

1.0 Connect the EVB9S12NE64 to your computer and apply power

- 1) Connect one end of the supplied Crossover Ethernet cable to the J1 Ethernet Connector. Connect the other end to the Ethernet port of your host PC.
- 2) Connect the provided 9 pin serial cable to the EVB board COM1 port. Connect the other of the serial cable end to a COM port on your host PC.
- 3) Plug the supplied wall plug power supply into a power outlet and install the barrel connector into the PWR Jack.
- 4) Set the EVB board RUN/LOAD switch to the RUN position.
- 5) Turn the PWR Switch ON.

1.1 Open a terminal program on your host PC

- 1) Open a terminal communication program (such as Hyper Terminal or AXIDE) on your host PC.
- 2) Configure the terminal window to communicate with the PC COM port you have the EVB board connected with through the serial cable.
- 3) Communication settings should be:

BAUD: 9600, Data Bits: 8, Parity: None, Stop Bits: 1, Flow Controls: None

1.2 Run the DEMO program

The EVB9S12NE64 is shipped with a demo application stored in on-chip flash memory. To run through the demo application, follow the instructions below:

- 1) The terminal window opened should present a scrolling list of 2 character hex numbers. These numbers are the output of the Analog to Digital Converter (ATD) on the MC9S12NE64. The input to the ATD can be adjusted with the RV1 user potentiometer. While adjusting RV1, the hex characters will change accordingly. Press the button labeled "SW2" to move on to the next test.
- 2) The prompt: "Type characters and they will be echoed. To move on to the LED test, type x:" should be presented. Type characters into the terminal window and they will be echoed to the screen. Once you type "x" the test will move on to the LED test.
- 3) After typing "x" you will see "Push SW1 and SW2 to see the LEDs light up. To move on to the Ethernet test, move SW3 to position B".

EVB board LED1 and 2 will be ON and will go off with a switch press. You can now press SW1 and SW2 and see that the LED1 or 2 will turn off when the button is pressed. To move on to the Ethernet test, move the switch RUN / LOAD switch to LOAD position.

- 4) After moving the RUN / LOAD switch to the RUN position you will see:

```
EtherOpen(start)
mdcsl bufmap maxfl
MAC ADDREtherType programmable etyperxmode
netctl FDX
EtherOpen(end)
-Mllread_START; data = -Mllread_START; data = -Mllread_START; data = -Mllwrite_START -
Mllread_START; data = -Mllread_START; data = -Mllread_START; data = -Mllwrite_START -
Mllread_START; data = - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- -
NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- -
NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK- - NOLK-
***EPHY ISR started
-Mllread_START; data = PHY Interrupt:
=====
- PHY_R16_LKC -- -Mllread_START; data = Link is UP
=====
***EPHY ISR end -RXA--IPv4--RXA--IPv4--RXA--IPv4--RXA--ARP--RXA--ARP--RXA--
```

This shows that your EVB9S12NE64 is successfully communicating with the network card on your PC through the supplied Crossover Ethernet cable.

This completes the quick start for your EVB9S12NE64.