

SL-5600 / Docking Station (CE-ST9)

Serial I/O (16-pin) Specifications

Revision 1.0.0
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Mobile Systems Division
Communications Systems Group
SHARP CORPORATION

1. Signal Pin Assignment

1.1. Serial Mode

SL-5600

No.	Symbol		IN/OUT	Description
1	PWR IN(+)			Power supply to the device, + side
2	PWR IN(+)			Power supply to the device, + side
3	SD	Transmitted Data	OUT	Transmitted data
4	RD	Received Data	IN	Received data
5	RS	Request to send	OUT	Request to send data
6	CS	Clear to send	IN	Data transmission enabled
7	DR	Data set ready	IN	Data set ready
8	GND	Signal GND	GND	Signal GND
9	USB D+	USB Data + (bi-directional)	IN/OUT	USB data signal, +
10	WakeUp	Sync signal	IN	Trigger signal for synchronization to PC
11	VCC	VCC	VCC	Power supply Vcci (max) = 200 mA
12	USB D-	USB Data – (bi-directional)	IN/OUT	USB data signal, -
13	Reserve	Reserve	Reserve	Pulled down internally
14	ER	Data terminal ready	OUT	Data terminal ready
15	PWR GND			Power supply to the device, - side
16	PWR GND			Power supply to the device, - side
	FG	Frame GND		

CE-ST9 (Docking Station)

No.	Symbol		IN/OUT	Description
1				
2				
3	SD	Transmitted Data	OUT	Transmitted data
4	RD	Received Data	IN	Received data
5	RS	Request to send	OUT	Request to send data
6	CS	Clear to send	IN	Data transmission enabled
7	DR	Data set ready	IN	Data set ready
8	GND	Signal GND	GND	Signal GND
9	Reserve	Reserve	Reserve	Reserve
10	Sync	Sync signal	IN	Trigger signal for synchronization from PC
11	VCC	VCC	VCC	Power supply Vcci (max) = 200 mA
12	Reserve	Reserve	Reserve	Reserve
13	Reserve	Reserve	Reserve	Reserve
14	ER	Data terminal ready	OUT	Data terminal ready
15				
16				
	FG	Frame GND		

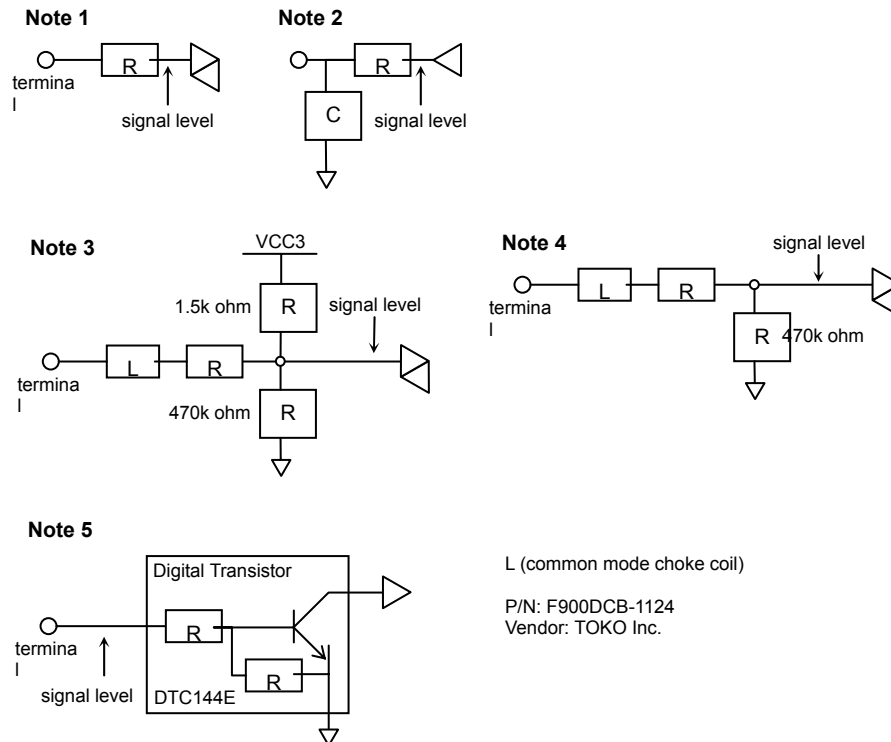
2. Electrical Specifications

2.1. Digital Input / Output

	Serial Mode	
	Signal Level	pin(s)
V _{IH} 1(min)	2.4 V	4, 9, 12
V _{IL} 1(max)	0.2VCC	4, 9, 12
V _{IH} 2(min)	2.0 V	6, 7
V _{IL} 2(max)	0.8 V	6, 7
V _{OH} 1(min)	0.8VCC	3, 9, 12
V _{OL} 1(max)	0.2VCC	3, 9, 12
V _{OH} 2(min)	VCC-0.4 V	5, 14
V _{OL} 2(max)	GND+0.4 V	5, 14
V _{IH} 3(min)	3.0 V	10
V _{IL} 3(max)	0.5 V	10

2.2. Input / Output Type

Type	Description	Pin(s)	Remarks
Type 1	100 ohm	3, 4	Note 1
Type 2	1k ohm	5, 6, 7	Note 1
Type 3	1k ohm + 4700 pF	14	Note 2
Type 4	24 ohm + Common mode choke coil	9	Note 3
Type 5	24 ohm + Common mode choke coil	12	Note 4
Type 6	Digital Transistor	10	Note 5



2.3. Power Line

VCC Line:

VCC = 3.3V +/- 0.3V

Beads are inserted on this power supply line. See below for bead details:

(beads)

P/N: MMZ1608Y152

Vendor: TDK Corporation

Characteristics: DCR \leq 0.7 ohm, Z = 1500 ohm (typ.) at 100 MHz

GND Line:

GND = 0 V

Beads and fuse are inserted on this GND line. See below for details:

(beads)

P/N: MMZ1608Y152

Vendor: TDK Corporation

Characteristics: DCR \leq 0.7 ohm, Z = 1500 ohm (typ.) at 100 MHz

(fuse)

P/N: KAB3202631NA29

Vendor: Matsuo Electric Corporation

Characteristics: DCR \leq 0.24 ohm, I = 630 mA

2.4. Absolute Maximum Ratings

$V_{IH} \text{ (max)} = VCC + 0.3 \text{ V}$

$V_{IL} \text{ (min)} = GND - 0.3 \text{ V}$

$I_{VCC} = \text{max } 10 \text{ mA}$ (current that can be supplied from the SL-5600)

3. Mechanical Specifications

(Also See mechanical dimensions on separate file)

3.1. Pin Layouts

On the SL-5600

Connector Used:

P/N: TCX3104-010100 (Hosiden Corporation)

On the Docking Station

Connector Used:

P/N: TCX3104-010100 (Hosiden Corporation)

3.2. Applicable Connector

If you will be creating a cable that will fit the serial connectors used on both the unit and the docking station, please use the following connector:

P/N: TCX3106-010100 (Hosiden Corporation)