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April 1st, 2010
Renesas Electronics Corporation

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7544 Group

Termination of Unused Pins

1. Abstract

The following article introduces and shows the termination of unused pins on the 7544 Group device.

2. Introduction

The explanation of this issue is applied to the following condition:
Applicable MCU: 7544 Group

3. Contents

3.1 Termination of Unused Pins

Table 3.1 Termination of Unused Pins

Pin/Port Name	Termination
P0, P1, P2, P3	- Set a port to the input mode and connect the port to Vcc or Vss through a 1 kΩ to 10 kΩ resistor. The port which can select a built-in pull-up resistor can also use the built-in pull-up resistor. - Set a port to the output mode, and leave the port open at "H" or "L".
VREF	Connect to Vss (GND).
XIN	When an on-chip oscillator is used as the main clock, connect this pin to Vcc through a 1 kΩ to 10 kΩ resistor.
XOUT	- When an external clock is used, leave this pin open. - When an on-chip oscillator is used as the main clock, leave this pin open.

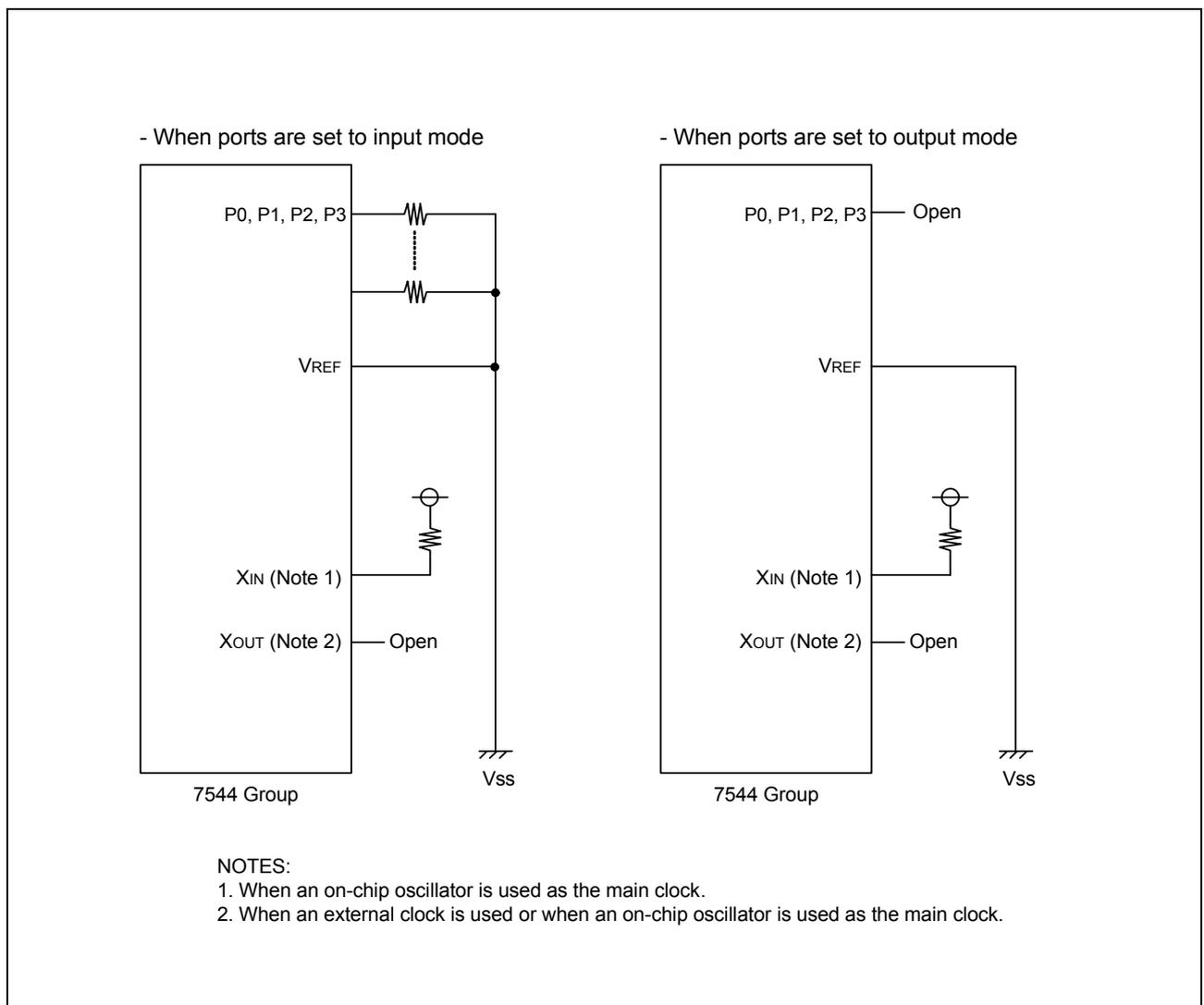


Figure 3.1 Termination Example of Unused Pins

4. Reference

Renesas Technology Corporation Semiconductor Home Page
<http://www.renesas.com>

E-mail Support
E-mail: support_apl@renesas.com

Data Sheet
7544 group
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REVISION HISTORY	7544 Group Termination of Unused Pins Application Note
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Rev.	Date	Description	
		Page	Summary
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