

DOS Test Program

User Manual

for SB16C1053APCI application only

Ver. 1.00



1. Overview

This document is an user manual of DOS test program, "GT-1053A" for the SB16C1053APCI applications. Users can test all applications of SB16C1053APCI. It also support below 7 modes of SB16C1053APCI.

- 1S mode
- 2S mode
- 4S mode
- 6S mode
- 1P mode
- 1S1P mode
- 2S1P mode

2. Test Method using the TEST program, GT-1053A

Please follows the below steps if you want to test your applications of SB16C1053APCI in the DOS operating system.

- ① Install your application board in your test main board.
And please turn-on the test system.

- ② After the DOS operating system boot up, execute the SystemBase's DOS test program.

```
C: \ > GT-1053A.EXE
```

- ③ If the board is recognized correctly, you can see the test program view as below figure.

SystemBase SB16C1053APCI Test Program

SB16C1053APCI (① Mode) is detected !!!

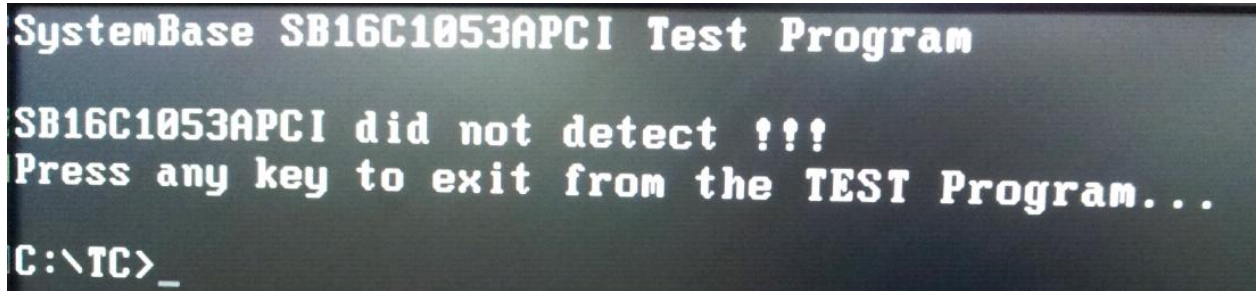
UART0 Addr: ② , UART1 Addr: ③ , LPT Addr: ④

IRQ Number = ⑤

SERIAL PORT	UART0	UART1
INTERNAL TEST		
----: RTS-CTS		
----: RTS-DCD		
----: DTR-DSR		
----: DTR-RI		
----: TXD-RXD		
----: TX-INT		
----: RX-INT		
----: MD-INT		
----: LN-INT		

PARALLEL PORT	
/STROBE-/FAULT	
/STROBE-D1	
/STROBE-D5	
/AUTOFD-nACK	
/AUTOFD-D2	
/AUTOFD-D6	
/INIT-BUSY	
/INIT-D3	
/INIT-D7	
/SELECT IN-PAPER EMPTY	
/SELECT IN-SELECT	
/SELECT IN-D4	
/SELECT IN-D8	

If the board is not recognized correctly, you can see the error message as below figure.



2.1 The configurations of GT-1053A

SystemBase SB16C1053APCI Test Program

SB16C1053APCI (① Mode) is detected !!!

UART0 Addr: ② , UART1 Addr: ③ , LPT Addr: ④

IRQ Number = ⑤

SERIAL PORT	UART0	UART1
INTERNAL TEST		
----: RTS-CTS		
----: RTS-DCD		
----: DTR-DSR		
----: DTR-RI		
----: TXD-RXD		
----: TX-INT		
----: RX-INT		
----: MD-INT		
----: LN-INT		

Serial Port Communication Status

PARALLEL PORT
/STROBE-/FAULT
/STROBE-D1
/STROBE-D5
/AUTOFD-nACK
/AUTOFD-D2
/AUTOFD-D6
/INIT-BUSY
/INIT-D3
/INIT-D7
/SELECT IN-PAPER EMPTY
/SELECT IN-SELECT
/SELECT IN-D4
/SELECT IN-D8

Parallel Port Communication Status

- ① The installed board's operating mode is showed.
- ② The base address of the 1st Serial Port(UART) is showed. This value could be changed on the different system. In case of 1P mode, this will be blanked.
- ③ The base address of the 2nd Serial Port(UART) is showed. This value could be changed on the different system. In case of 1P or 1S1P mode, this will be blanked.
- ④ The base address of the Parallel Port is showed. This value could be changed on the different system. In case of 2S, 4S or 6S mode, this will be blanked.
- ⑤ The IRQ number of the board is showed.
- ⑥ Serial Port Communication Status.

In the "INTERNAL TEST" tab, you can see the status of the data communication using the UART internal loop back function.

In the second column, you can see the loopback test result using an external loopback connector.

In the third column, you can see whether the TX, RX, modem and line interrupt happens or not.

⑦ Parallel Port Communication Status.

You can see the loopback test result using an external parallel loopback connector.

In the "Serial Port Communication Status" and "Parallel Port Communication Status" panel,

'.' shows that the loopback communication is succeeded.

'x' shows that the loopback communication is failed.

And you can see the other configuration test result as below figure in the 4S or 6S mode.

SystemBase SB16C1053APCI Test Program

SB16C1053APCI (Mode) is detected !!!

UART0 Addr: , UART1 Addr: , UART2 Addr:

UART3 Addr: , UART4 Addr: , UART5 Addr:

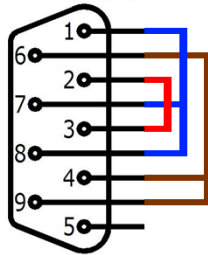
IRQ Number =

SERIAL PORT	UART0	UART1	UART2	UART3	UART4	UART5
INTERNAL TEST						
----: RTS-CTS						
----: RTS-DCD						
----: DTR-DSR						
----: DTR-RI						
----: TXD-RXD						
----: TX-INT						
----: RX-INT						
----: MD-INT						
----: LN-INT						

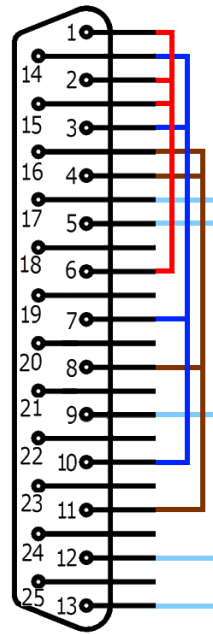
2.2 How to make loopback connector

You can make a loopback connector as below figures.

When you want to test a serial port, you need to make serial loopback using a DB9 connector. And when you want to test a parallel port, you need to make a parallel loopback connector using a DB25 connector.



<DB9 Serial Port Loopback Connector>



<DB25 Parallel Port Loopback Connector>

3. Test Screen for each modes

In this chapter, you can see the each messages on your screen when you test your each test board.

3.1 2S mode

After you installed the 2S board in your mainboard and then execute "GT-1053A.EXE", you can see the test result as below figure.

SystemBase SB16C1053APCI Test Program

SB16C1053APCI (2S Mode) is detected !!!

UART0 Addr: EC00, UART1 Addr: E800
IRQ Number = 10

SERIAL PORT	UART0	UART1
INTERNAL TEST	.	.
----: RTS-CTS	.	.
----: RTS-DCD	.	.
----: DTR-DSR	.	.
----: DTR-RI	.	.
----: TXD-RXD	.	.
----: TX-INT	.	.
----: RX-INT	.	.
----: MD-INT	.	.
----: LN-INT	.	.

PARALLEL PORT
/STROBE-/FAULT
/STROBE-D1
/STROBE-D5
/AUTOFD-nACK
/AUTOFD-D2
/AUTOFD-D6
/INIT-BUSY
/INIT-D3
/INIT-D7
/SELECT IN-PAPER EMPTY
/SELECT IN-SELECT
/SELECT IN-D4
/SELECT IN-D8

3.2 4S mode

After you installed the 4S board in your mainboard and then execute "GT-1053A.EXE", you can see the test result as below figure.

SystemBase SB16C1053APCI Test Program

SB16C1053APCI (4S Mode) is detected !!!

UART0 Addr: EC00, UART1 Addr: E800

UART2 Addr: E800, UART3 Addr: = E480

IRQ Number = 10

SERIAL PORT	UART0	UART1	UART2	UART3	UART4	UART5
INTERNAL TEST		
----: RTS-CTS		
----: RTS-DCD		
----: DTR-DSR		
----: DTR-RI		
----: TXD-RXD		
----: TX-INT		
----: RX-INT		
----: MD-INT		
----: LN-INT		

3.3 6S mode

After you installed the 6S board in your mainboard and then execute "GT-1053A.EXE", you can see the test result as below figure.

SystemBase SB16C1053APCI Test Program

SB16C1053APCI (6S Mode) is detected !!!

UART0 Addr: EC00, UART1 Addr: E800, UART2 Addr: E800

UART3 Addr: E808, UART4 Addr: E480, UART5 Addr: E488

IRQ Number = 10

SERIAL PORT	UART0	UART1	UART2	UART3	UART4	UART5
INTERNAL TEST
----: RTS-CTS
----: RTS-DCD
----: DTR-DSR
----: DTR-RI
----: TXD-RXD
----: TX-INT
----: RX-INT
----: MD-INT
----: LN-INT

3.4 2S1P mode

After you installed the 2S1P board in your mainboard and then execute "GT-1053A.EXE", you can see the test result as below figure. And you can see the similar testresult as below figure, when you test the 1S or 1S1P board.

SystemBase SB16C1053APCI Test Program

SB16C1053APCI (2S1P Mode) is detected !!!

UART0 Addr: EC00, UART1 Addr: E800, LPT Addr: E800
IRQ Number = 10

SERIAL PORT	UART0	UART1
INTERNAL TEST	.	.
-----: RTS-CTS	.	.
-----: RTS-DCD	.	.
-----: DTR-DSR	.	.
-----: DTR-RI	.	.
-----: TXD-RXD	.	.
-----: TX-INT	.	.
-----: RX-INT	.	.
-----: MD-INT	.	.
-----: LN-INT	.	.

PARALLEL PORT	
/STROBE-/FAULT	.
/STROBE-D1	.
/STROBE-D5	.
/AUTOFD-nACK	.
/AUTOFD-D2	.
/AUTOFD-D6	.
/INIT-BUSY	.
/INIT-D3	.
/INIT-D7	.
/SELECT IN-PAPER EMPTY	.
/SELECT IN-SELECT	.
/SELECT IN-D4	.
/SELECT IN-D8	.