

To our customers,

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## Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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## Customer Notification

# IE-789850-NS-EM1<sup>TM</sup>

Emulation Board

Operating Precautions

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### Target devices

**μPD789850 Subseries**

**μPD789850A Subseries**

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IE-789850-NS-EM1

**(A) Table of Operating Precautions**

No.	Outline	IE-789850-NS-EM1		
		Rev.		
		Rank <sup>Note</sup>	A	C
1	A/D Converter (Direction of use)	7	3	
2	DCAN RMES register (Direction of use)	7	3	
3	DCAN RXONLY Mode (Specification Change)	7	3	
4	Mounting advice (Direction of use)	7	7	

3: Not applicable

7: applicable

**Note:** The rank is indicated by the letter appearing at the 5<sup>th</sup> position from the left in the lot number, marked on each product.

**Caution:** Pls. refer to and consider the Operating Precautions mentioned in the Customer Notifications of the according devices, to which this Probe Board belongs.

**(B) Description of Operating Precautions**

No. 1	A/D Converter (Direction of use)			
<p><u>Details</u>                  The selection of the analog input channel for A/D conversion is done by the analog input channel specification register (ADS).                  The selection of the analog input channel on the emulation board IE-789850-NS-EM1 with control code A is different than on the real device.</p>				
<b>IE789850-NS-EM1</b>		<b>Selected Input Channel</b>	<b>Real device</b>	
<b>ADS1</b>	<b>ADS0</b>		<b>ADS1</b>	<b>ADS0</b>
0	0	ANI3	1	1
0	1	ANI2	1	0
1	0	ANI1	0	1
1	1	ANI0	0	0
No. 2	DCAN RMES register (Direction of use)			
<p><u>Details</u>                  Don't use the DN5 bit of the receive message register (RMES). The reason is, when the DN6 bit of the receive message buffer 6 is cleared in the reception status register (DSTAT), also the DN6 and DN5 bits of the receive message register (RMES) are cleared.</p>				

No. 3	<p>DCAN RXONLY Mode (Specification Change)</p>
	<p><u>Details</u> The RXONLY mode is not available on the emulation board IE-789850-NS-EM1 with control code A.</p> <p>When the RXONLY Mode is set, the In-Circuit Emulator will not enter this mode.</p> <p>The In-Circuit Emulator remains in the ordinary transmission / reception operation status and performs the following operations:</p> <ul style="list-style-type: none"> <li>• The error counter is incremented or decremented, depending on the communication status in the same manner as in ordinary operation.</li> <li>• If a transmission request is set (TXA1 = TXA0 = 1) a message is output to the CAN bus in the same manner as in ordinary operation.</li> <li>• If a message flows into the connected CAN bus, an acknowledge (ACK) is returned as usual.</li> <li>• If an error is detected, an error frame is output to the CAN bus as usual.</li> </ul>
No. 4	<p>Mounting advice (Direction of use)</p>
	<p><u>Details</u> The main board of the In-Circuit Emulator IE-78K0S-NS-A is equipped with two metallic spacers at its corners. When the emulation board IE-789850-NS-EM1 is mounted on the main board, there might be a short circuit between some electrical components. Due to this, it is recommended to remove the metallic spacers.</p>

**(C) Valid Specification**

<b>Item</b>	<b>Date published</b>	<b>Document No.</b>	<b>Document Title</b>
1	February 2001	U15141E or later	User's Manual IE-789850-Ns-EM1
2	August 2002	U14403E or later	User's Manual $\mu$ PD789850 Subseries
3	February 2003	U16532E or later	User's Manual $\mu$ PD789850A Subseries
4	March 9, 2005	TPS-LE-OP-9850 or later	Customer Notification $\mu$ PD789850 and $\mu$ PD789850A Subseries

**(D) Revision History**

<b>Item</b>	<b>Date published</b>	<b>Document No.</b>	<b>Comment</b>
1	July 17, 2002	TPS-LE-OP-ST850-C	1 <sup>st</sup> Release of new outline. Addition of control code C
2	March 8, 2005	TPS-LE-OP-ST850-D	1 <sup>st</sup> Update Revision of items 1 to 4 Addition of item 5
3	June 13, 2005	TPS-LE-OP-ST850-E	2 <sup>nd</sup> Update Caution added on page 4