

TOSHIBA

SP-870-013

SIOTR1

--Inter-CPU Communication (Transmission + Reception) Using SIO--

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1. Target MCU

This sample program is created targeting at the TLCS-870/X series.
When using an MCU other than the TLCS-870/X series, refer to the data sheet for that MCU.

2. Overview

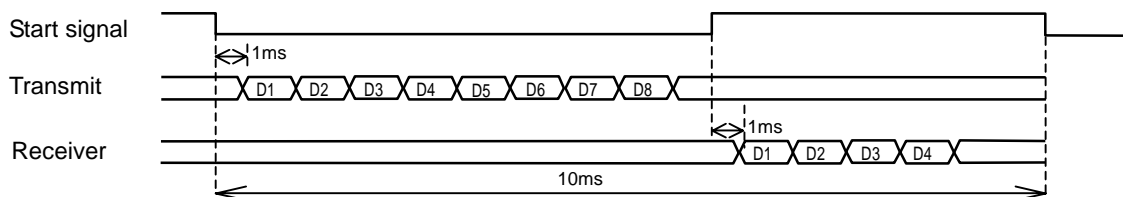
This sample program performs inter-CPU communication (transmission + reception) using SIO.

3. Description

The program performs transmission and reception (8-byte transmission + 4-byte reception) using the internal clock. It repeats communication at intervals of 10 ms.

The program uses the following pins:

- Start signal: P20
- Clock: SCK (P43)
- Transmit data: SO (P45)
- Receive data: SI (P44)



4. Passing Data

The program uses the following variables to pass the operating mode, R/W addresses, and R/W data:

[Variable: GSIOFLG] Communication flag

bit7 FRCVCP =1: Reception completed (cleared by processing routine)

[Variable: GSNDDAT] Transmit data (8 bytes)

[Variable: GRCV DAT] Receive data (4 bytes)

5. Interrupts

- TC2 interrupts (10-ms cycle): To start communication
- TC3 interrupts: To create a start signal
- SBI interrupts

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