

RENESAS TECHNICAL UPDATE

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Product Category	MPU & MCU	Document No.	TN-V85-A030A/E	Rev.	1.00
Title	V850E2/Dx4, V850E2/Dx4-H Usage restriction of IIS Slave mode		Information Category	Technical Notification	
Applicable Product	Refer to a body	Lot No.	Reference Document	<ul style="list-style-type: none"> • V850E2/Dx4(-H)User Manual (R01UH0075ED0104) • V850E2/DK4-H UserManual (R01UH0077ED0104) 	
		ALL lots			

This document describes the following restrictions about IIS Slave mode of the affected products mentioned above.

1. Restrictions

[Conditions and Restrictions]

Restriction1

In using the I2S Format transfer in IISA slave mode, the Frame error interrupt(IISAnTFERR) is not generated by Frame error*1 occurrence at start transfer .

*1: when a cycle number per frame is longer than the serial clock cycle which is set.

Restriction2

In using the Serial Audio Format transfer in IISA slave mode, the Frame error interrupt(IISAnTFERR) is not generated by Frame error*2 occurrence at start transfer .

And the communication of right channel data after the left channel data communication is started 1 clock early.

*2: when a cycle number per frame is shorter than the serial clock cycle which is set.

2. Workaround(counter measure of the above restriction)

There are workarounds to avoid the restriction as below.

Counter Measure of Restriction1

The first 1 frame transfer shall transmit invalid data(IISAnIDL=0 , then data is "0").

Counter Measure of Restriction2

The first 1 frame transfer shall transmit invalid data(IISAnIDL=0 , then data is "0").

And please configure following one of them(1) or 2)) additionally.

- 1) In case of using only one transfer direction, it shall transmit 2 frame dummy data before the start of the transfer operation.

- 2) In case of using two transfer directions, please configure as follows.
 - 2-1) The RX direction shall be activated first.
 - 2-2) The TX direction shall follow after at least 2 frame cycles delay.
 - 2-3) The RX direction should be disabled.
 - 2-4) Wait 1 frame cycle.
 - 2-5) The RX direction shall be re-enabled.

3. Target Product

Target Product Series	
V850E2/Dx4	μ PD70F3524, μ PD70F3525, μ PD70F3526
V850E2/Dx4-H	μ PD70F3529, μ PD70F 3532, μ PD70F 3535, μ PD70F 3536, μ PD70F 3537