

SIO_8bit_TRANS_RECEIVE

1. Operation Outline

On two boards of which the same programs are implemented,
1-byte data received from the transmission board is displayed on the terminal software.

2. Each Setting

| | | |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| <u>SIO</u> | : SO1 (Port90) : SI1 (Port91) : SCLK1 (Port92) | |
| <u>UART</u> | : TXD2 (Port93) : RXD2 (Port94) | |
| <u>Transfer selection edge</u> | : default = Data reception at the rising edge, data transmission at the falling edge main.c: Changing the value of "#define SIO_SEL_EDGE" allows changing the transfer selection edge. | |
| <u>Serial clock selection [Hz]</u> | : default = fcgck/2^9 main.c: Changing the value of "#define SIO_SCLK" allows changing the serial clock. | |
| <u>Transfer format selection (MSB/LSB)</u> | : default = LSB first main.c: Changing the value of "#define SIO_TRANS_FORMAT" allows changing the transfer format (MSB/LSB). | |
| <u>Transfer mode selection</u> | : 8-bit transmission / reception mode | |
| <u>Command list</u> | : write | Test data are transmitted. |
| <u>Serial port setting</u> | Baud rate : 115200 (bps) Data : 8 (bit) Parity : None Stop : 1 (bit) Flow control : None | |

3. Basic Operation

Two boards of which the transmission / reception programs should be implemented are prepared, and each SO1 and SI1 are connected.
The "write" command is input to the one of them on the terminal software,
and the 1-byte test data is output by 20 ms period. (Test data: The values (0x00-0xFF) counted up by 1)
Whenever the test data are received on the other board,
the received data are displayed on the terminal software for reception.

Display example of terminal software for reception

```
SIO Sample Program
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Received data:
0x00
0x01
0x02
0x03
```

4. Note

None.