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Concerned Products:	Customer Notification	Date: 13. 11, 2000
		NEC-Electronics (Europe) GmbH EAD –Technical Product Support
μPD780053 μPD780054 μPD780055 μPD780056 μPD780058 μPD78F0058 μPD780053Y μPD780054Y μPD780055Y μPD780056Y μPD780058Y μPD78F0058Y	Bug Report	Source Doc: SBB-T-0526 SBG-T-2077
		Author: P. Diederichs
Date of initial issue: Aug. 14th, 98		Doc. No.: TPS-LE-B-0500
1st revision : Nov. 13th, 00		Doc. No.: TPS-LE-B-0500-2
2nd revision :		

Table of Contents

- (A) Bug List**
- (B) Bug Description**
- (C) History List**

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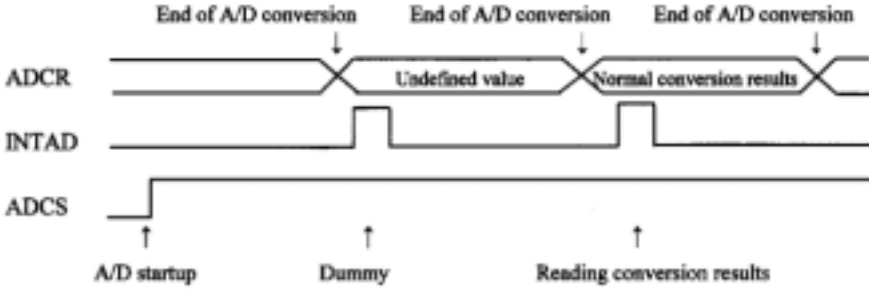
(A) BUG LIST

Bug No.	Outline	μPD780053/54/55/56/58, μPD78F0058, μPD780053Y/54Y/55Y/56Y/58Y, μPD78F0058Y
1	A/D converter operation start	☹
2	Time division UART function	☹

☹: Bug (restriction, not corrected by version upgrade)

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(B) BUG DESCRIPTION

Bug No.	Outline	Description
1	A/D converter start operation	<p>Restriction:</p> <p>As the reference voltage in the A/D converter is not stable immediately after starting the A/D conversion, the sampling circuit (controlled by this reference voltage) does not operate correct. This increases the conversion error of the first conversion result.</p> <p>Additionally the first conversion result is undefined because the conversion error at this time cannot be confirmed due to disparities between the conversion speed and the precision.</p> <p>Work around:</p> <p>To overcome this problem do not use the first conversion result out of the ADCR register immediately after A/D converter start. Use instead the second or later conversion results (see diagram below).</p> <p>To clear the A/D conversion end interrupt request flag (INTAD), either accept the interrupt after first initial conversion or clear the INTAD request flag.</p> 

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Bug No.	Outline	Description
2	Time division UART function	<p><u>Restriction:</u></p> <p>If the time division UART function mode (for the products listed on the first page) is used and data is sent from the TxD1 pin, be sure to enable and disable the send operation as shown in the example program below.</p> <p>Transmission is not performed correctly if the send operation is not enabled and disabled as shown in the program.</p> <p>Conditions: Serial Interface Pin Select register (SIPS) = 0x10, 0x30, TXD1 is used as UART transmit pin.</p> <p><u>Enable send operation:</u></p> <pre>CLR1 PM2.3 ; P23 (TxD1) output SET1 P2.3 ; P23 → "1" SET1 ASIM.7 ; enable sending CLR1 P2.3 ; P23 → "0" MOV TXS; #Data ; move transmit data to shift reg.</pre> <p>Remark 1: Repeat the above program each time you enable the send operation using the TxD1 pin (ASIM.7 = 1)</p> <p>Remark 2: To switch the send pin from TxD0 to TxD1, you must first disable sending. Use the above processing in such a case.</p> <p><u>Disable send operation:</u></p> <pre>SET1 P2.3 ; P23 → "1" CLR1 ASIM.7 ; disable sending</pre> <p>Remark 3: Repeat the above program each time you disable the send operation using the TxD1 pin (ASIM.7 = 0)</p> <p>Remark 4: To switch the send pin from TxD1 to TxD0, you must first disable sending. Use the above processing in such a case.</p>

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(C) History List

Revision	Part	Item	Modification
1	-	-	Addition of Bug Nr.2