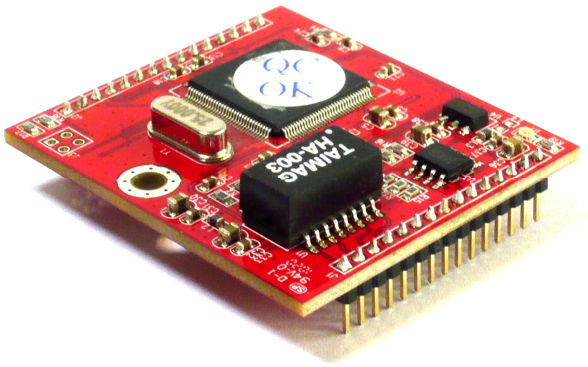
UART to TCP/IP core module User Manual (V 1.3)

(Model: IPM-UART)



Feature:

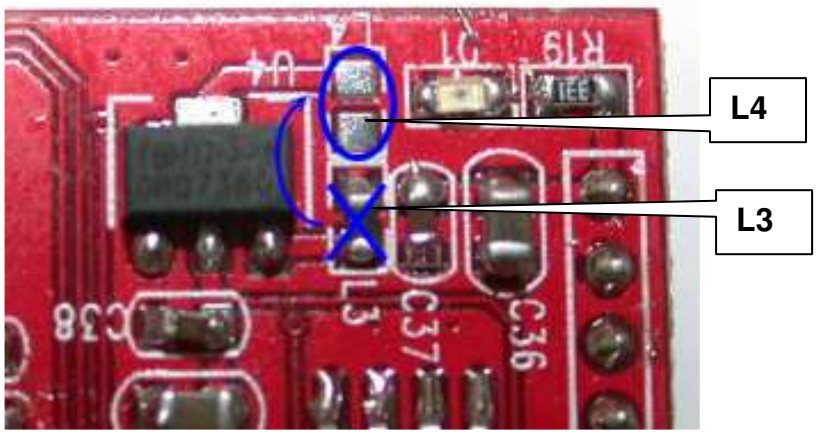
1. Operation voltage: DC 3.3V or 5V.
2. Serial Interface
   - Interface : RS232 TTL compatibility.
   - Data Rate : 1200 bps up to 921600 bps
   - Characters : 5, 6, 7, 8
   - Parity : None, Even, Odd
   - Stop Bits : 1, 1.5
   - Control Signals : TxD, RxD, GND
3. Ethernet Interface
   - Ethernet Interface : 10Base-T, 100Base-TX
   - Ethernet Speed/Duplex : Auto-negotiation 10/100Mbps, Full/Half duplex
   - Protocols Supported : ARP, IP, UDP, TCP, BootP
   - Network Services : DHCP, DNS, PPPoE, TFTP, HTTP, UDP Broadcasting
   - Auto-MDIX : Yes

Default setting:

The module default IP address is 192.168.0.1, this module build-in a homepage for setting, so user can change internal parameter setting by browser. The operation voltage is DC 5V.

Operation voltage option:

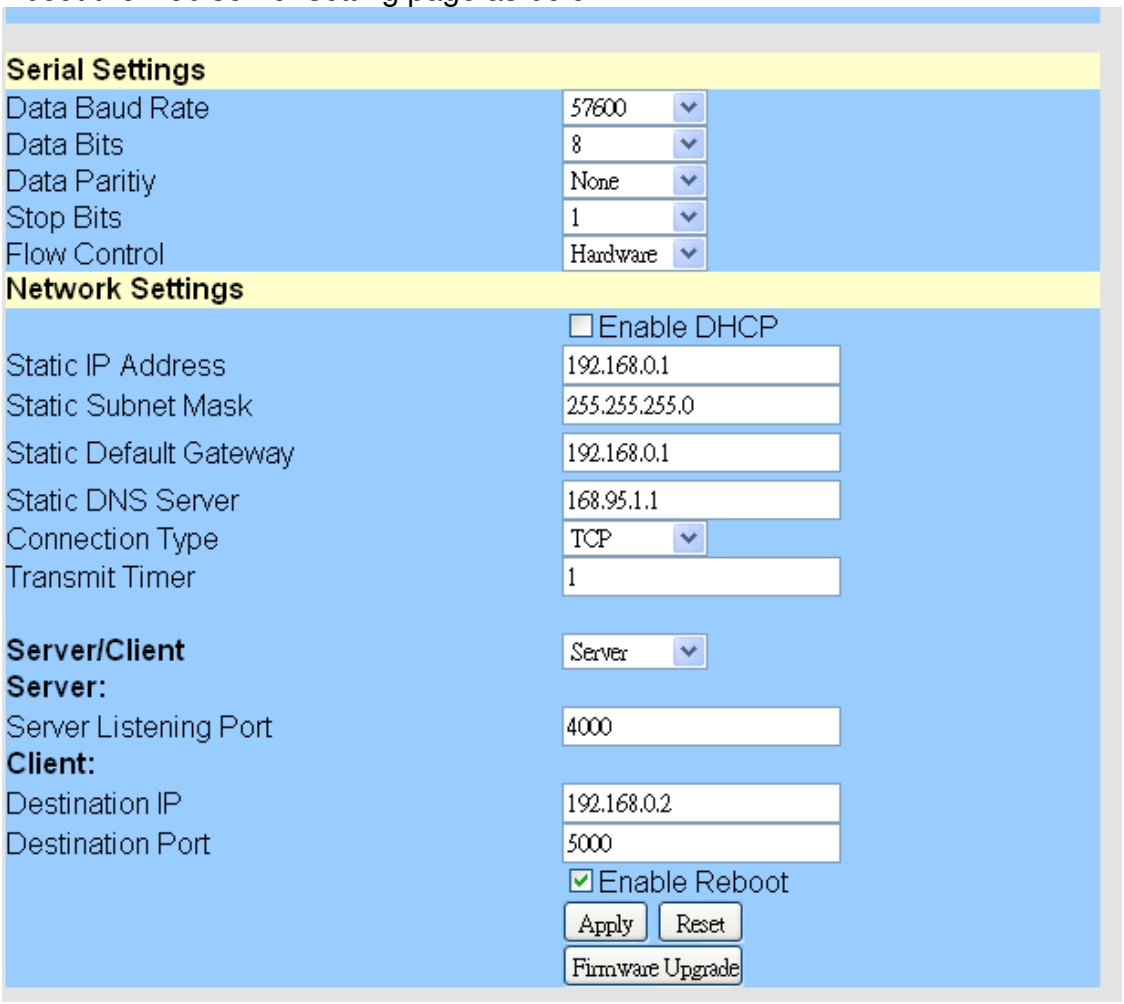
The L3 default is connected, so the operation voltage is DC 5V, if you remove the L3 and connect to L4, the operation voltage will be changed to DC 3.3V.



Quick start:

User can use browser and entry the URL(http://192.168.0.1/setting.htm) for setting.

About the web server setting page as below:



User can change any parameter, once the parameter was finished, user can press the 'Apply' button, and new parameter can be saved to module simultaneously the module will reboot.

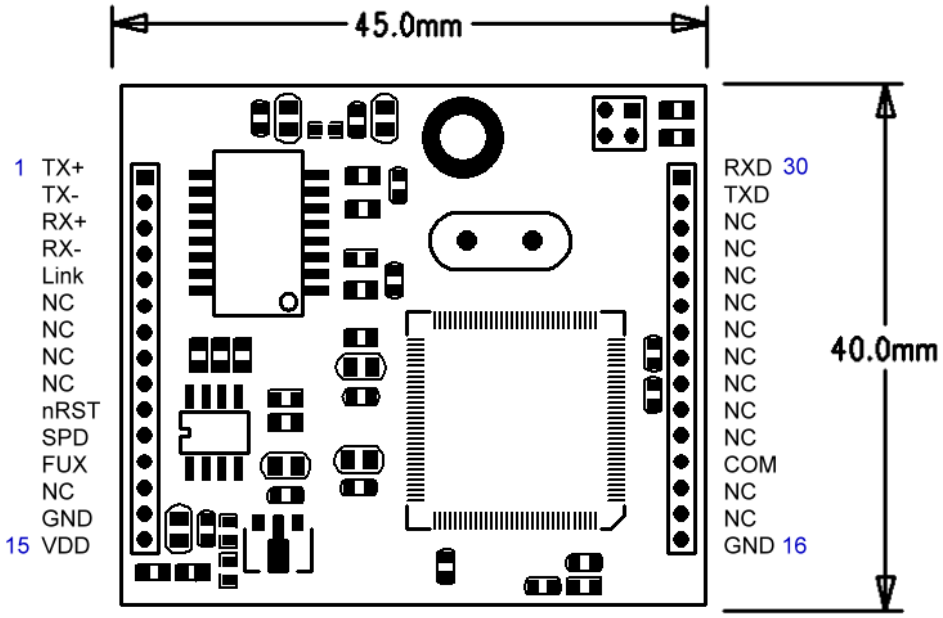
The main page mainly provides two functions,

(1) **Apply**: to update the configuration value on the device server(s).

(2) **Reset**: to reset the configuration value to the factory default settings.

Notice: The 'Firmware Update' button doesn't press.

Pin definitoin:



Pin Definition:

No.	Pin	Description
1	TX+	Transmit differential data output positive pin.
2	TX-	Transmit differential data output negative.
3	RX+	Receive differential data input positive pin.
4	RX-	Receive differential data input negative pin.
5	Link	Link status LED indicator. This pin drives low continuously when the Ethernet link is up and drives low and high in turn (blinking) when Ethernet PHY is in receiving or transmitting state.
6~9	NC	-
10	nRST	Chip reset input, active low. This is the external reset source used to reset this chip. This input feeds to the internal power-on reset circuitry, which then provides the main reset source of this chip.
11	SPD	Ethernet speed LED indicator. This pin drives low when the Ethernet PHY is in 100BASE-TX mode and drives high when in 10BASE-T mode.
12	FUX	Full duplex and collision detected LED indicator. This pin drives low when the Ethernet PHY is in full-duplex mode and drives high when in half duplex mode. When in half duplex mode and the Ethernet PHY detects collision, it will be driven low.
13	NC	-
14	GND	Ground
15	VDD	DC 5V or 3.3V power input
16	GND	Ground
17~18	NC	-
19	COM	Don't connector
20~28	NC	-
29	TXD	UART serial transmit data.
30	RXD	UART serial receive data.

Reference Design: