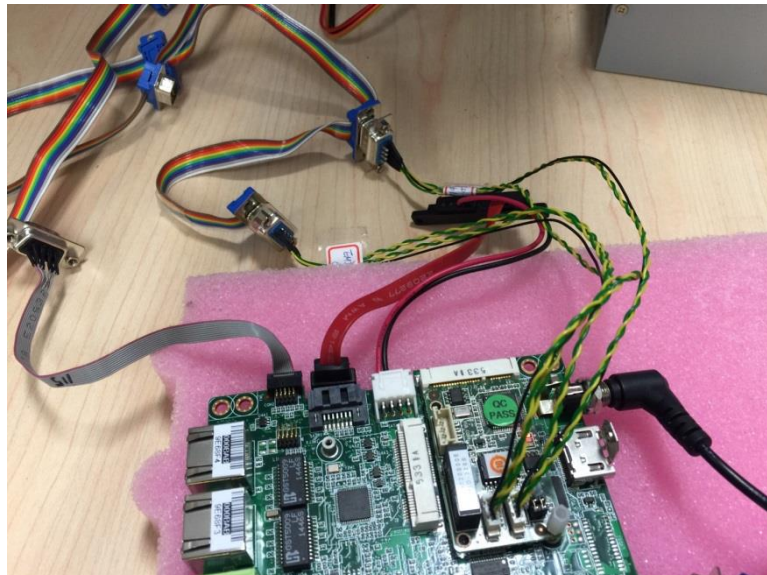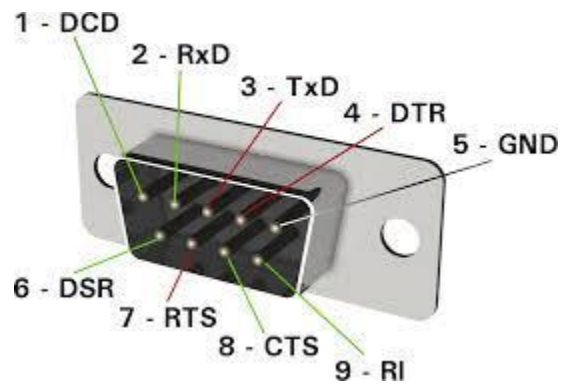# UTX-3115 with EMIO-220S Testing RS-485

Connection:

Connect pin 1 to pin 1, pin2 to pin 2 and pin 5 to pin 5

RS-485 pin assignment

Pin1	DATA-	Transmitted and Received Data -
Pin2	DATA+	Transmitted and Received Data +
Pin3	N/C	No Connection
Pin4	N/C	No Connection
Pin5	GND	Common Ground
Pin6	N/C	No Connection
Pin7	N/C	No Connection
Pin8	N/C	No Connection
Pin9	N/C	No Connection

Step 1:   Login console and tty2

Switch to console: Ctrl+ Alt + F1

```
Wind River Linux 5.0.1.33 WR-IntelligentDevice console

WR-IntelligentDevice login: root
Password:
Last login: Thu Jul  7 10:58:34 UTC 2016 on tty2
root@WR-IntelligentDevice:~# _
```

Switch to tty2: Ctrl+ Alt + F2

```
Wind River Linux 5.0.1.33 WR-IntelligentDevice tty2

WR-IntelligentDevice login: root
Password:
Last login: Thu Jul  7 11:32:28 UTC 2016 on console
root@WR-IntelligentDevice:~# _
```

Step2:   Check serial device name

```
Wind River Linux 5.0.1.33 WR-IntelligentDevice console

WR-IntelligentDevice login: root
Password:
Last login: Thu Jul  7 10:58:34 UTC 2016 on tty2
root@WR-IntelligentDevice:~# dmesg |grep ttyS*
console [tty0] enabled
0000:00:1e.3: ttyS0 at MMIO 0x9081c000 (irq = 18) is a 16550A
0000:00:1e.4: ttyS1 at MMIO 0x9081a000 (irq = 19) is a 16550A
usb 1-4.2: FTDI USB Serial Device converter now attached to ttyUSB0
usb 1-4.2: FTDI USB Serial Device converter now attached to ttyUSB1
root@WR-IntelligentDevice:~#
```

Step 3:   Open minicom

Console setting:

```
Wind River Linux 5.0.1.33 WR-IntelligentDevice console

WR-IntelligentDevice login: root
Password:
Last login: Thu Jul  7 11:32:55 UTC 2016 on tty2
root@WR-IntelligentDevice:~# minicom -s
```

```
    A -      Serial Device      : /dev/ttyUSB0
    B - Lockfile Location       : /var/lock
    C -      Callin Program     :
    D -    Callout Program      :
    E -       Bps/Par/Bits      : 115200 8N1
    F - Hardware Flow Control   : No
    G - Software Flow Control   : No

       Change which setting?

              Screen and keyboard
              Save setup as dfl
              Save setup as..
              Exit
              Exit from Minicom
```

```
            ─[configuration]─
         Filenames and paths
         File transfer protocols
         Serial port setup
         Modem and dialing
         Screen and keyboard
         Save setup as dfl
         Save setup as..
         Exit
         Exit from Minicom
```

```
Welcome to minicom 2.6.1

OPTIONS: I18n
Compiled on Mar 24 2016, 18:04:08.
Port /dev/ttyUSB0

Press CTRL-A Z for help on special keys
```

tty2 setting:


```
Wind River Linux 5.0.1.33 WR-IntelligentDevice tty2

WR-IntelligentDevice login: root
Password:
Last login: Thu Jul  7 11:40:09 UTC 2016 on console
root@WR-IntelligentDevice:~# minicom -s
```



```
    A -      Serial Device       : /dev/ttyUSB1
    B - Lockfile Location        : /var/lock
    C -    Callin Program        :
    D -   Callout Program        :
    E -     Bps/Par/Bits         : 115200 8N1
    F - Hardware Flow Control     : No
    G - Software Flow Control     : No

       Change which setting?

              Screen and keyboard
              Save setup as dfl
              Save setup as..
              Exit
              Exit from Minicom
```



```
              [configuration]
          Filenames and paths
          File transfer protocols
          Serial port setup
          Modem and dialing
          Screen and keyboard
          Save setup as dfl
          Save setup as..
          Exit
          Exit from Minicom
```



```
Welcome to minicom 2.6.1

OPTIONS: I18n
Compiled on Mar 24 2016, 18:04:08.
Port /dev/ttyUSB1

Press CTRL-A Z for help on special keys
```

Step 4 type any word and check the output at another terminal

Console receive tty2 input


```
Welcome to minicom 2.6.1

OPTIONS: I18n
Compiled on Mar 24 2016, 18:04:08.
Port /dev/ttyUSB0

Press CTRL-A Z for help on special keys

I am tty2_
```

tty2 receive console input


```
Welcome to minicom 2.6.1

OPTIONS: I18n
Compiled on Mar 24 2016, 18:04:08.
Port /dev/ttyUSB1

Press CTRL-A Z for help on special keys

I am console
```