

Application Note

Subject : RSC-W910 MAC address programming Guide

FAQ Document No: S12004

Date: 2012/05/10

Model Name. RSC-W910

Rev. A1

Category: General H/W S/W Others,

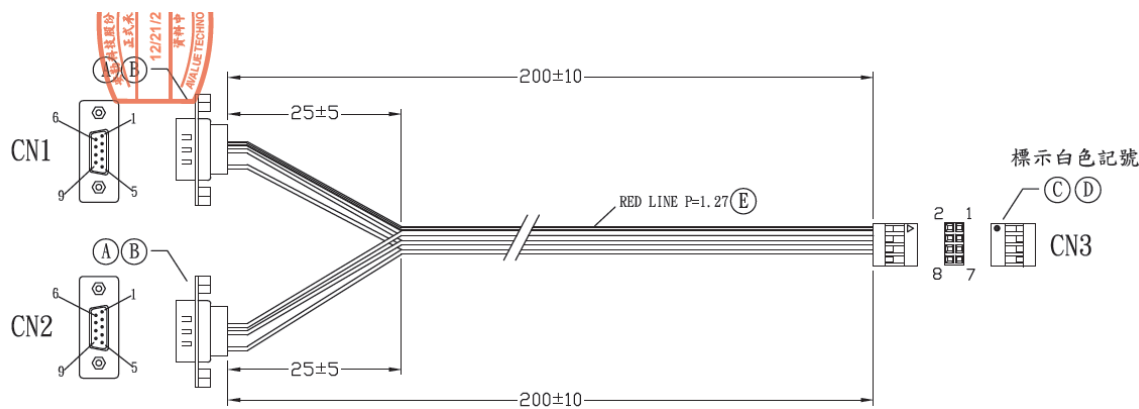
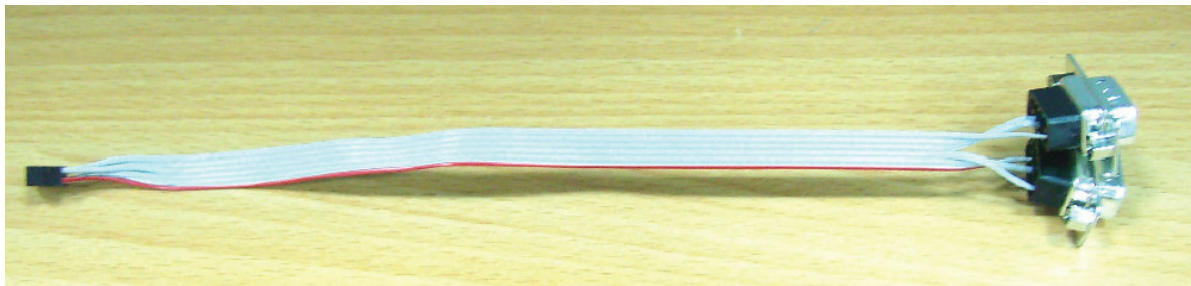
Purpose :

Programming MAC address with WinCE Boot loader Boot menu.

Pre-configuration for RSC-W910:

A. Required cables:

1.E170612200R



CN1	CN3	CN2	CN3
RED 2	1	RED 2	2
GRY 3	3	GRY 3	4
GRY 5	5	GRY 5	6

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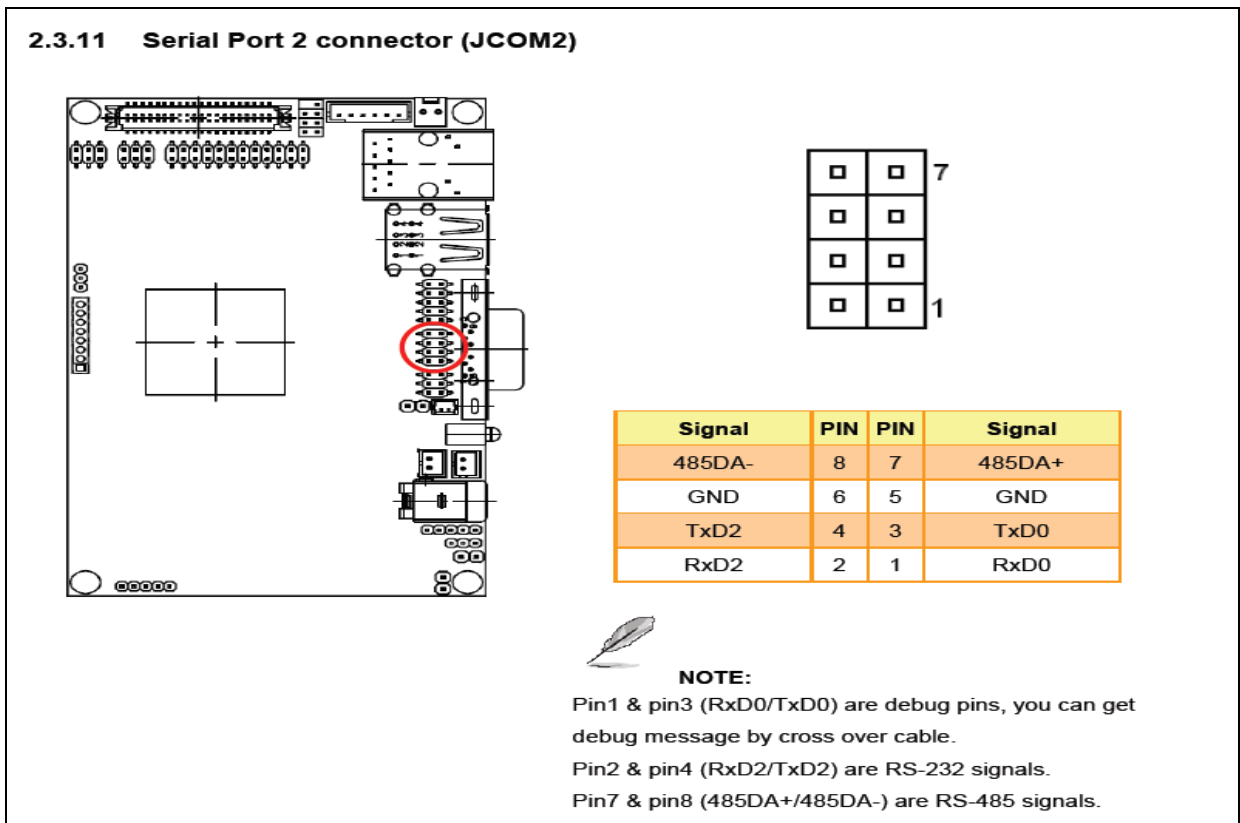
2.DB9 null Modem cable(RS-232 cross over Cable)



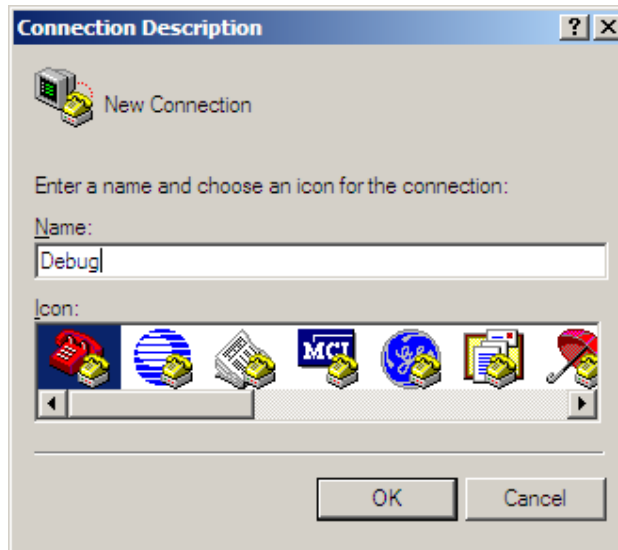
B. Another PC host with Windows XP + hyper terminal Program.

Procedures:

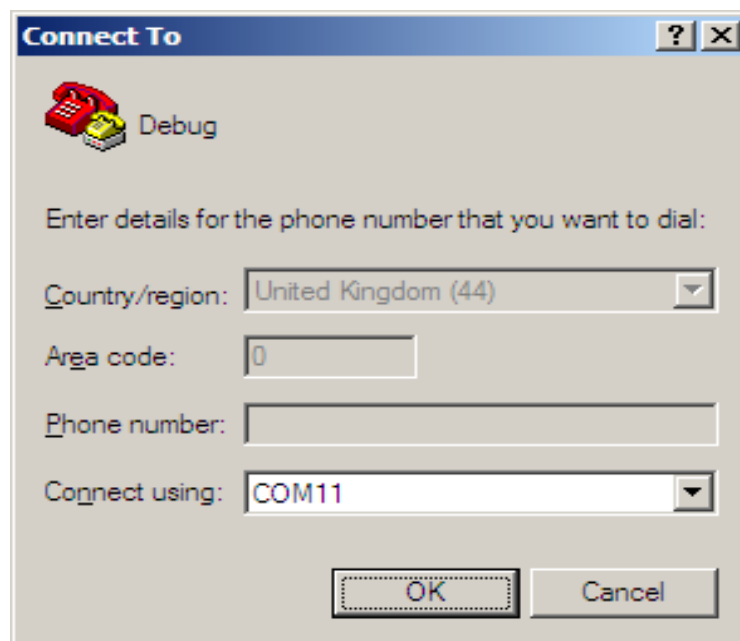
1. Connect E1706122000R to RSC-W910, find the JCOM2 and cable's CN3 for debug port.



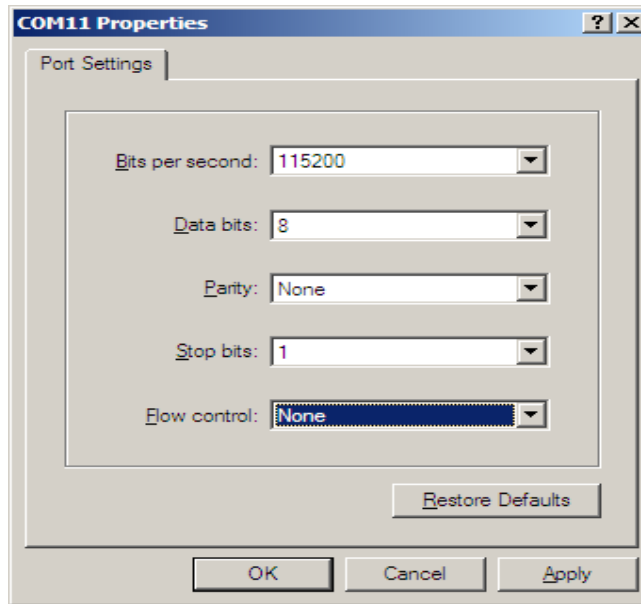
2. Make DB9 cross over cable connection for RSC-W910 E1706122000R CN1 and WinXP PC host.
3. Launch WinXP Hyper terminal program.
4. Make a new connection name “Debug”.



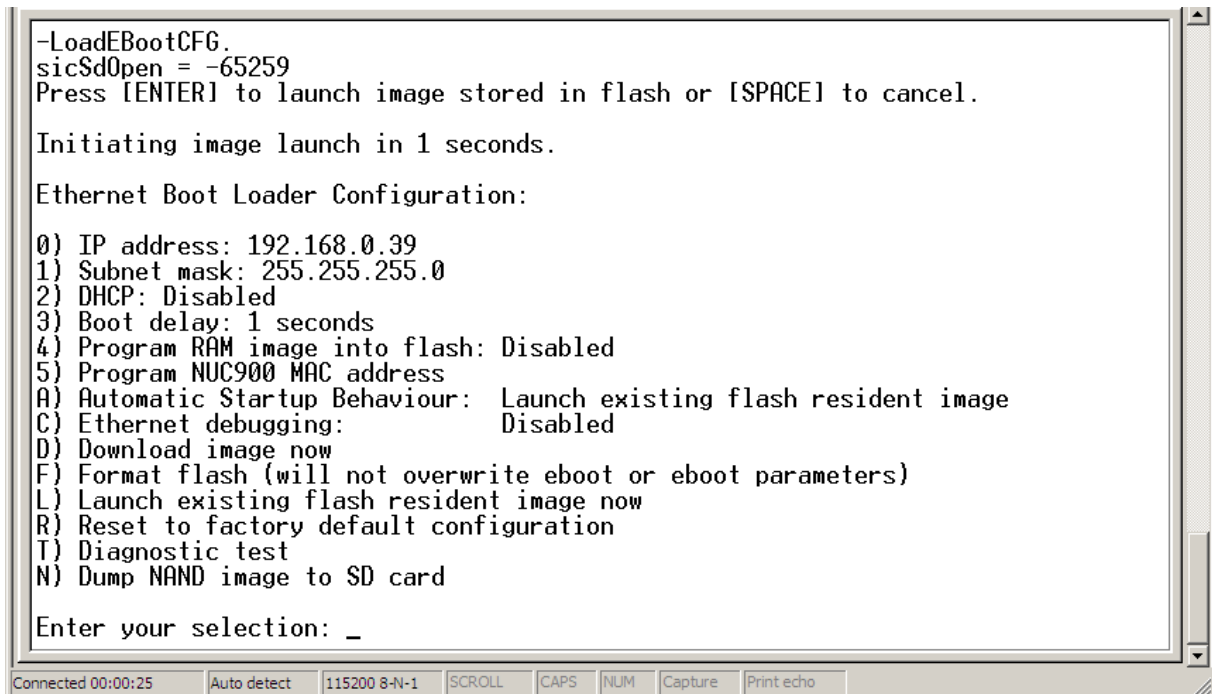
5. Configure the connection port of your WinXP PC COM port where the Cross over cable connected. For example :“COM11”



6. Set BaudRate Bit Per second as “115200” and Flow control as “None” and click OK.



7. Boot RSC-W910, while the boot moment and debug Screen is displayed, please keep pressing “space bar” ***very quickly*** for enter Boot loader Menu. If you missed the timing for cancel launch Image, you won’t see the menu as below. Please reboot RSC-W910 again until you got menu shows just like below.



8. Enter “5” key for input new MAC address and Program NUC900 MAC address.

```

Ethernet Boot Loader Configuration:
0) IP address: 192.168.0.39
1) Subnet mask: 255.255.255.0
2) DHCP: Disabled
3) Boot delay: 1 seconds
4) Program RAM image into flash: Disabled
5) Program NUC900 MAC address
A) Automatic Startup Behaviour: Launch existing flash resident image
C) Ethernet debugging: Disabled
D) Download image now
F) Format flash (will not overwrite eboot or eboot parameters)
L) Launch existing flash resident image now
R) Reset to factory default configuration
T) Diagnostic test
N) Dump NAND image to SD card

Enter your selection: 5

Current MAC address is: 00:80:88:65:22:34

Enter new MAC address in hexadecimal (hh.hh.hh.hh.hh.hh): 00.04.5f.84.97.de_
    
```

Please key-in correct MAC address by format XX.XX.XX.XX.XX.XX and Press Enter.

9. Please type “L” for Launch Image and Programming MAC address.

```

Ethernet Boot Loader Configuration:
0) IP address: 192.168.0.39
1) Subnet mask: 255.255.255.0
2) DHCP: Disabled
3) Boot delay: 1 seconds
4) Program RAM image into flash: Disabled
5) Program NUC900 MAC address
A) Automatic Startup Behaviour: Launch existing flash resident image
C) Ethernet debugging: Disabled
D) Download image now
F) Format flash (will not overwrite eboot or eboot parameters)
L) Launch existing flash resident image now
R) Reset to factory default configuration
T) Diagnostic test
N) Dump NAND image to SD card

Enter your selection: L
Reading Kernel Image from Flash (into ram)
FMD: ReadID (Mfg=0xec, Dev=0xf1)
Loading RAM image from flash (Flash=0x306000 RAM=0x801A0000 Length=0x13D3B1C).
    
```

Thus, you could see the next screen show the NUC900 starting with correct MAC address.

```
-OALTimerInit(rc = 1)
OEMInit: Set NK force clean boot.....avoid quickly power off/on launch NK fail p
roblem
-OEMInit
+OALIoCtlHalInitRTC(...)
RTC Enabled
FMD_Init:: Initialize OK.....
<I2C_Init:0xd00e2b80
OAL INFO: *** Device id 'NUC90038878' ***
PIO_Init: Map_Hardware: ADJ should be inverted!!
PIO_Init
WDT_Init
EthernetAddr = 400 845f de97
CurrentNetworkAddress = 400 845f de97
PermanentNetworkAddress = 400 845f de97
NUC900EMC_StartUp Mac Addr 0-4-5f-84-97-de
NUC900Eth: NOT_USED
NUC900Eth: OID_GEN_CURRENT_LOOKAHEAD
NUC900Eth: OID_GEN_CURRENT_PACKET_FILTER PacketFilter = 0x0000000b
init_DataImage_FG050720DSSWDGT1:
<I2C_Open:1
+OEMSetAlarmTime(3/13/2005 2:0:0.000)
WriteEnableRTC OK
```

Connected 00:02:56 Auto detect 115200 8-N-1 SCROLL CAPS NUM Capture Print echo

10. Done.