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April 1st, 2010
Renesas Electronics Corporation

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38D2 Group

Key Input Interrupt

1. Abstract

The following article introduces and shows an example of how to use the Key Input Interrupt on the 38D2 Group device.

2. Introduction

The application explained in this document applies to the following MCU and parameter(s):

Applicable MCU: 38D2 Group

Oscillation frequency: 4 MHz

This sample program may include operations of unused bit functions for the convenience of the SFR bit layout. Set the values according to the operational conditions of the user system.

3. Contents

3.1 Key input interrupt

Outline: Any key input generates a key input interrupt request.
Exit from stop mode via key input interrupt.

Specifications:

- Key input pins: P00 ~ P03, Pull-up
- Scan output pins of key matrix: P04 ~ P07

Figure 3.1 shows the Connection Diagram, Figure 3.2 shows the Example of Timing for Key Input Interrupt Operation in Stop Mode, Figure 3.3 shows the Relevant Register Settings, and Figure 3.4 shows the Control Procedure.

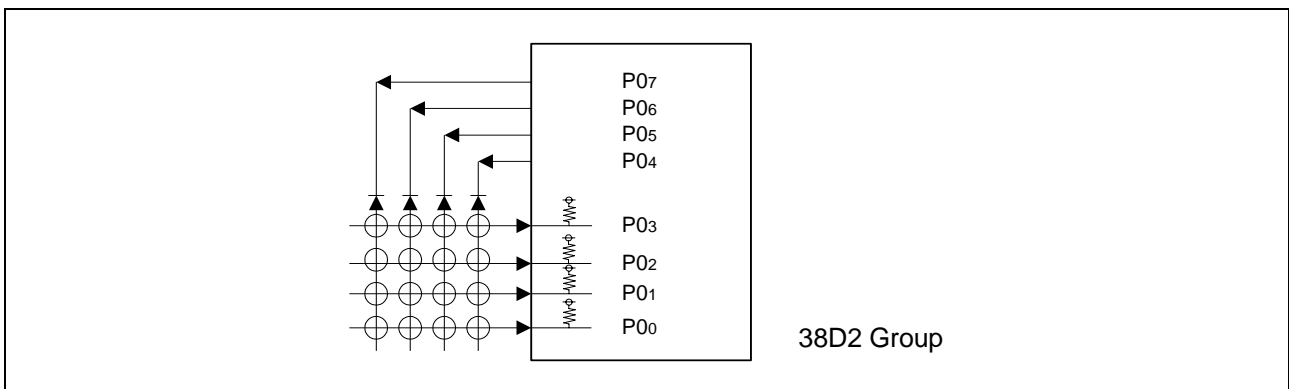


Figure 3.1 Connection Diagram

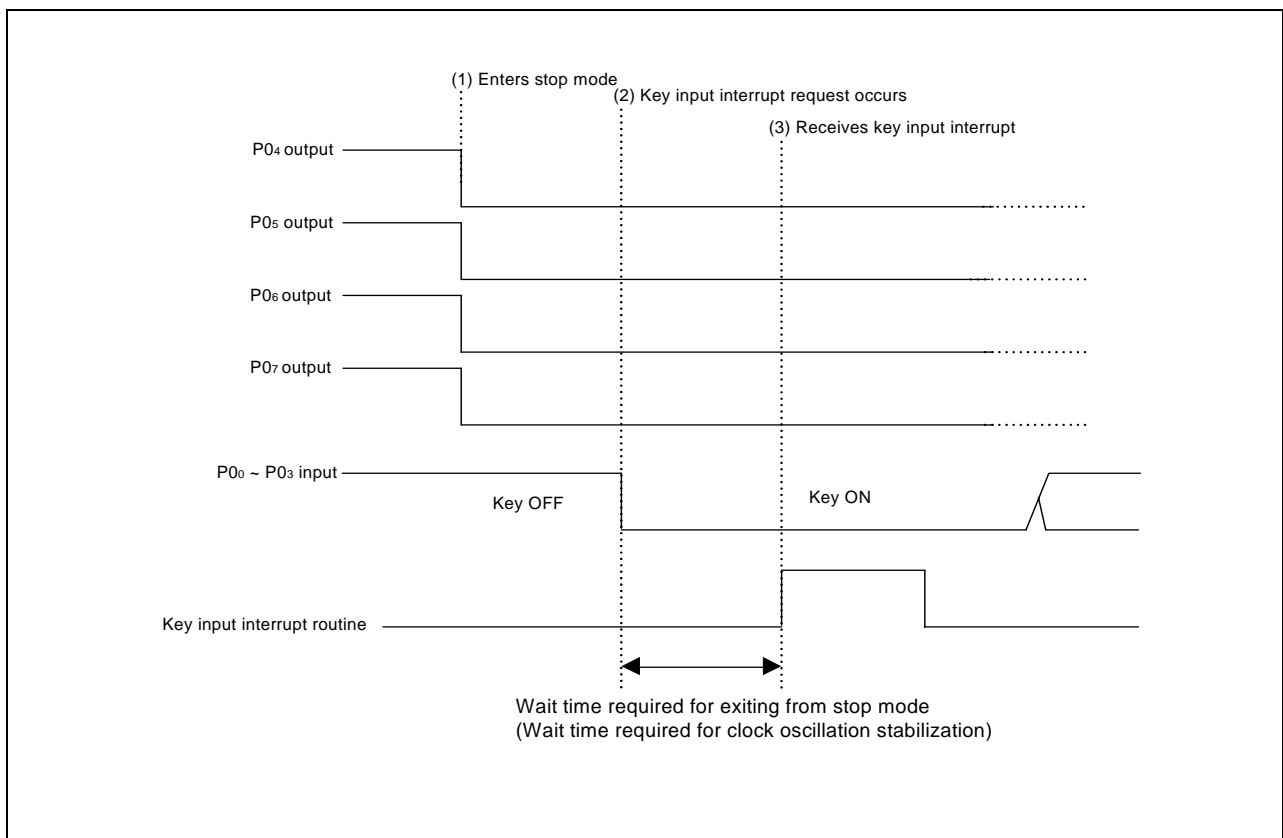


Figure 3.2 Example of Timing for Key Input Interrupt Operation in Stop Mode

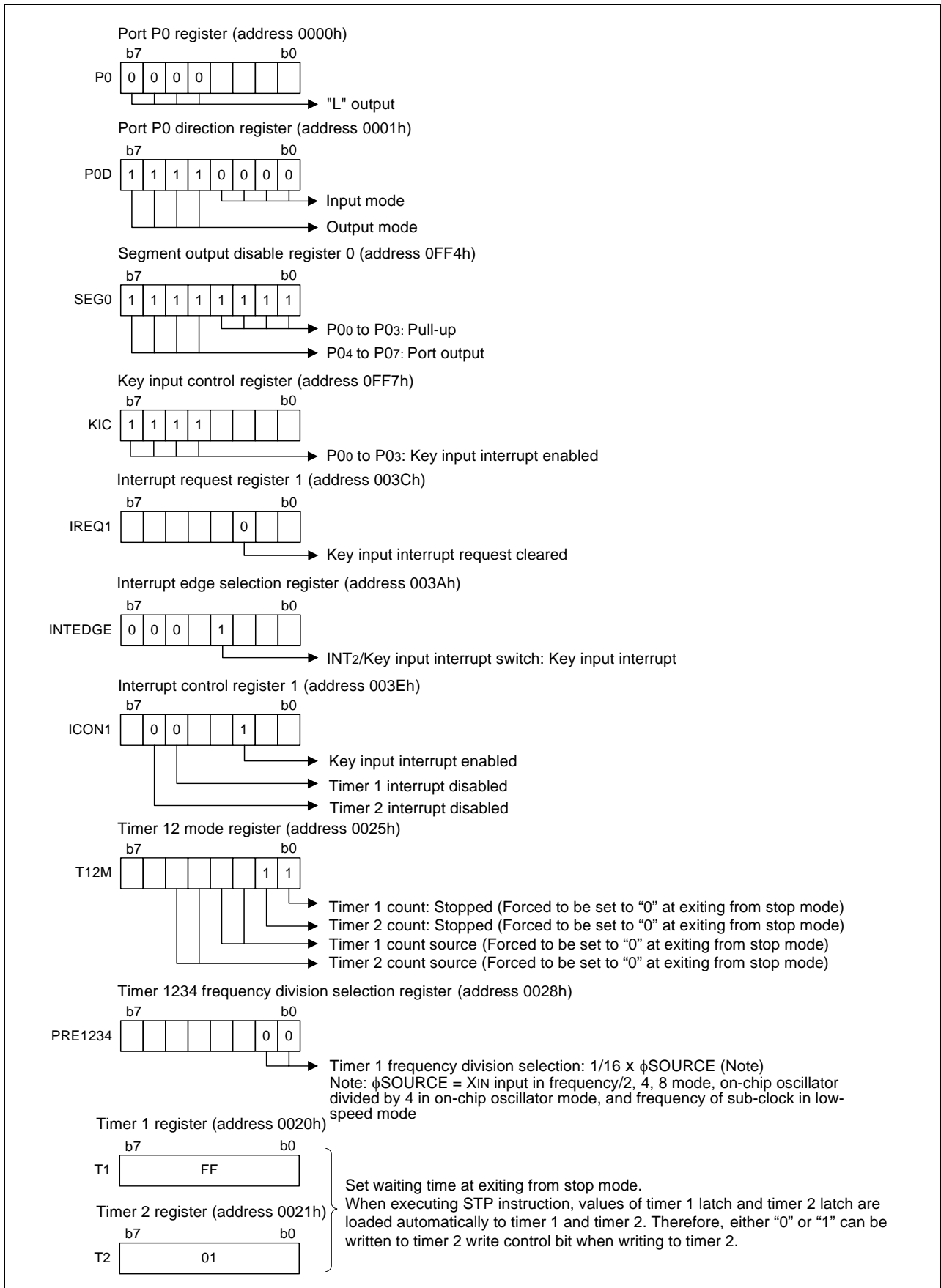


Figure 3.3 Relevant Register Settings

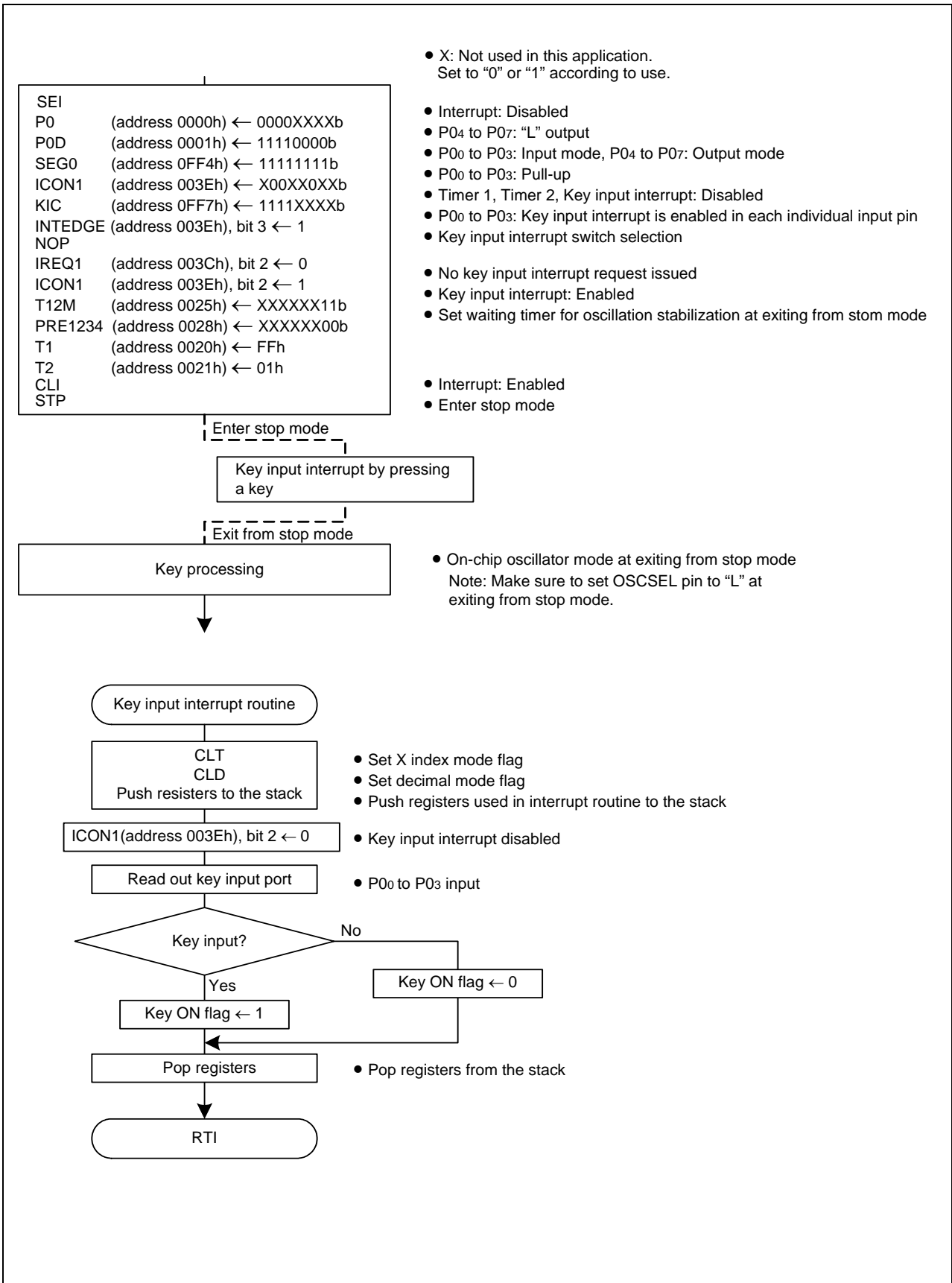


Figure 3.4 Control Procedure

4. Sample programming Code

Download a sample program from the Renesas Technology website.
To download, click “Application Notes” in the left side menu on the page of the 38D2 Group.

5. Reference Document

Datasheet
38D2 Group Datasheet
Download the latest version from the Renesas Technology website.

Technical News/Technical Update
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REVISION HISTORY	38D2 Group Key Input Interrupt
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Rev.	Date	Description	
		Page	Summary
1.00	Feb 9, 2007	–	First Edition issued

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