Introduction

The 5921 Wi-Fi adapter enables a Gainspan GS2100MIP WiFi module to be plugged or soldered simply into the breakout area of any Micro-Robotics Application board. Communication is via serial port 3 or 5 and the Venom firmware provides full software support to use the WiFi interface with the VM2's built in TCP/IP stack.

Unpacking

This kit contains
- WiFi Adapter board
- 10 pin socket (5 x 2 way, 0.1" pitch)

Tools

To install the WiFi adapter you will need a soldering iron and solder.

Installing The Wifi adapter

For development and evaluation, it is recommended to use the supplied socket. If production equipment will use the Application board, soldering the module direct may be preferable.

The socket can be sited in two different positions in the breakout area labelled BC1 on the Breakout Board (Application Board 1) or BRK1 on the Application Boards 2 and 3.

For use with serial port 5 (recommended) the socket or adapter should be soldered to pins 13-22 of the connector. For use with serial port 3, use pins 31-40. Note the '+'and '-' markings on the breakout connectors mark the position of one end of the socket.

The WiFi Adapter should be fitted with the component side facing the VM2, as shown in the diagram.
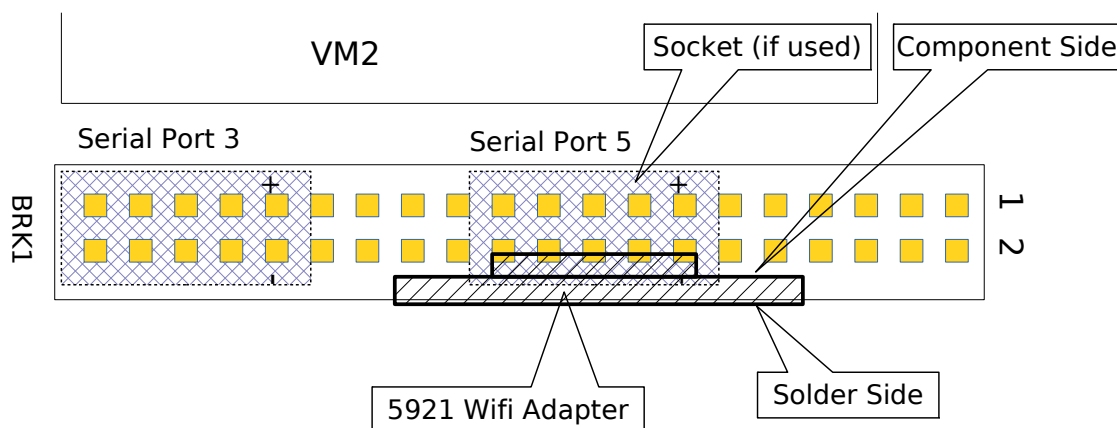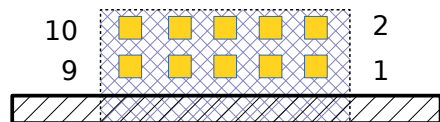
Power Consumption

Power at 3.3V is supplied via the connector.

Current Draw:

Module Idle   23mA
Module Active   140mA

Pinout

View from top

Pin	Function	Direction
1	GND	-
2	3.3V power	-
3	*nc*	-
4	RxD	in
5	*nc*	-
6	TxD	out
7	*nc*	-
8	CTS	in
9	*nc*	-
10	RTS	out

nc = no connection.

Link LK1

No jumper is needed for this link. It is used by Micro-Robotics when programming firmware into the Gainspan Module.