```
Web Setup Mode exited
> get wlan.ssid
YOUR_NETWORK_NAME
> get wlan.passkey
YOUR_NETWORK_PASSWORD
```

3.3.2 Script Setup

If you prefer instead to enter configuration details for the Wi-Fi network, WiConnect provides a default setup script to step you through the process. The setup script is provided as a file called `default_setup.script` on the WiConnect file system. The setup script may be customised as required.

```
> setup cmd
> Enter Wi-Fi network name:
set wlan.ssid YOUR_NETWORK_NAME
Set OK
> Enter Wi-Fi network password:
set wlan.passkey YOUR_NETWORK_PASSWORD
Set OK
>
set wlan.auto_join.enabled true
Set OK
> Saving settings
save
Saved
Success
>
network_up
[2014-05-17 | 11:48:31: Associating to YOUR_NETWORK_NAME]
In progress
> Security type from probe: WPA2-Mixed
Obtaining IPv4 address via DHCP
IPv4 address: 192.168.0.31
[2014-05-17 | 11:48:41: Associated]
> Exiting Cmd Setup Mode
```

3.3.1 Manual Setup

It is straightforward to manually enter the name and password for the network using the `wlan.ssid` and `wlan.passkey` variables too. Be sure to save afterwards, or the values will be lost when the module reboots. Any subsequent command requiring network access, such as an ICMP (Internet Control Message Protocol) ping, automatically results in the module attempting to join the network.

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```
> set wlan.ssid YOUR_NETWORK_NAME
Set OK
> set wlan.passkey YOUR_NETWORK_PASSWORD
Set OK
> save
Saved
Success
> ping -g
[Associating to YOUR_NETWORK_NAME]
Security type from probe: WPA2-Mixed
Obtaining IPv4 address via DHCP
IPv4 address: 192.168.0.31
[Associated]
Ping reply in 25ms
```

The `network up -s` command provides a shortcut to the process, by scanning for wireless Access Points, offering a choice of networks to join and automatically saving the `ssid` and `passkey`:

```
> network_up -s
Scanning for networks...
! 3 networks found
!   # Ch RSSI MAC (BSSID)       Network (SSID)
#   0  1   -40 4C:55:CC:10:2E:50 ABC
#   1  1   -32 9C:D6:43:28:50:A0 myAP
#   2  6   -77 30:85:A9:E7:9C:B0 DEF

Type the number # that matches your Network: 1
Type the password for your Network         : secretpassword
[Associating to myAP]
> In progress
> Security type from probe: WPA2-AES
Obtaining IPv4 address via DHCP
IPv4 address: 10.5.6.94
[Associated]
```

3.3.2 Wireless Protected Setup (WPS)

WPS is a Wi-Fi provisioning method originally intended to simplify the process of connecting Wi-Fi clients to Wi-Fi Access Points. WPS offers both a push-button and PIN entry method for configuration. In reality, WPS push-button (as opposed to PIN) is the only method that has gained some level of adoption in the industry, however WPS naturally only works when the Wi-Fi AP supports WPS.

Many AP vendors choose not to test and certify APs with the Wi-Fi Alliance, and the lack of a standard WPS logo next to the WPS button on an AP often means many users are unaware that WPS is available. The potential for equipment incompatibility and added user confusion mean it is unwise to rely on WPS as the primary method of Wi-Fi provisioning in the real world.

Incompatibility and confusion aside, WiConnect provides full support for WPS1.0 & WPS2.0 and the underlying WPS engine has passed Wi-Fi certification. To use WPS in push-button mode, simply enter the `wps` command into WiConnect, then press the WPS button on your router (if the router supports WPS, and it is enabled, and you can find the button), and wait for the magic to happen.

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3.4 Filesystem

ACKme Wi-Fi modules running WiConnect include a serial flash memory and a filesystem that provides users with the ability to read and write files. A quick example showing how to create, manipulate then delete a file is provided below.

```
> file_create hello.txt 13
my hello data
File created
Success
> ls
!  #   Size   Version  Filename
#  0   1853     2.0.0  /favicon.ico.gz
#  1  18067     2.0.0  /setup/images.png
#  2  10525     2.0.0  /setup/index.css.gz
#  3  10143     2.0.0  /setup/index.html
#  4  39233     2.0.0  /setup/index.js.gz
#  5  32297     2.0.0  command_help.csv
#  6    135     2.0.0  default_setup.script
#  7   1236     2.0.0  geotrust_ca.pem
#  8    279     1.0.0  gpio_config_init.csv
#  9     13     1.0.0  hello.txt
# 10 212736     2.0.0  upgrade_app.exe
# 11 176920     2.0.0  wiconnect.exe
# 12 203261  5.26.230  wifi_fw.bin
> file_open hello.txt
[Opened: 0]
0
> stream_read 0 5
my he
> stream_read 0 50
llo data
[Closed: 0]
> file_delete hello.txt
File deleted
Success
```



Note! When reading the contents of a file using `stream_read`, the file is automatically closed if the end of file is reached.

3.5 Saving Custom Configurations

All available WiConnect variables may be saved to a file as a custom configuration. Saved configuration may then be loaded at a later date. This feature is particularly useful for saving configuration variables prior to an over-the-air (OTA) upgrade, and then restoring the configuration afterwards.

```
> save my_config.csv
Success
> load my_config.csv
Configuration successfully loaded
```


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3.6 UDP / TCP / TLS Clients

To open a UDP, TCP or secure TLS connection to a remote server, use the `udp_client`, `tcp_client` or `tls_client` commands. WiConnect responds with a stream handle if the connection is opened successfully. For TLS connections, WiConnect provides a default TLS root certificate signed by GeoTrust (located on the WiConnect file system), however this certificate may not work with some TLS servers. A custom certificate may be provided as an option to the `tls_client` command if required.

```
> udp_client test.ack.me 50019
[Opening: test.ack.me:50019]
Resolving host: test.ack.me
Connecting: 107.170.222.80:50019
[2014-05-19 | 11:12:22: Opened: 0]
0
> tcp_client test.ack.me 50019
Resolving host: test.ack.me
[2014-05-19 | 11:12:38: Opening: test.ack.me:50019]
Connecting (TCP): 107.170.222.80:50019
[2014-05-19 | 11:12:39: Opened: 1]
1
> tls_client google.com 443
Resolving host: google.com
[2014-05-19 | 11:12:49: Opening: google.com:443]
Connecting (TLS): 74.125.237.174:443
[2014-05-19 | 11:12:50: Opened: 2]
2
```

Now try writing a character to the UDP or TCP stream that was opened in the examples above (remember, WiConnect does NOT echo characters typed after the `stream_write` command). The server at http://test.ack.me responds with a character pattern using the Chargen (Character Generator) protocol.

```
> stream_write 0 2
hi
Success
> stream_read 0 50
!"#$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQR
```



Note! WiConnect supports TCP, UDP and TLS server modes too!
For more information, please refer to the WiConnect Reference Guide.

3.7 HTTP / HTTPS Clients

To open an HTTP or secure HTTPS connection to a remote server, read the first 300 bytes of the response then close the connection, use the `http_get`, `stream_read` and `stream_close` commands. WiConnect responds with a stream handle if the connection is opened successfully.

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```
> http_get https://www.google.com
[2014-05-19 | 11:14:31: Opening: https://www.google.com]
Request GET /
Connecting (HTTP): www.google.com:443
Starting TLS
[2014-05-19 | 11:14:31: Opened: 0]
HTTP response: 302
Redirected to https://www.google.com.au/?gfe_rd=cr&ei=l-d5U9m2J6GN8QfexoHYCg
Request GET /?gfe_rd=cr&ei=l-d5U9m2J6GN8QfexoHYCg
Connecting (HTTP): www.google.com.au:443
Starting TLS
HTTP response: 200
Status: 200
0
> stream_read 0 300
<!doctype html><html itemscope="" itemtype="http://schema.org/WebPage" lang="en-
AU"><head><meta content="/images/google_favicon_128.png"
itemprop="image"><title>Google</title><script>(function(){
window.google={kEI:"mOd5U4eZAYTVkAXF2oDwBA",getEI:function(a){for(var
b;a&&(!a.getAttribute||!(b=a.getAt
> stream_close 0
[2014-05-19 | 11:14:47: Closed: 0]
Success
>
```

3.8 Using GPIOs

In WiConnect, a GPIO may have two functions: a standard IO function or an alternate function (such as a system indicator, status GPIO or control GPIO). When a GPIO is configured with an alternate function, the standard IO function is NOT available and the `gpio_dir`, `gpio_set`, and `gpio_get` commands are disabled for that GPIO.

Before a GPIO can be used, it is necessary to first check whether the GPIO is being used for an alternate function, or is already in use as a standard GPIO (for another purpose). If the GPIO is in use, it must first be freed up by setting the direction of the GPIO to none using the `gpio_dir` command (standard IO) or by disabling the alternate function.

The example below demonstrates how to control GPIO 23 on the AMW006 module. GPIO 23 is unassigned after factory reset.

```
> gpio_dir 23 out
Set OK
> get gpio.usage
! #   Description
#13 - UART1 RX
#14 - UART1 TX
#17 - SPI CLK
#18 - SPI MOSI
#19 - SPI MISO
#21 - system.indicator.network
#22 - system.indicator.wlan
#23 - Standard I/O
> gpio_set 23 0
Set OK
> gpio_set 23 1
Set OK
> gpio_set 23 0
Set OK
```


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3.9 Factory Reset

The AMW006 module may be factory reset using the `factory_reset` command or by holding the factory reset pin (GPIO 0 on all ACKme modules) high for more than 10 seconds through a hardware reset. After a successful factory reset, all variables are set to factory defaults and the module reboots. To avoid accidental factory reset, the Wi-Fi MAC address must be provided when calling the `factory_reset` command.

```
> get wlan.mac
4C:55:DC:15:02:5D
> factory_reset 4C:55:DC:15:02:5D
Reverting to factory default settings
Setting boot app to wiconnect.exe (0)
WiConnect-2.0.0.0, Built:2014-10-07 00:07:31 for AMW006.2, Board:AMW006-E03.1
[Ready]
>
```

3.10 Save & Reboot

When the value of a WiConnect variable is changed, the new value is only saved to RAM (not flash!). The value of unsaved variables is lost when the module is reset or rebooted. To save variables to non-volatile flash memory, use the `save` command. The following example demonstrates that failing to save the `wlan.ssid` prior to reboot results in the newly assigned value being lost.

```
> get wlan.ssid
> set wlan.ssid ssid_WONT_be_saved
Set OK
> reboot
[Disassociated]
Rebooting
WiConnect-2.0.0.0, Built:2014-10-07 00:07:31 for AMW006.2, Board:AMW006-E03.1
[Ready]
> get wlan.ssid
> set wlan.ssid ssid_WILL_be_saved
Set OK
> save
Saved
Success
> reboot
[Disassociated]
Rebooting
WiConnect-2.0.0.0, Built:2014-10-07 00:07:31 for AMW006.2, Board:AMW006-E03.1
[Ready]
> get wlan.ssid
ssid_WILL_be_saved
>
```



Note! WiConnect configures some services (such as GPIO initialization) only after reboot. It may be necessary to save and reboot the module before the new value of some variables takes effect.

3.11 Command vs. Stream Mode

The WiConnect serial interface may be used in either Command Mode or Stream Mode. A brief description of each of these modes is provided in the following text. For detailed information, please refer to the WiConnect Reference Guide.

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3.11.1 Command Mode

Command mode provides an asynchronous command interface that a host may use to send and receive control and data information. Command mode is typically used by a host to configure WiConnect, however it may also be used by simple hosts that need ultimate master/slave control over information sent to, and received from, the module. All preceding examples demonstrate usage of WiConnect in command mode.

There are two ways to interact with WiConnect in Command mode. When operating in human friendly command mode, WiConnect provides verbose asynchronous responses that are easy for humans to read. In machine friendly command mode, verbose prints and the command prompt are disabled and a well-defined response header is returned after each command.

Configuring Command Mode

Command mode can be configured using the convenience variable `system.cmd.mode`

Command	Description
`set system.cmd.mode human`	Enable human friendly command mode
`set system.cmd.mode machine`	Enable machine friendly command mode

Setting `system.cmd.mode` executes a macro that sets the value of the four variables used to switch between human and command mode. These variables, together with the human and machine mode setting, are listed in the following table.

Command	Human	/	Machine	Description
`set system.print_level`	`all`	/	`0`	Set debug & informational print level
`set system.cmd.header_enabled`	`0`	/	`1`	Disable/enable a response header
`set system.cmd.prompt_enabled`	`1`	/	`0`	Turn on/off the user prompt
`set system.cmd.echo`	`on`	/	`off`	Turn on/off character echo. In human mode, lets you see what you're typing

3.11.2 Stream Mode

Stream Mode provides a streaming interface that transparently connects a WiConnect serial interface with a network stream such as a UDP, TCP or TLS client or server. Stream mode provides a simple 1-1 connection between a physical serial interface and a network stream.

Bytes or characters sent from the host to a serial interface are transparently pushed by WiConnect to a network stream via a wireless interface. Conversely, bytes or characters received by a network stream (from a remote server) via a wireless interface are transparently pushed by WiConnect to a serial interface connected to the host. A wireless serial port is a typical application that uses stream mode.

3.12 Want more?

The WiConnect Reference Guide, available online at http://wiconnect.ack.me, provides detailed information about all WiConnect features, commands and variables, versions and release notes.

A number of simple and more sophisticated example applications are also provided to help you get the most out of WiConnect and the AMW006 module.

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4 Ordering Information

Table 4 provides ordering information for AMW006 evaluation boards.

Table 3. Ordering Information

Part Number	Picture	Description
AMW006-E03 'Moray'		WiConnect development and evaluation platform for the surface-mount AMW006 module. The surface mount AMW006 module is not removable.

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5 Revision History & Glossary

5.1 Revision History

Table 4: Document Revision History

Revision	Date	Change Description
ARG-MW006E-100R	Oct 20, 2014	First release

5.2 Glossary

In most cases, acronyms and abbreviations are defined on first use. A comprehensive list of acronyms and other terms used in ACKme Networks documents are provided on the ACKme Networks website at http://ack.me/FAQs/Glossary.

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APPENDIX A – Configuring a Terminal Application

The following instructions describe how to obtain and install a serial terminal application for use on computers running a Windows® or OS X operations system. ACKme recommends using PuTTY for Windows® systems and CoolTerm for OS X systems, however other equivalent applications may work equally well.

Plug the evaluation board into the computer using a USB cable before continuing.

Verify USB-Serial Driver Installation

The USB-Serial interface on WiConnect evaluation boards is based on an FTDI chip used widely in the industry. Most operating systems including Windows®, OS X, and Linux provide integrated FTDI driver support as part of the operating system. However on some older machines, or machines that do not pickup regular updates, the driver may not automatically install and it is necessary to manually install the driver.

On computers running Windows®, check if the driver is installed as follows:

- Display the System Control Panel (e.g. press the 'Windows' key + Pause key).
- In the left-hand column near the top of the panel, click **Device Manager**
- In the Device Manager dialog, expand the Ports (COM and LPT) branch
- FTDI drivers appear under the USB Serial Port items. If no items of this kind appear, the drivers may not be installed.
  Note: The driver entry may not appear if the ACKme device is not connected to the USB port and powered on.
- Double click the USB Serial Port entry.
- Select the **General** tab in the USB Serial Port Properties dialog. Check the following:
  - Manufacturer: FTDI
  - Device status: This device is working properly
- Select the **Driver** tab in the USB Serial Port Properties dialog. Check the following:
  - Driver Provider: FTDI
  - Update drivers if necessary by clicking the **Update Driver…** button.
- In some cases, the FTDI driver may actually be correctly installed, but the driver may not enumerate as a Virtual Communications Port (VCP). If this is the case, find the device under the USB Serial Bus controllers section of the Device manager, open the device, check the VCP box, then click OK. It may be necessary to unplug/replug your evaluation board in order for the VCP driver to load correctly.

If the FTDI drivers do not appear to be installed, see the installation instructions on the FTDI official site:

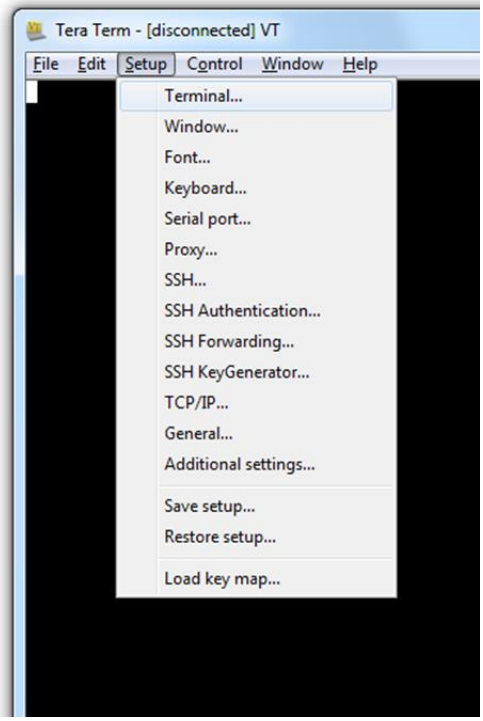
http://www.ftdichip.com/Support/Documents/InstallGuides.htm

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Set Up Tera Term for Windows®

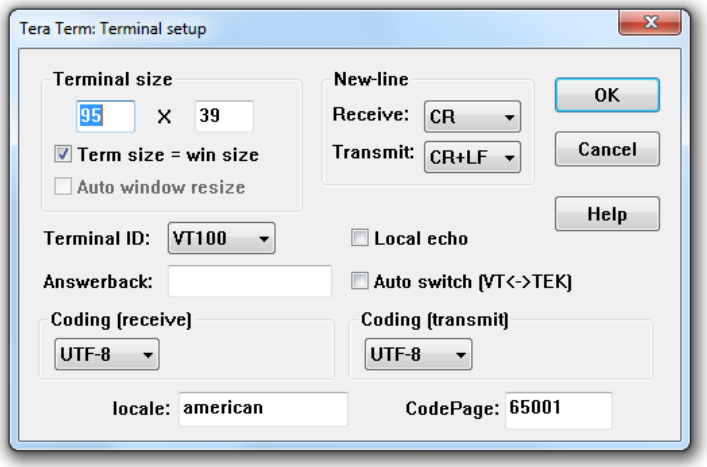
Tera Term is available as a free download from http://ttssh2.sourceforge.jp. Download and install Tera Term now if you have not already done so. The following procedure describes how to establish a UART serial connection between Tera Term and the evaluation board.

1. Start the Tera Term application and click on the **Setup** tab. A dropdown appears providing options to configure Tera Term as shown in the screen capture on the right. Select **Terminal**.



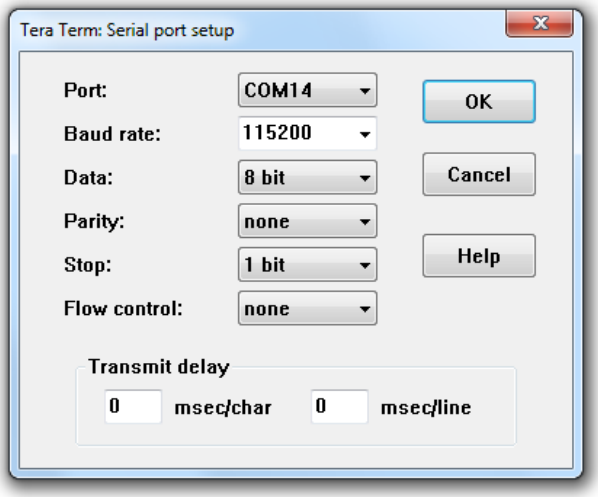
2. Terminal Setup. In the **New-line** section of the **Setup Terminal** dialog box (see the screen capture below), ensure that:
   - **Receive**: is set to **CR**
   - **Transmit:** is set to **CR+LF**

   Close the **Terminal Setup** dialog box by selecting **OK**.



3. Serial Port Setup. Select the **Setup** tab again from the main window, then select **Serial port**. A **Setup serial port** dialog box appears. Ensure the settings in the dialog box match the settings shown in the following screen capture. The COM **Port** shown in the example (COM14) will almost certainly be different for your evaluation board, be sure to choose the COM port that matches your board.

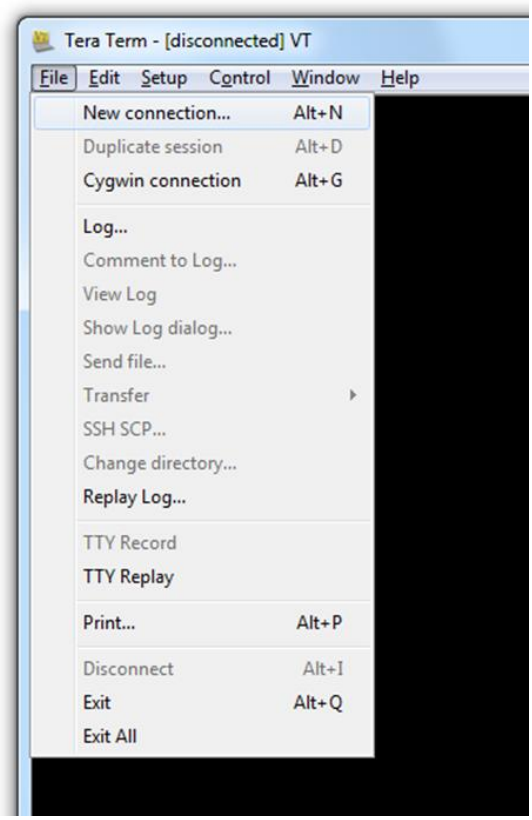
   When the serial port has been correctly setup, close the **Serial port** setup dialog box by selecting **OK**.

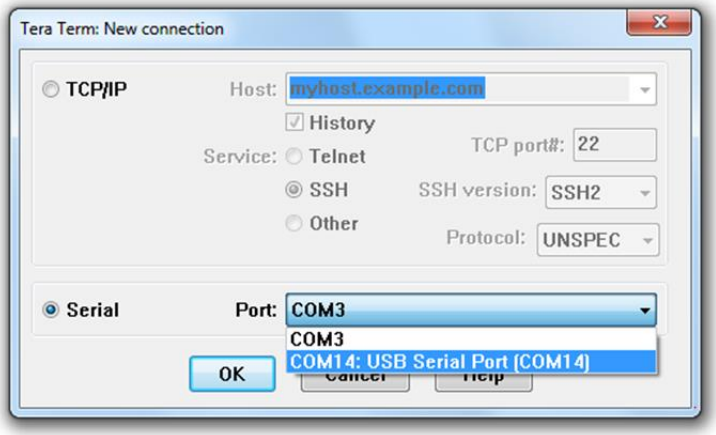


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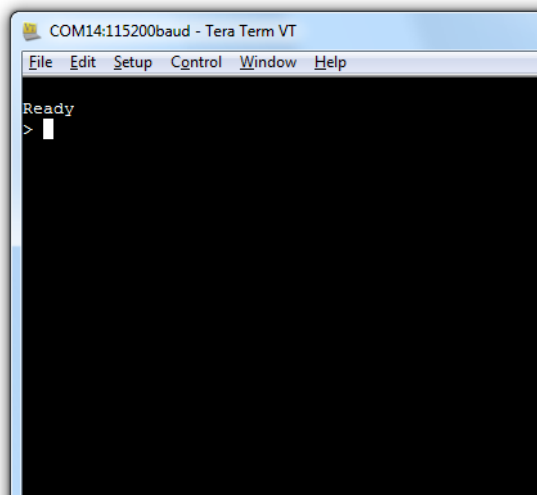
4. New Connection. From the Tera Term application menu, setup a new connection with the evaluation board by selecting **File** | **New connection** (or by pressing **Alt** + **N**) as shown in the screen capture on the right. A New connection dialog box appears as shown in the following screen capture. Check the **Serial** radio button, then click the **Port:** dropdown menu and select the COM port that matches your evaluation board. The COM port description for the evaluation board includes the text **COMxx: USB Serial Port (COMxx)**.

   Once the correct COM port has been selected, close the **New connection** dialog box by selecting **OK**.





5. Testing the connection. If Tera Term was able to connect successfully, the text in the application title bar indicates which COM port is connected, and the baud rate of the connection. For the example documented above, Tera Term displays 'COM14:115200baud'. The Tera Term screen remains blank however until a character is sent to WiConnect. Try pressing the **Enter** key, WiConnect responds with `Ready` as shown in the following screen capture.



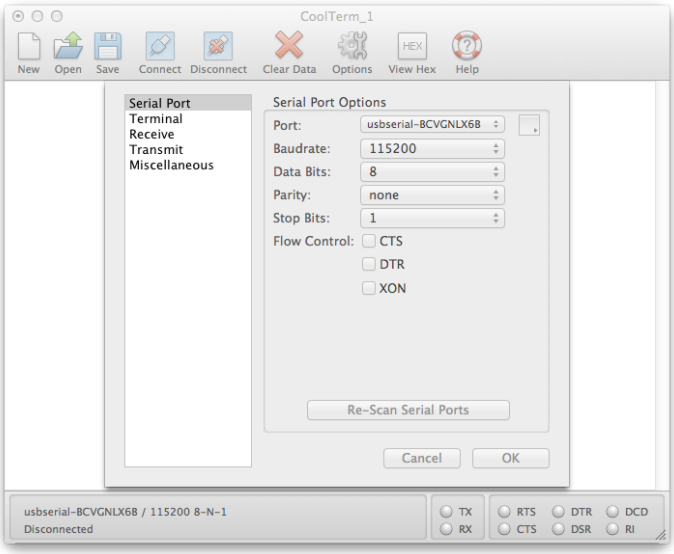
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Set Up CoolTerm for OS X

CoolTerm is available as a free download from http://freeware.the-meiers.org/CoolTermMac.zip. Download and install CoolTerm now if you have not already done so.

The following procedure describes how to establish a UART serial interface between CoolTerm and the evaluation board.

1. Start the CoolTerm application and click the **Options** menu icon. The CoolTerm Configuration window opens. Set the Serial Port configuration options as follows:
   - Port: **usbserial-XXXXXXXX**
   - Baudrate: **115200**
   - Data bits: **8**
   - Parity: **none**
   - Stop bits: **1**
   - Flow control : Deselect all options
2. Click **OK**.
3. Click the **Connect** menu icon. The CoolTerm application connects to the evaluation board.

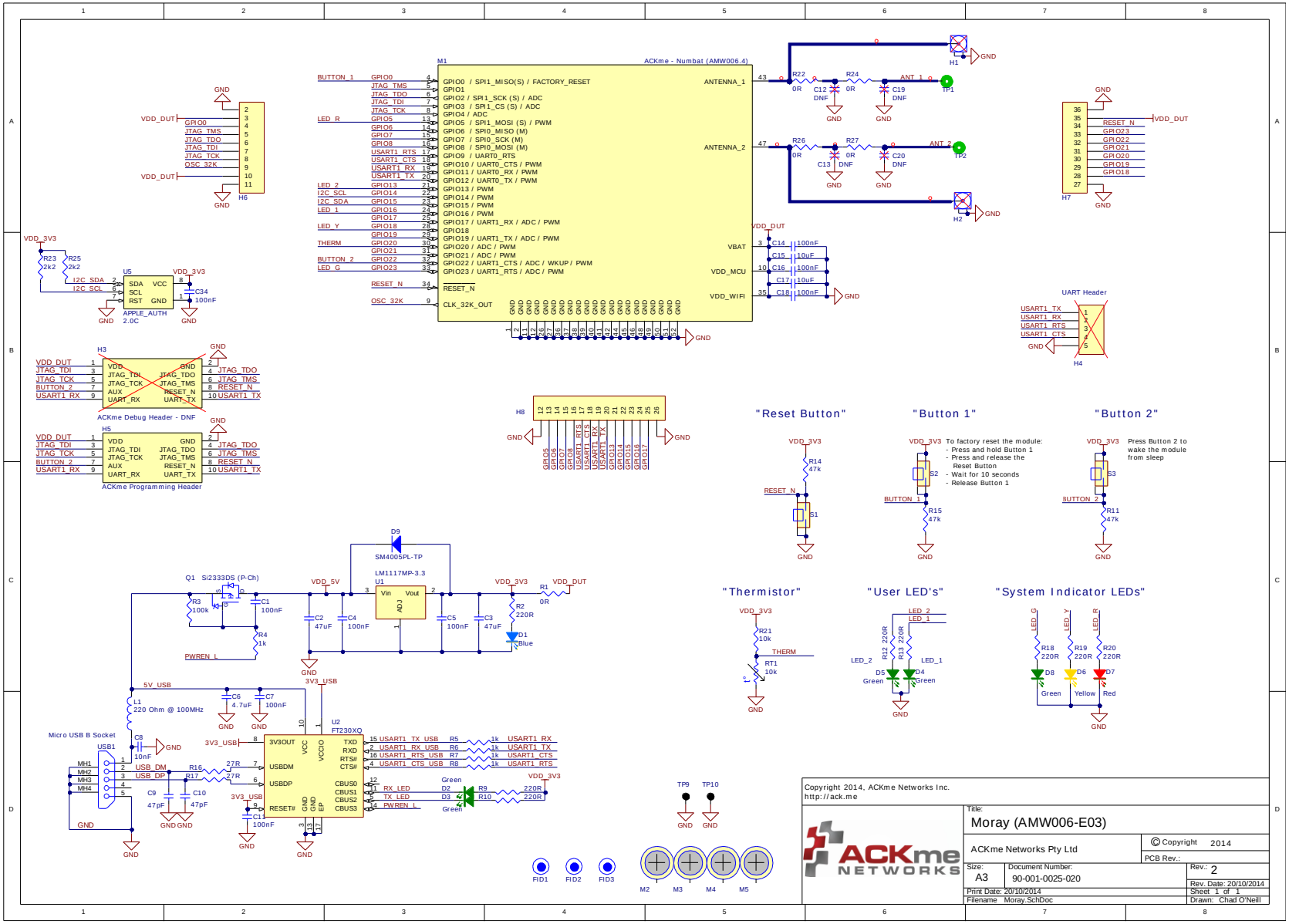


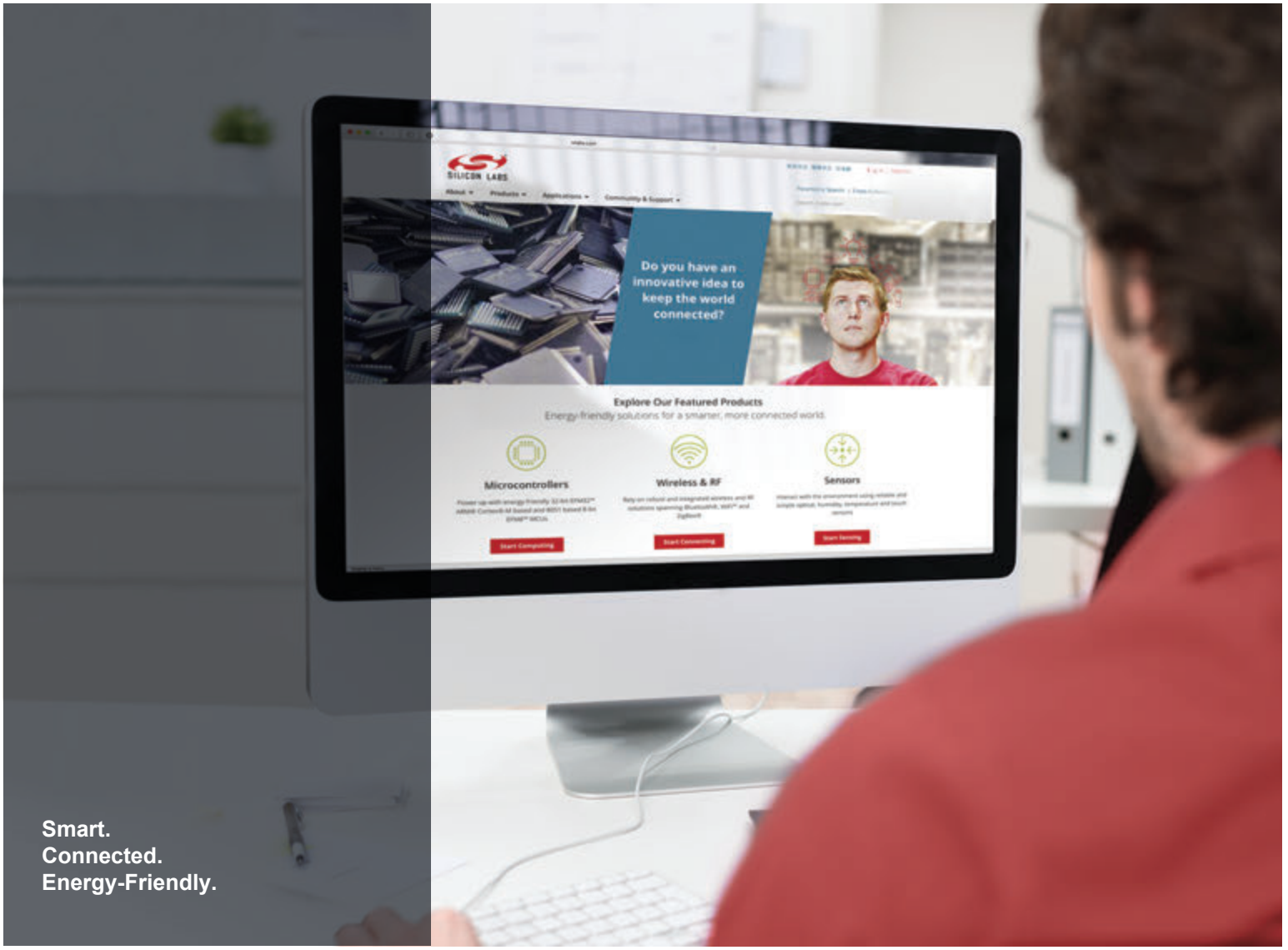
Try pressing the **Enter** key, if CoolTerm is successfully connected to the evaluation board, WiConnect responds with

```
Ready
>
```


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The schematic on this page is for Moray version 2 - AMW006-E02.2. Schematics for other board revisions are available at http://ack.me/resources/show





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