UART-02

User's Manual(DOS)

Bear Technologies
www.beartech.com.tw

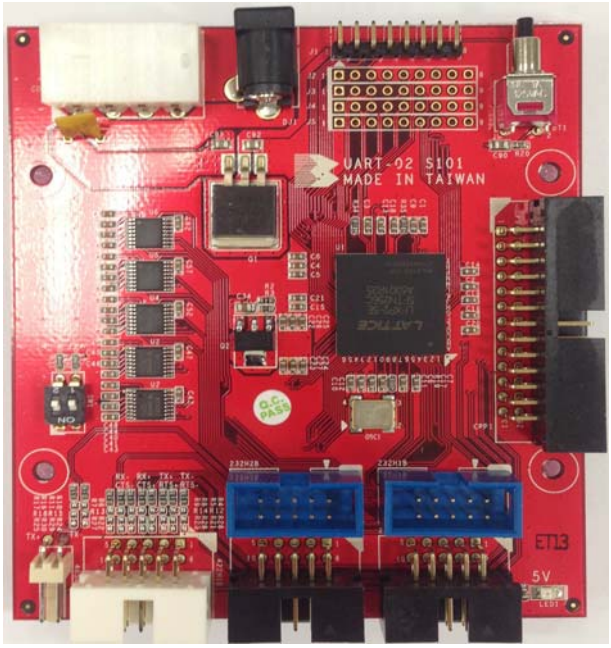
Section 1 : Introduction

1. Product Feature

A) Test RS232 Mode Support up to 921600 BPS
B) Test RS422 Mode Support up to 921600 BPS
C) Test RS485 Mode Support up to 921600 BPS
D) Test Parallel Port

2. Accessories

A) UART Test Card *1
B) PARALLEL PORT CABLE *1
C) RS232 CABLE * 2
D) RS422 CABLE * 1
E) RS485 CABLE * 1



3. JUMPER SETTING & LED

1> LED1 : 5V LED
2> BT1 : Reset Button
3> SW1 : RS485 Baud Rate Switch
SW[1:0]
1 1 : 115200bps (Default)
1 0 : 230400bps
0 1 : 460800bps
0 0 : 921600bps

Section 2 : Common Program Syntax

1-1> Filename: UART.COM

1-2>Syntax:

UART [/nnnn] [Cn] [@nnnn] [Inn] [\K] [?]
/1234 : Lap_Cnt = 1234 /L : Lap_Cnt = Loop
C1 : COM1 C2 : COM2 C3 : COM3 C4 : COM4
@D100 : D100H (COM Port I/O Base)
RS422 : RS422 Mode Selected
RS485 : RS485 Mode Selected
I03 : IRQ03 I04 : IRQ04 I05 : IRQ05 I09 : IRQ09
I10 : IRQ10 I11 : IRQ11 I12 : IRQ12
\I : IRQ Test Skip
\RTS : RTS Test Skip \DTR : DTR Test Skip
\CTS : CTS Test Skip \DSR : DSR Test Skip
+RTS : RTS Test Enable (For RS422 Only)
+CTS : CTS Test Enable (For RS422 Only)
\TX- : TX- Test Skip (For RS422/RS485 Only)
H : 921600 BPS Test
H0 : 115200 BPS Test
H1 : 230400 BPS Test
H2 : 460800 BPS Test

1-3> Example:

UART	:RS232 COM1 IRQ4
UART C2	:RS232 COM2 IRQ3
UART C3 @d100 I11	:RS232 COM3 IRQ11 Base = D100H
UART RS422	:RS422 COM2 IRQ3 RTS+/RTS- Skip
UART RS422 +RTS +CTS	:RS422 COM2 IRQ3 RTS+/RTS- Enable
UART RS422 C1	:RS422 COM1 IRQ4 RTS+/RTS- Skip
UART RS485	:RS485 COM2
UART RS485 C1	:RS485 COM1
UART RS485 C1 @E000	:RS485 COM1 Base = E000H

2-1> Filename: MT.EXE

2-2> Example :

MT P1N :Parallel Port Test

Section 3 : Testing Principle

A. Fuction:

COM Port , Parallel Port Read/Write Test

B. Compatibility:

Parallel Port & COM Port , IPC , Server , M.B.

C. Efficiency and Completeness

Only requires one test program UART.COM (UART ? ; Help Message) , to complete the Com Port Test

D. Testing Procedure:

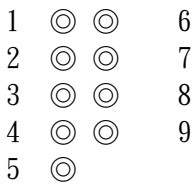
RS232 Mode :

1. Connect COM Port To “232H1A” or “232H2A” (A_TYPE)
or Connect COM Port To “232H1B” or “232H2B” (B_TYPE)

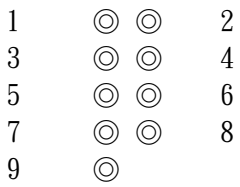
2. Boot the screen to DOS platform

3. Execute **UART.COM**

A_TYPE : (232H1A or 232H2A)



B_TYPE : (232H1B or 232H2B)



(1. DCD 2. RX 3. TX 4. DTR 5. GND 6. DSR 7. RTS 8. CTS 9. RI)

RS422 Mode :

1. Connect COM Port To “422H1B”

2. Boot the screen to DOS platform

3. Excute **UART.COM**

(1. TX- 2. TX+ 3. RX+ 4. RX- 6. RTS- 7. RTS+ 8. CTS+ 9. CTS-)

RS485 Mode :

1. COM Port Connect To “485H1C”

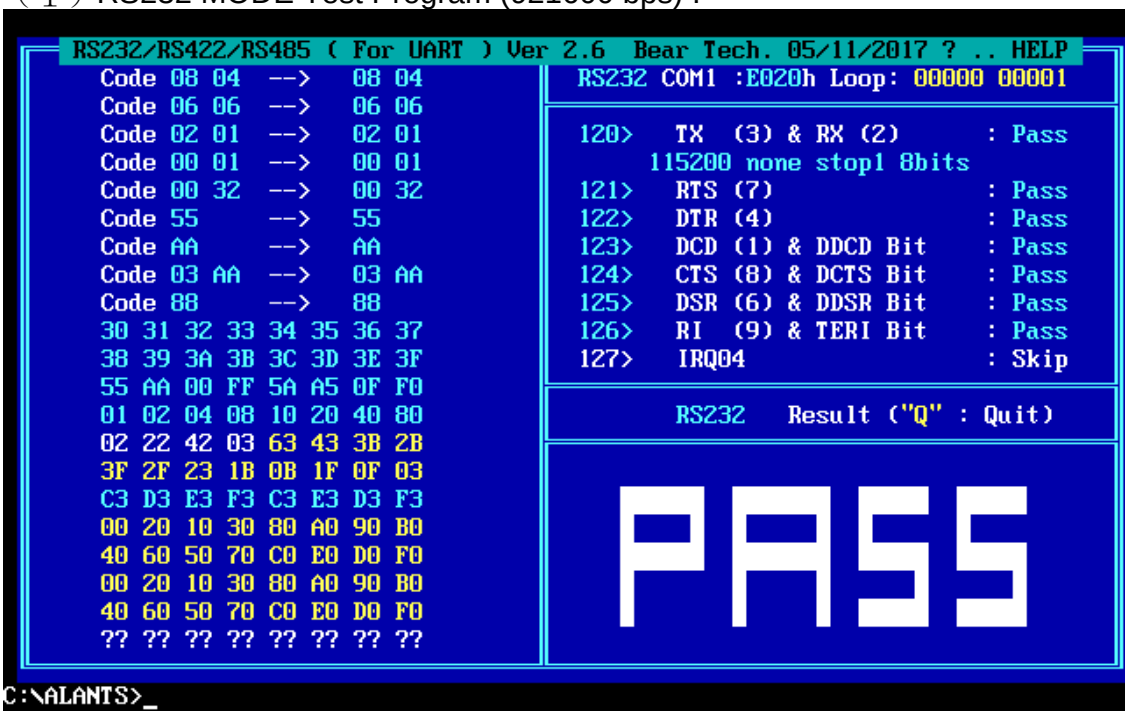
2. Boot the screen to DOS platform

3. Excute **UART.COM**

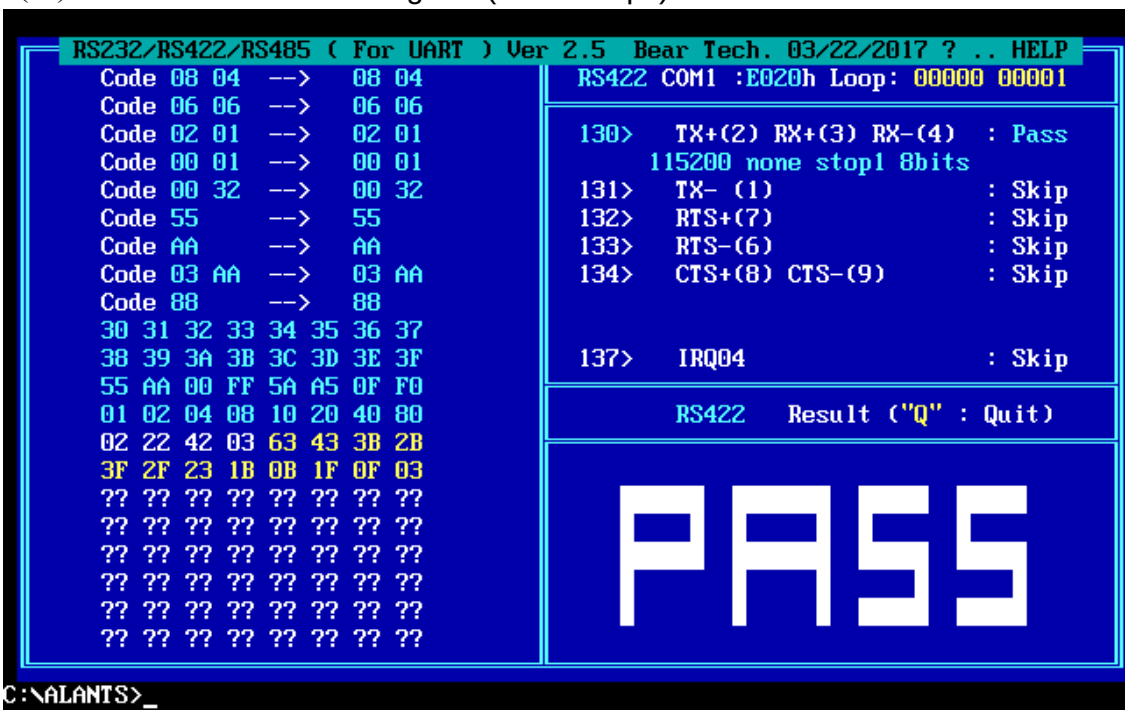
(1. TX- 2. TX+)

E. Actual test:

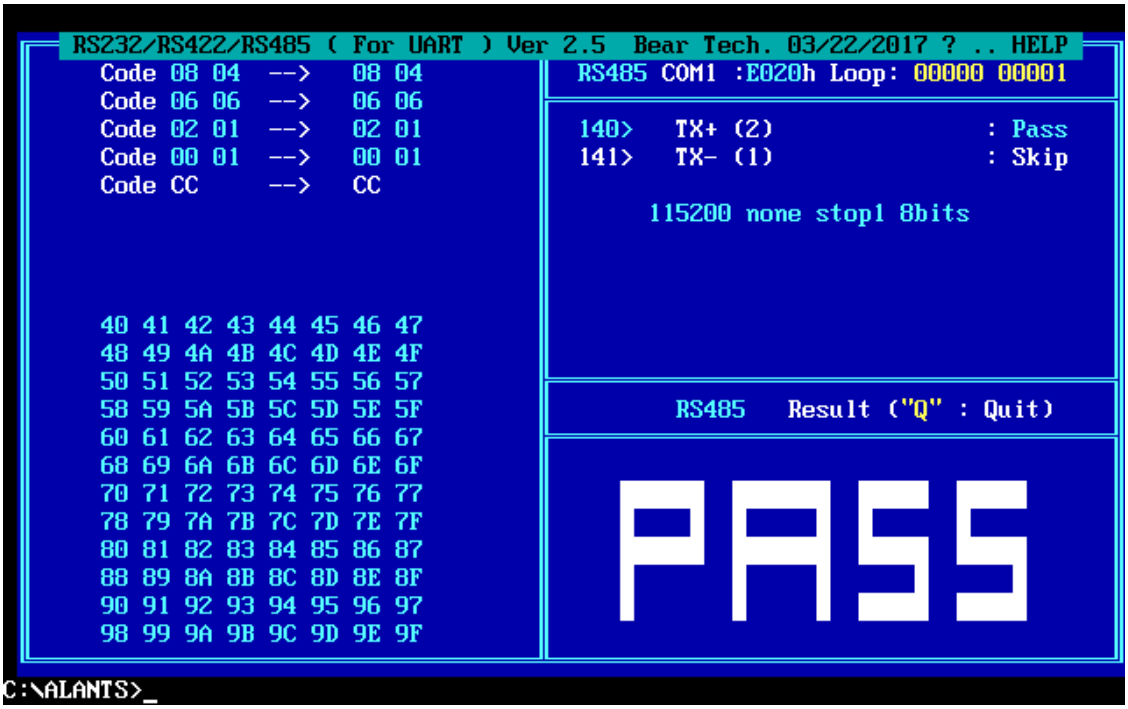
（1）RS232 MODE Test Program (921600 bps) :



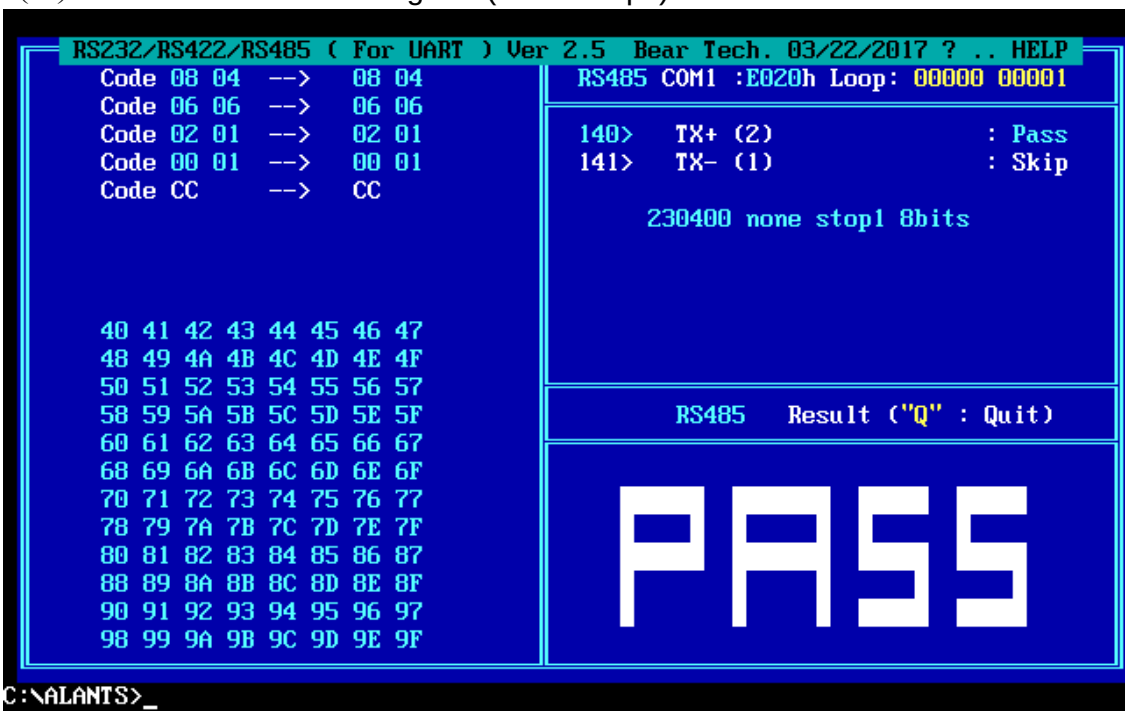
（2）RS422 MODE Test Program (921600 bps) :



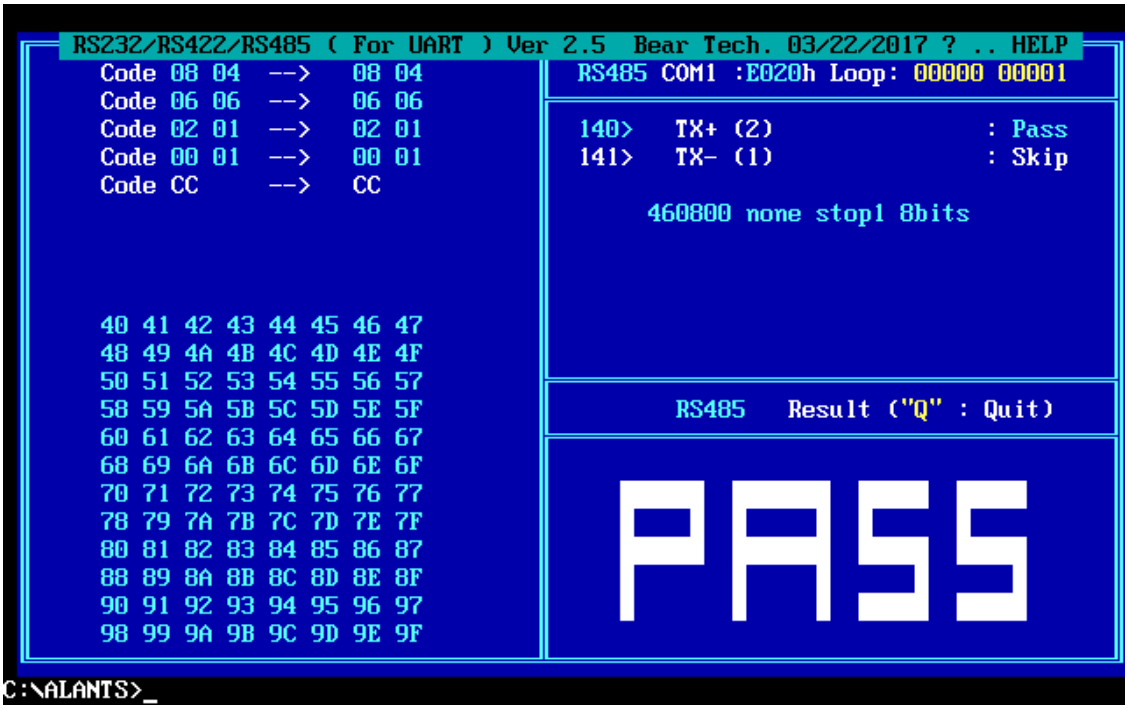
（3）RS485 MODE Test Porgram (115200 bps):



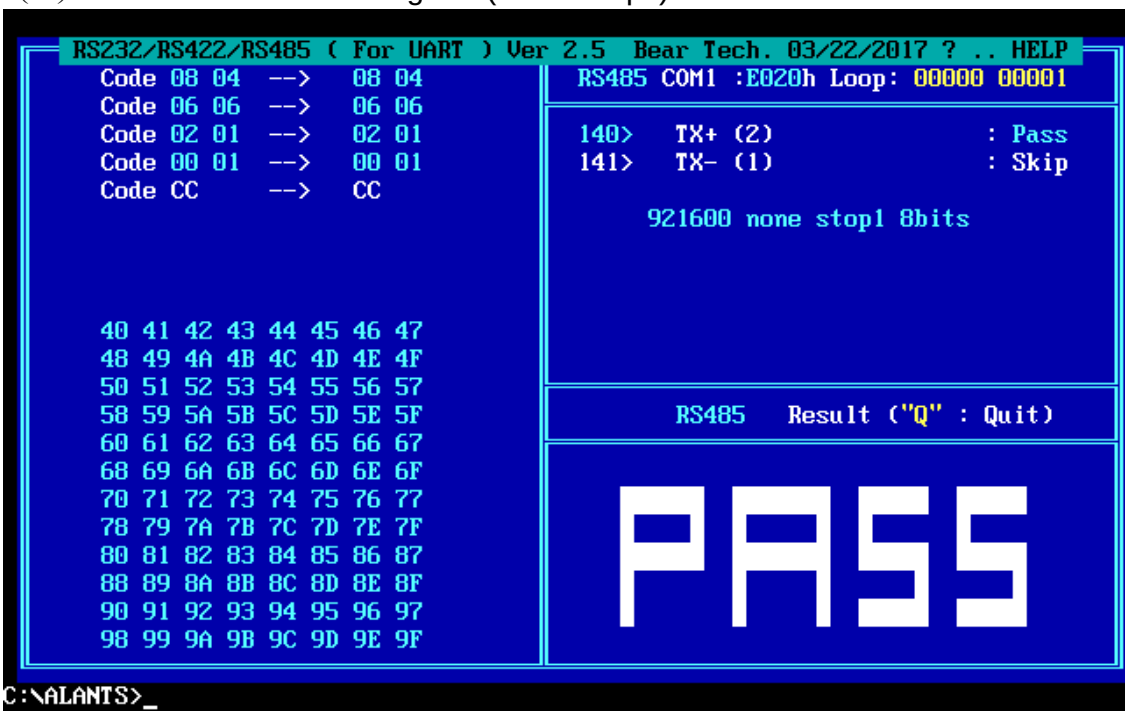
（4）RS485 MODE Test Porgram (230400 bps):



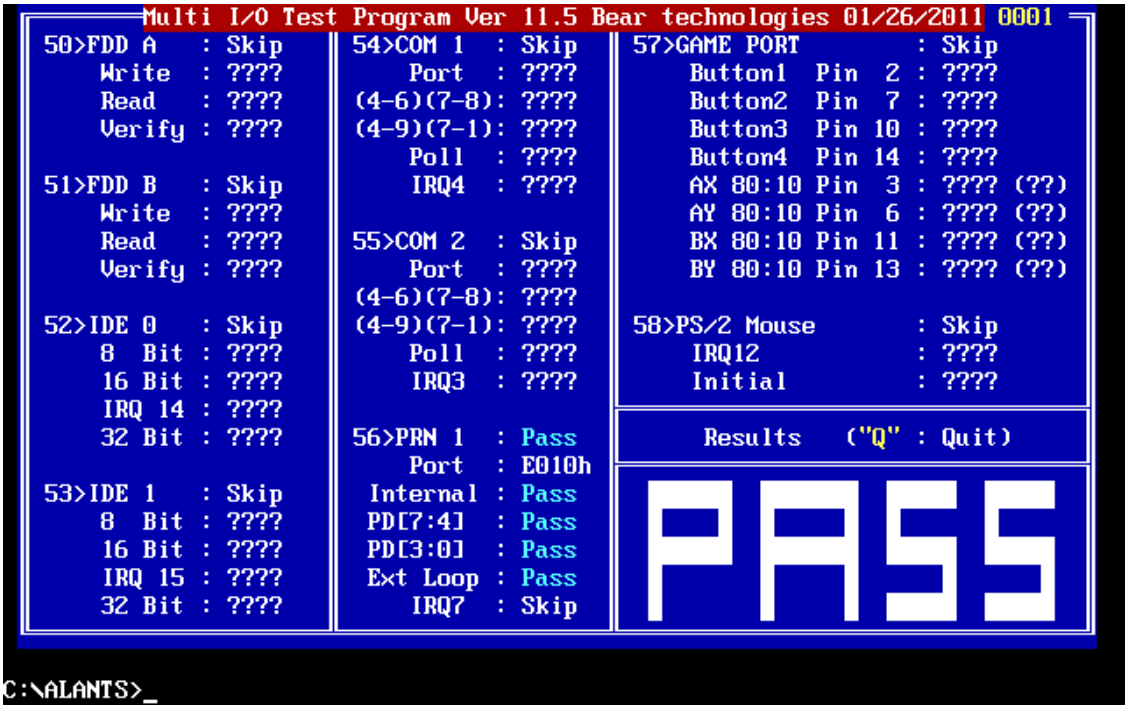
（5）RS485 MODE Test Porgram (460800 bps):



（6）RS485 MODE Test Porgram (921600 bps):



（7）Parallel Port Test Porgram :



Section 4 : Test Results

4.1 The chips that have been tested

Super I/O Chip : sunix sun2212

Program updates and product related information can be viewed and download at : http://www.beartech.com.tw

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