

Interlace / Progressive Conversion IC

S2S65P10

First Step Guide

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1. OVERVIEW

This document explains the operation procedures of the S1S65010 and S2S65A00 evaluation boards that contain the sample software for S2S65P10.

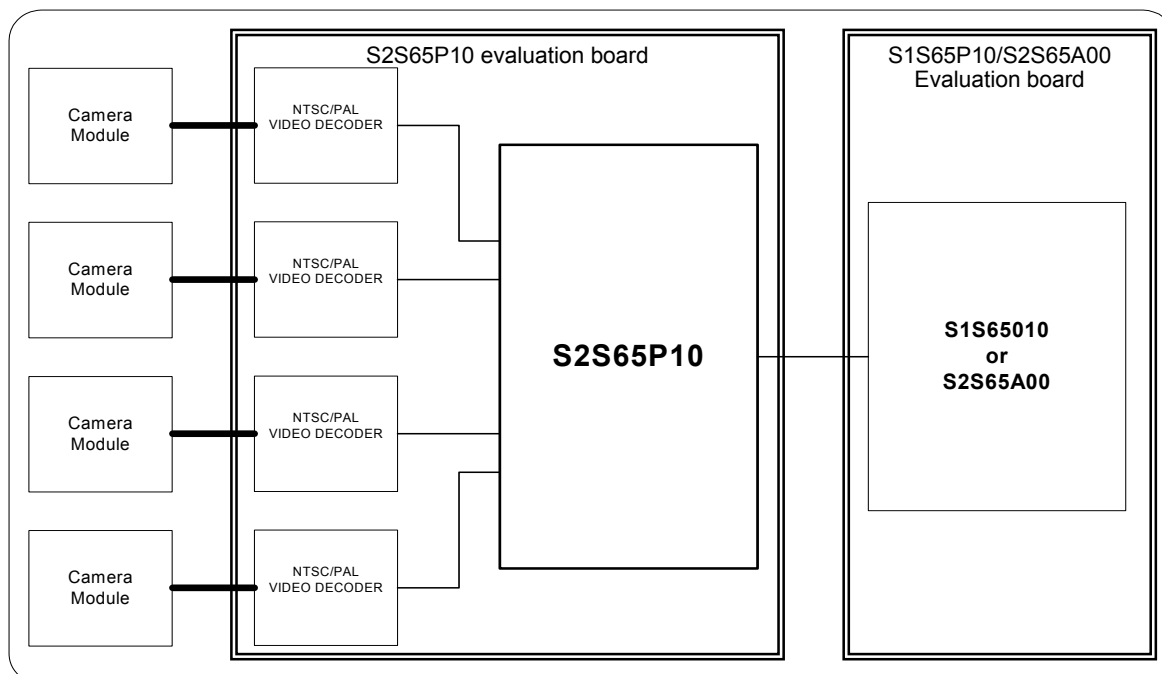
2. CONTENTS OF SAMPLE SOFTWARE

There are three types of operation modes.

- ① Fixed screen output mode
Enables you to output the input from channel 1 and operate three types of I/P conversion modes.
- ② Automatic switching screen output mode
Enables 2-input switching (channels 1 and 2) or 4-input switching (channels 1 to 4) in the 30- or 150-frame output cycle. I/P conversion is available in the Weave mode.
- ③ 4-input composite screen output mode
Sets each channel to the QVGA size to combine four screens and changes to the VGA size to output data.

3. OPERATION DESCRIPTION

- ① When combining the S2S65P10 and S1S65010 evaluation boards:
Display images from the S2S65010 evaluation board on your PC via network.
- ② When combining the S2S65P10 and S2S65A00 evaluation boards:
Save data on the memory card of the S2S65A00 evaluation board. Remove the card from the board once and insert it in your PC; otherwise, after getting images, connect a USB to your PC to view images.

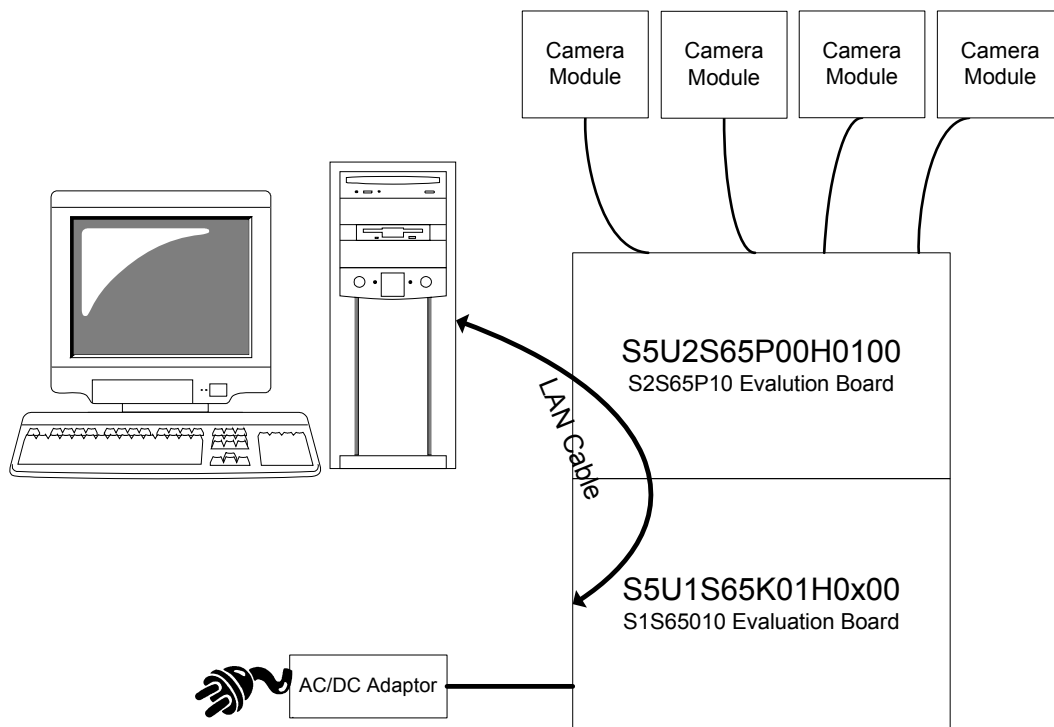


4. SAMPLE OPERATION

4. SAMPLE OPERATION

4.1 When Using the S1S65010 and S2S65P10 Evaluation Boards

① Connect two boards and also connect cameras.



- Number of connectable camera boards Max. 4 boards
- LAN cable 1 unit
- AC-DC power adapter 1 unit (Attached to the S1S65010 evaluation board.)

② Configure network settings on your PC.

- Install Java software.
<http://www.java.com/ja/>
- Enter the following network set values on your PC.
IP address: 192.168.1.XXX (With XXX=2 to 254 excluding 253)
Sub net mask: 255.255.255.0
Default gateway: 192.168.1.1

- ③ Set the switches on the S2S65P10 evaluation board.
- | | |
|----------|--------------------------|
| SW1 | “OFF” |
| SW2 | “OFF” |
| SW3 | “OFF” |
| SW4 | “OFF” |
| SW5[4:1] | “ON”, “OFF”, “ON”, “OFF” |
| SW6 | “65K” |
- ④ Set the switches on the S1S65010 evaluation board
- | | |
|-----------|--|
| SW1[6:1] | “OFF”, “OFF”, “OFF”, “OFF”, “ON”, “ON” |
| SW2 | “OFF” |
| SW4 | “OFF” |
| SW5 | “①” |
| SW6[8:1] | “OFF”, “OFF”, “OFF”, “OFF”, “OFF”, “OFF”, “OFF”, “OFF” |
| SW7 | “OFF” |
| SW8 | “①” |
| SW9 | “ON” |
| SW10[8:1] | “OFF”, “OFF”, “OFF”, “OFF”, “OFF”, “OFF”, “OFF”, “OFF” |
- Set by operation mode.
- ⑤ Supply the power to cameras.
- ⑥ Supply the power to the S1S65010 evaluation board.
- ⑦ [For uITRON]
CN3 and PC's COM port jointed.
9600bps, 8 bit data, No Parity bit, Stop bit 1, No flow control
The joint camera is modified to S2S65P10. See “S2S65P10 DRIVER EMBEDDED MANUAL” Chapter 4.2.

Activate the browser on your PC.

- Type “http://192.168.1.253” in the address field of the browser, and press the [Enter] key.
- The S1S65010 evaluation board will display the menu. Click [High-Speed Movie Display]
- Another window is opened, and a camera image will appear.

[For Linux]

Start our Viewer software. For operations, see the Viewer manual attached to the evaluation board.

* Changing the operation mode

- ① Determine the operation mode depending on the SW10[8:6] setting of the S1S65010 evaluation board.

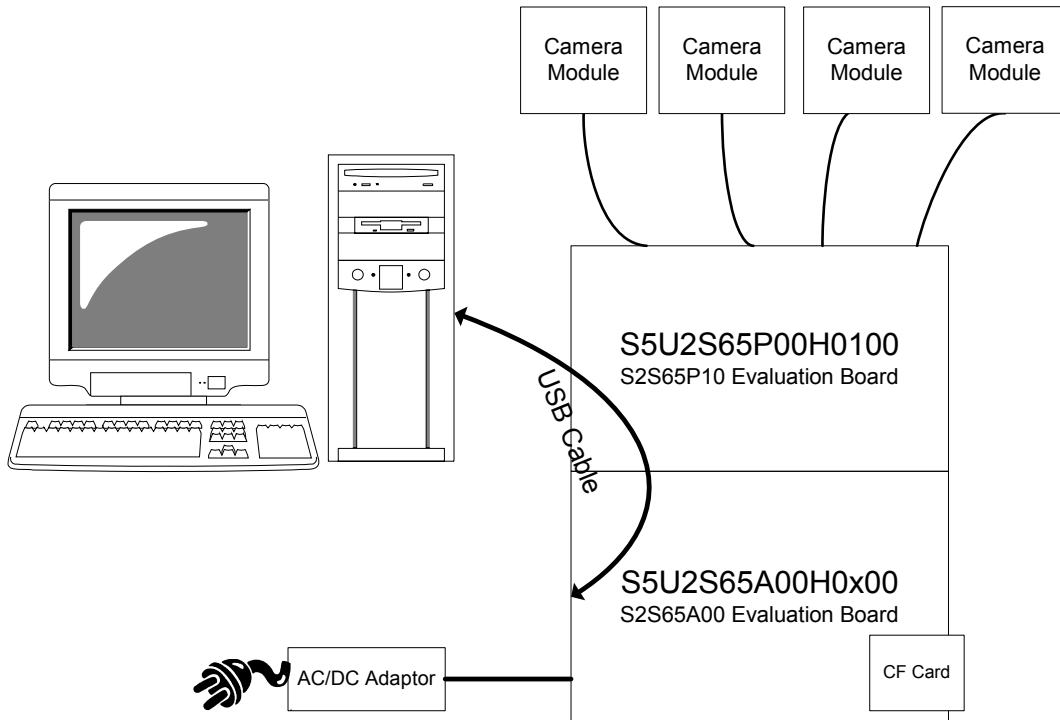
SW10[8,7,6]	Operation mode	I/P conversion mode	Input channel
ON,ON,OFF	Fixed screen output	Weave	1
ON,OFF,ON	Fixed screen output	Bob	1
OF,OFF,ON	Fixed screen output	Interpolation	1
OFF,ON,ON	Automatic switching screen output	Weave	1, 2 *30-frame switching
OFF,ON,OFF	Automatic switching screen output	Weave	1, 2, 3, 4 *30-frame switching
OFF,OFF,ON	4-input composite screen output	None	1, 2 *A channel with no input is blank.
OFF,OFF,OFF	4-input composite screen output	None	1,2,3,4

- ② Press SW3 on the S1S65010 evaluation board, and reset the evaluation board.
- ③ [For uITRON]
PC browser
[For Linux]
Restart the Viewer software.

4. SAMPLE OPERATION

4.2 When Using the S2S65A00 and S2S65P10 Evaluation Boards

- ① Connect two boards and also connect cameras.



- Connect the S2S65P10 evaluation board to the CAMERA1 connector of the S2S65A00 evaluation board.
- Number of connectable camera boards Max. 4 boards
- CF Card 1 unit
The camera item of “config.txt” inside the CF Card is modified to S2S65P10. See “S2S65A00 Demo Application MANUAL” Chapter 12.4.
- USB cable 1 unit
- AC-DC power adapter 1 unit (Attached to the S2S65A00 evaluation board.)

- ② Set the switches on the S2S65P10 evaluation board.

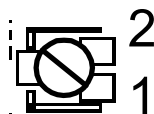
SW1	“OFF”
SW2	“OFF”
SW3	“OFF”
SW4	“OFF”
SW5[4:1]	“ON”, “OFF”, “ON”, “OFF”
SW6	“65K”

- ③ Set the switches on the S2S65A00 evaluation board.

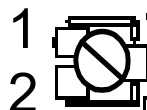
• Dip Switch	
SW2[8:1]	“OFF”, “OFF”, “OFF”, “OFF”, “OFF”, “OFF”, “OFF”, “OFF”
SW3	“ON”
SW9[6:1]	“OFF”, “ON”, “OFF”, “ON”, “OFF”, “ON”
SW11	“OFF”
SW12	“ON”

- Rotary Switch: Rotary switch: It shows the switch direction as seen when CN6 and CN7 on the S2S65A00 evaluation board are at the top.

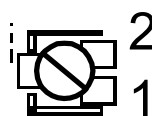
SW1



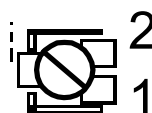
SW5



SW6



SW7



- ④ Supply the power to cameras.
- ⑤ Supply the power to the S2S65A00 evaluation board.
- ⑥ Press the SW8 trigger switch on the S2S65A00 evaluation board to read images.
 - Connecting your PC to the board via a USB cable will cause the CF card to be recognized as a removable disk, so you can confirm files in the CF card.
 - Remove the CF card from the evaluation board and connect it to your PC; you will be able to check the files.

* Changing the operation mode

- ① Determine the operation mode depending on the SW2[5:8] setting on the S2S65A00 evaluation board.

SW[5,6]	SW[7,8]	Operation mode	I/P conversion mode	Input channel
ON,OFF	OFF,OFF	Fixed screen output	Weave	1
	ON,OFF		Bob	1
	OFF,ON		Interpolation	1
	ON,ON		Reserved	
OFF,ON	OFF,OFF	Automatic switching screen output	Weave	1, 2 *30-frame switching
	ON,OFF			1, 2 *150-frame switching
	OFF,ON			1, 2, 3, 4 *30-frame switching
	ON,ON			1, 2, 3, 4 *150-frame switching
ON,ON	OFF,OFF	4-input composite screen output	None	1 *A channel with no input is blank.
	ON,OFF			1,2 *A channel with no input is blank.
	OFF,ON			1, 2, 3 *A channel with no input is blank.
	ON,ON			1,2,3,4

- ② Press SW13 on the S2S65A00 evaluation board, and reset the evaluation board.

REVISION HISTORY

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Rev.	Date	Description	Person
0.00	2007/04/23	First Edition	C.Higuchi
0.80	2007/06/26	Change "Demo Manual" to "First Step Guide".	T.Suzuki
1.00	2007/08/01	Release Edition	T.Suzuki

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