ZUD-F35-10-0072

Created by:
Renesas Electronics Corporation
MCU Tool Product Marketing
Department

RX610 Group Connection Example

 The following is a connection example for the RX Family RX610 Group and E1/E20 emulator(14pin).
Pull-up and pull-down resistance values are provided for reference only. Please perform an evaluation on your system to confirm actual values.
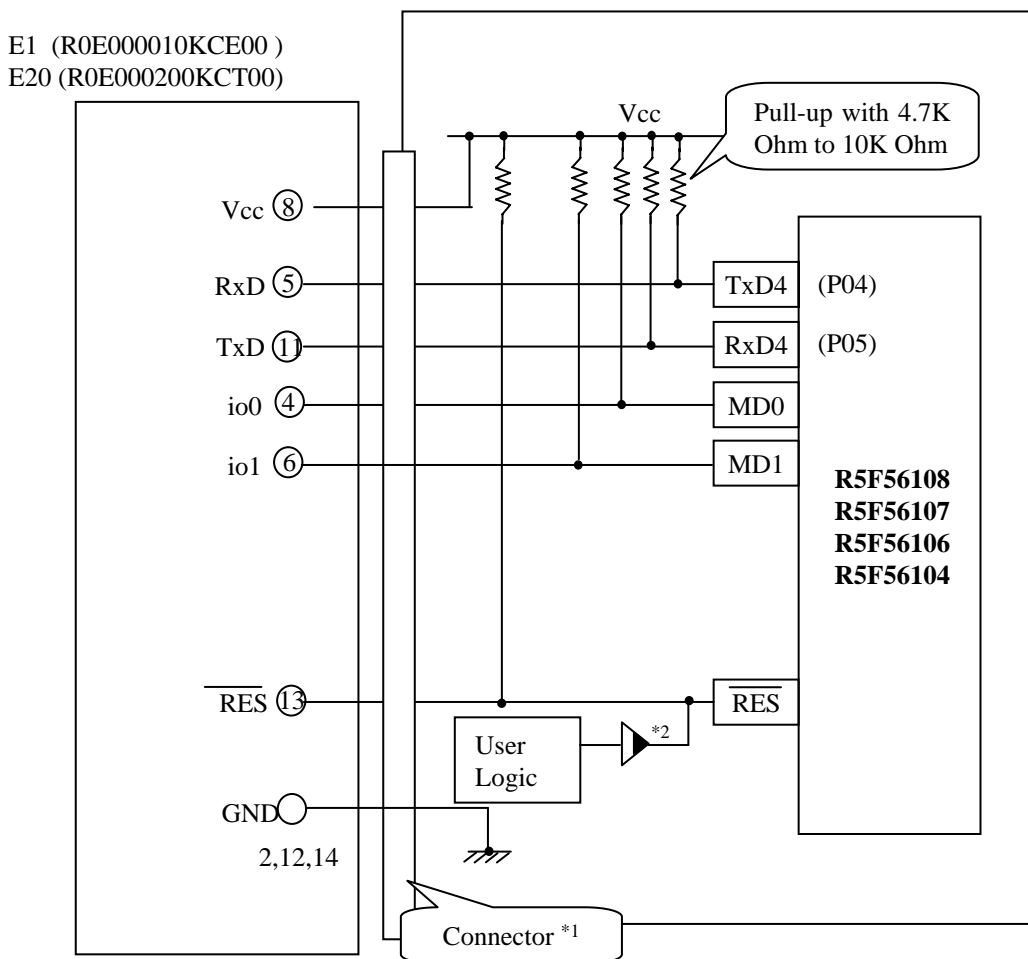 Although this connection example has been confirmed on paper, it is the user's responsibility to perform an evaluation on the user system to determine applicability. Renesas assumes no responsibility for determining the applicability of this example on the user system.

•This connection example is for using the Flash Development ToolKit with E1/E20 as a flash programmer.
When you use E1 or E20 as a debugger, please refer to the connection example in the E1/E20 Emulator Additional Document for User's Manual prepared for each MCU group. You can download the E1/E20 Emulator Additional Document for User's Manual from the following URLs.
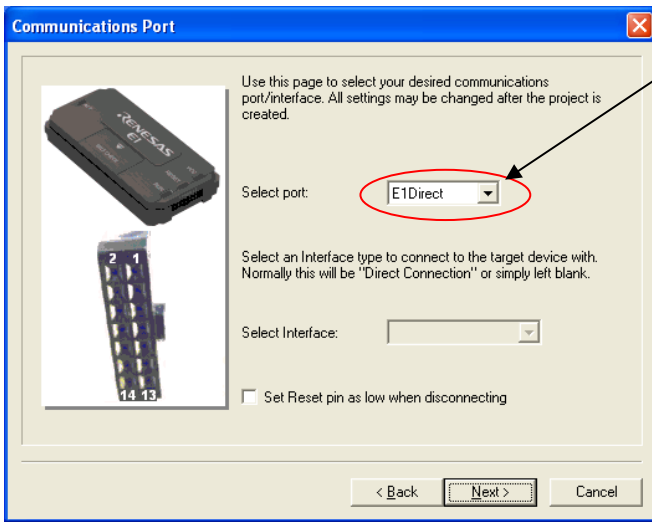
 http://www.renesas.com/e1
 http://www.renesas.com/e20

*1 Connector manufacturer and model name

	Model Name	Manufacturer	Specification type
14-pin connector	2514-6002	3M Limited	14-pin straight type (recommended for overseas use)

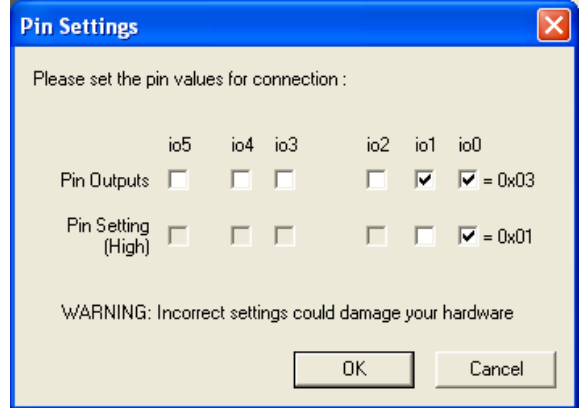 *2 Open connector buffer
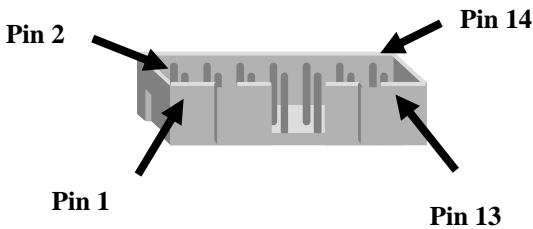
Flash Development ToolKit Settings

Select [E1aDirect]
or
Select [E20aDirect]

Pin Setting

E1/E20 14pin Connector:

Pin 2

Pin 14

Pin 1

Pin 13

Pin No.	E1 Pin Name (Flash Development ToolKit Settings)
1	io4
2	GND
3	Io5
4	Io0
5	RxD (user-side TxD)
6	io1
7	Io3
8	UVcc
9	UVcc2
10	Io2
11	TxD (user-side RxD)
12	GND
13	/RES
14	GND

(1) Make sure pins 2, 8, 12, 13 and 14 are connected

(2) Set unused pins to NC (Non Connect).

Rev.1.0e

RX62T Group Connection Example

The following is a connection example for the RX Family RX62T Group and E1/E20 emulator(14pin). Pull-up and pull-down resistance values are provided for reference only. Please perform an evaluation on your system to confirm actual values.
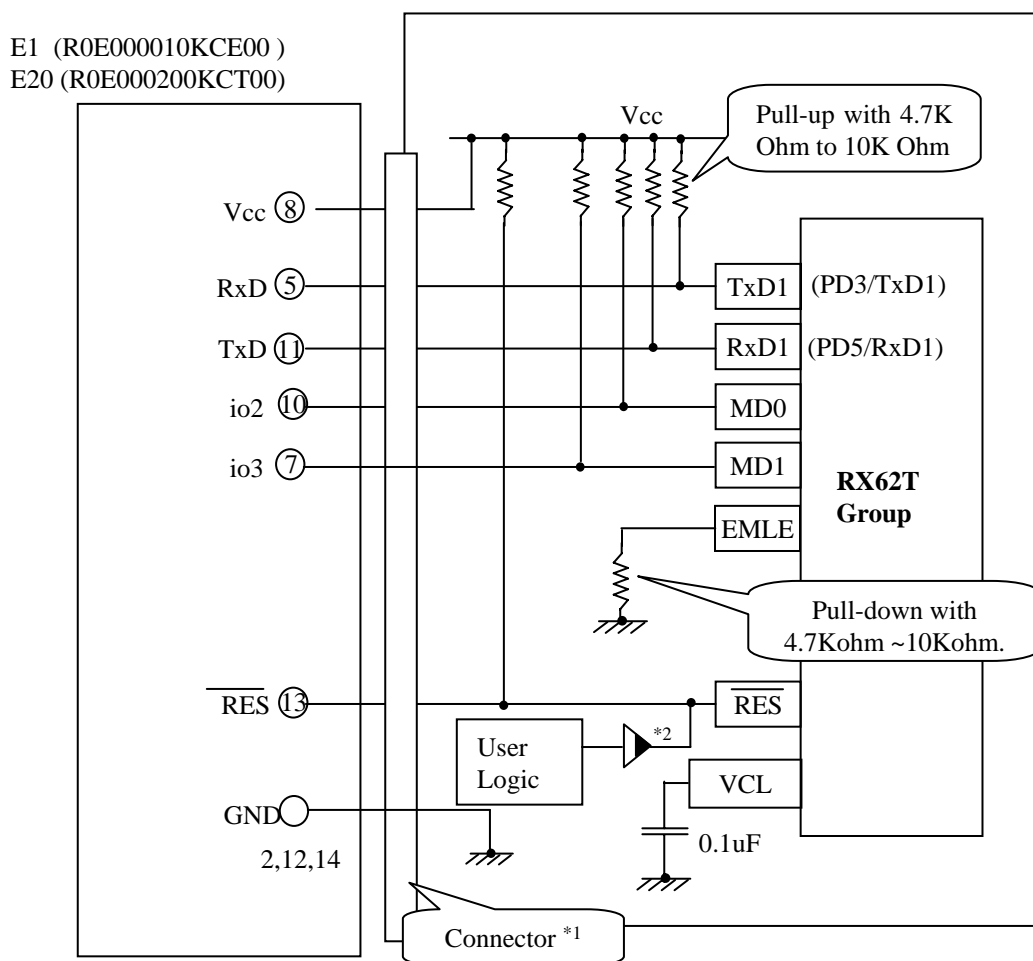
Although this connection example has been confirmed on paper, it is the user's responsibility to perform an evaluation on the user system to determine applicability. Renesas assumes no responsibility for determining the applicability of this example on the user system.

•This connection example is for using the Flash Development ToolKit with E1/E20 as a flash programmer. When you use E1 or E20 as a debugger, please refer to the connection example in the E1/E20 Emulator Additional Document for User's Manual prepared for each MCU group. You can download the E1/E20 Emulator Additional Document for User's Manual from the following URLs.
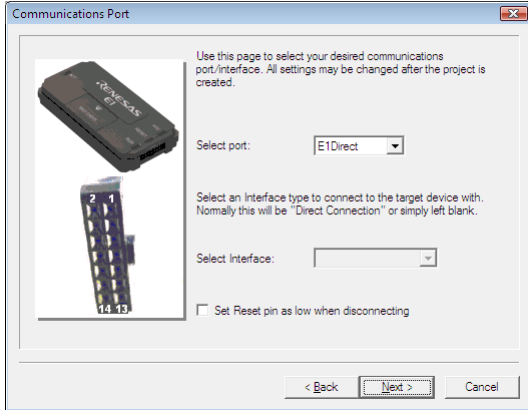
http://www.renesas.com/e1
http://www.renesas.com/e20

*1 Connector manufacturer and model name

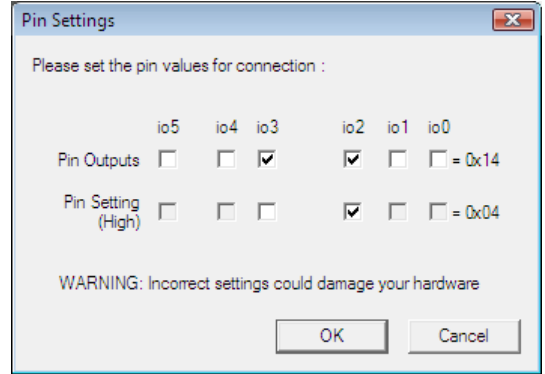|	Model Name	Manufacturer	Specification type
14-pin connector	2514-6002	3M Limited	14-pin straight type (recommended for overseas use)

*2 Open connector buffer
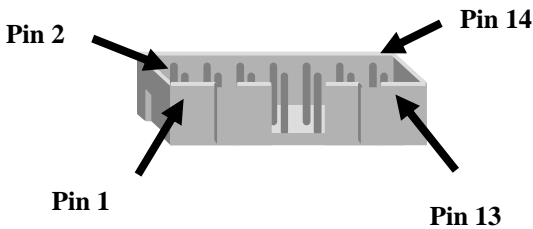
Flash Development ToolKit Settings

Select [E1aDirect]
or
Select [E20aDirect]

Pin Setting

E1/E20 14pin Connector:

Pin 2   **Pin 14**

Pin 1   **Pin 13**

Pin No.	E1 Pin Name (Flash Development ToolKit Settings)
1	io4
2	GND
3	Io5
4	Io0
5	RxD (user-side TxD)
6	io1
7	Io3
8	UVcc
9	UVcc2
10	Io2
11	TxD (user-side RxD)
12	GND
13	/RES
14	GND

(1) Make sure pins 2, 8, 12, 13 and 14 are connected

(2) Set unused pins to NC (Non Connect).

Rev.1. 4e

ZUD-F35-11-0052

Renesas Electronics Corp.
MCU Tool Product Marketing Dept.

RX621,RX62N Group and E1 Connection

The following is a connection example for the RX Family RX621,RX62N Group and E1/E20 emulator(14pin). Pull-up and pull-down resistance values are provided for reference only. Please perform an evaluation on your system to confirm actual values.

Although this connection example has been confirmed on paper, it is the user's responsibility to perform an evaluation on the user system to determine applicability. Renesas assumes no responsibility for determining the applicability of this example on the user system.
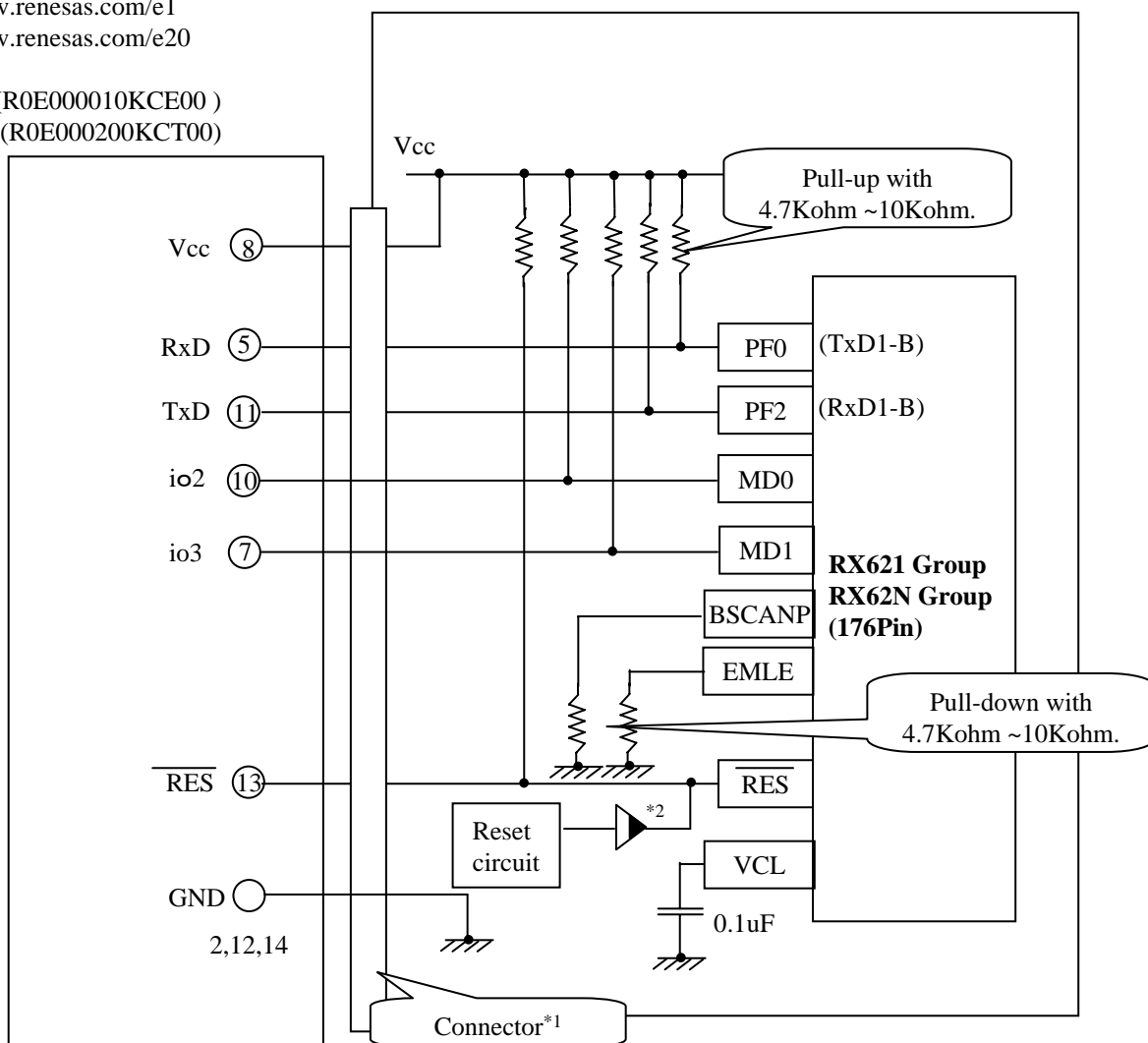
This connection example is for using the Flash Development ToolKit with E1/E20 as a flash programmer.

When you use E1 or E20 as a debugger, please refer to the connection example in the E1/E20 Emulator Additional Document for User's Manual prepared for each MCU group. You can download the E1/E20 Emulator Additional Document for User's Manual from the following URLs.

http://www.renesas.com/e1
http://www.renesas.com/e20

*1 Connector manufacturer and model name

	Model Name	Manufacturer	Specification type
14-pin connector	2514-6002	3M Limited	14-pin straight type (recommended for overseas use)

*2 Open connector buffer

E1 (R0E000010KCE00)
E20 (R0E000200KCT00)
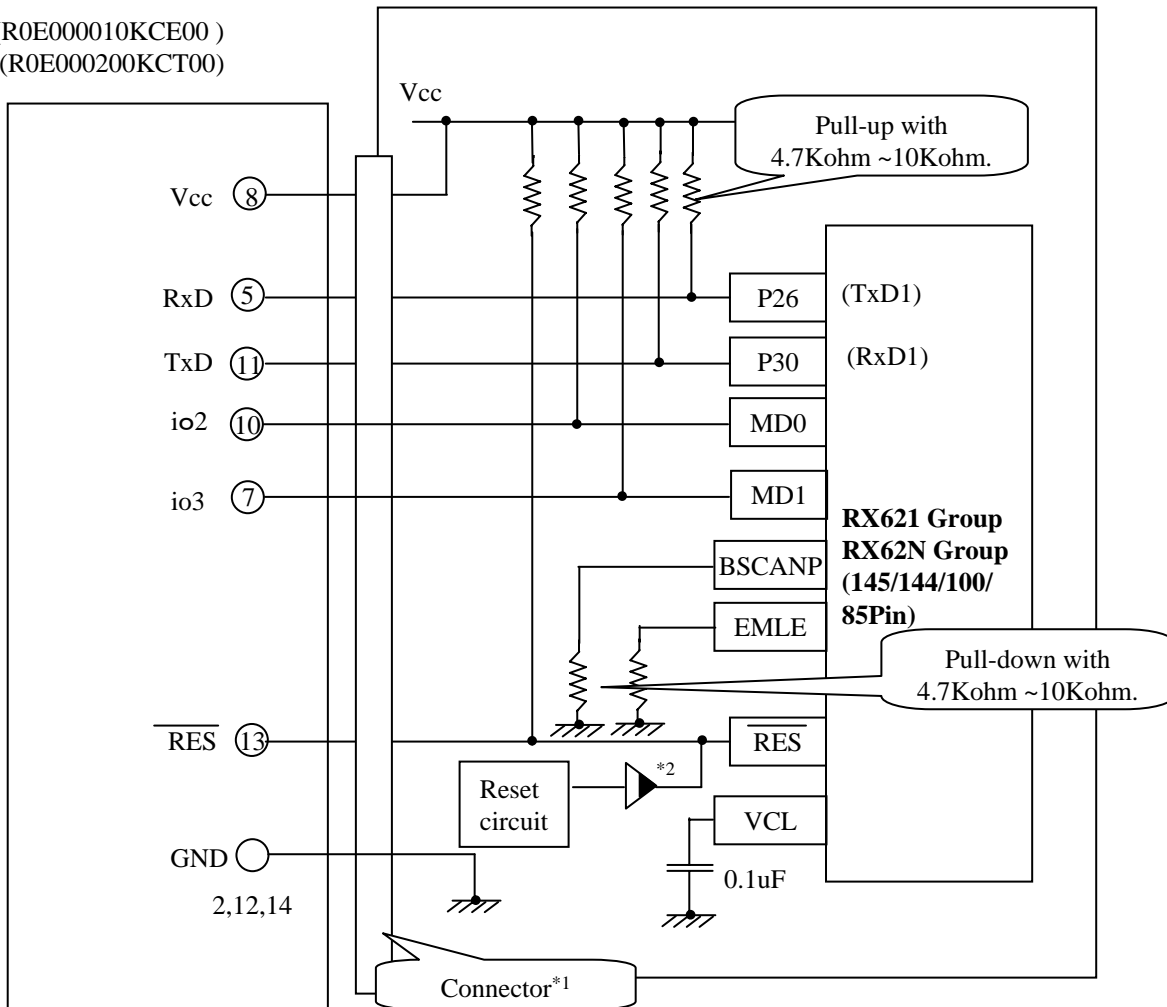
Vcc

Pull-up with
4.7Kohm ~10Kohm.

Vcc ⑧

RxD ⑤ — P26 (TxD1)

TxD ⑪ — P30 (RxD1)

io2 ⑩ — MD0

io3 ⑦ — MD1

BSCANP

EMLE

RX621 Group
RX62N Group
(145/144/100/
85Pin)

Pull-down with
4.7Kohm ~10Kohm.

$\overline{\text{RES}}$ ⑬ — $\overline{\text{RES}}$

Reset
circuit — *2

VCL

GND ◯ 0.1uF

2,12,14

Connector*1

*1 Connector manufacturer and model name

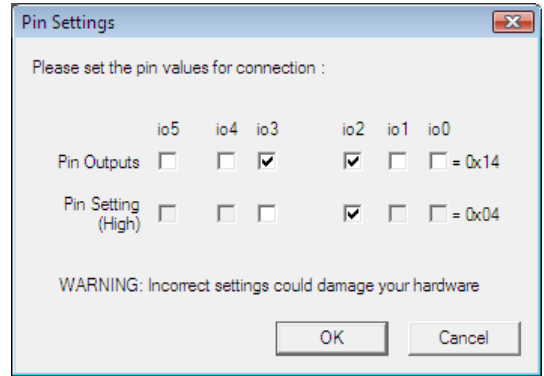|	Model Name	Manufacturer	Specification type
14-pin connector	2514-6002	3M Limited	14-pin straight type (recommended for overseas use)

*2 Open connector buffer
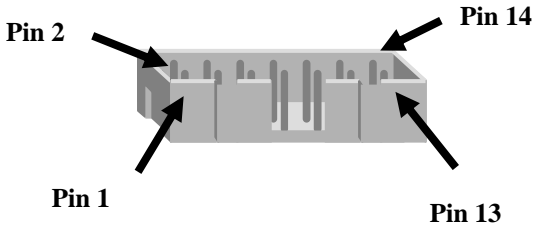
Flash Development ToolKit Settings

Select [E1aDirect]
or
Select [E20aDirect]

Pin Setting

E1/E20 14pin Connector:

Pin 2

Pin 14

Pin 1

Pin 13
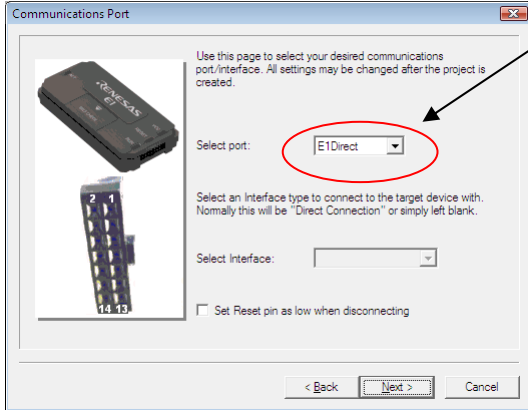
Pin #	E1/E20 Pin name (Setting for FDT)
1	io4
2	GND
3	io5
4	io0
5	RxD (User side: TxD)
6	io1
7	Io3
8	UVcc
9	UVcc2
10	Io2
11	TxD (User side: RxD)
12	GND
13	/RES
14	GND

(1) Make sure pins 2, 8, 12, 13 and 14 are connected

(2) Set unused pins to NC (Non Connect).