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Concerned Products:	Customer Notification		Date: November 10, 1999
μPD78P0308GF μPD78P0308GC μPD78P0308KL-T μPD78P0308YGF μPD78P0308YGC μPD78P0308YKL-T			NEC-Electronics (Europe) GmbH EAD -Technical Product Support
		Bug Report	Source Doc: SBB-T-12194
			Author: P. Diederichs
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1 st edition :			Doc. No.:

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(A) BUG LIST

Bug No.	Outline	78P0308(Y)GF/GC Control Code "K"	78P0308(Y)GF/GC Control Code "E" Note 1	78P0308(Y)GF/GC Control Code "E" Note 2	78P0308(Y)KL-T Control Code "I" Note 3	78P0308(Y)KL-T Control Code "I" Note 4
1	CPU operating voltage range	*	☞	✓ Operable at VDD = 2.0 to 5.5V	☞	✓
2	LCD display data memory	☞	✓	✓	☞	✓
3	AD Converter operating voltage range	*	☞	✓ Operable at VDD = 2.2 to 5.5V	☞	✓
4	LCD C/D supply voltage	☞	✓	✓	☞	✓

✓: No problem, anymore

☞: Limitation will be improved in next version.

*: Bug restriction

Note 1: The devices belonging to this column have a **Control Code** xxxxExxxx **and a Date Code** earlier than "9920".

Note 2: The devices belonging to this column have a **Control Code** xxxxExxxx **and a Date Code** equal or later than "9920".

Note 3: The devices belonging to this column have a **Control Code** xxxxlxxxx **and a Date Code** earlier than "9912".

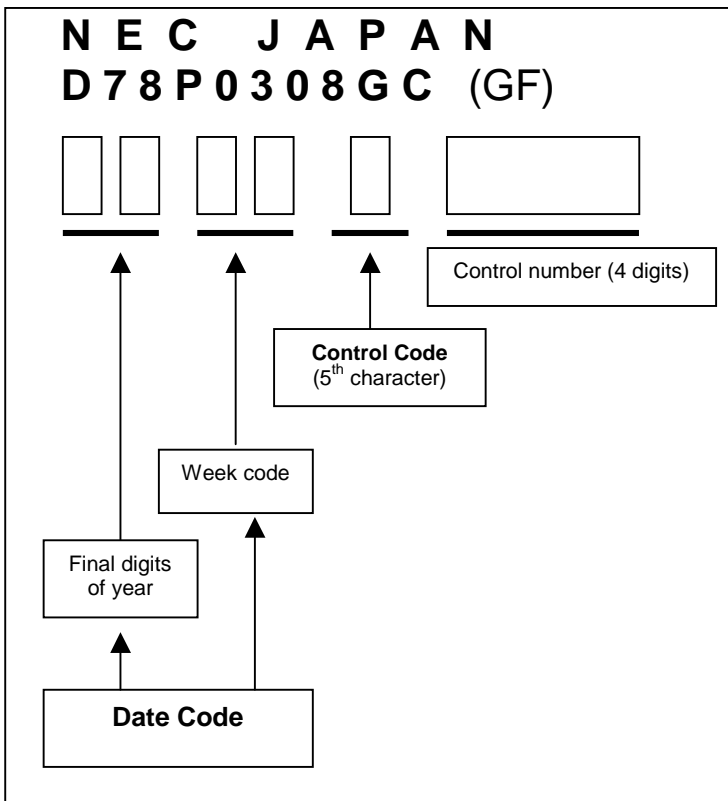
Note 4: The devices belonging to this column have a **Control Code** xxxxlxxxx **and a Date Code** equal or later than "9912".

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(B) BUG DESCRIPTION

1	CPU operating voltage range	Details Make sure to use the product within the following supply voltage range. $2.7V \leq VDD \leq 5.5V$
2	LCD display data memory	Details Do not use the instructions included on page 4 with the LCD display data memory (address FA58h to FA7Fh). The instructions may not be executed normally. However, the LCD display works normally.
3	AD Converter operating voltage range	Use the A/D converter in the condition $VDD1=VDD2=AVREF=4.0$ to $5.5V$. In other conditions, the conversion precision may be dramatically deteriorated.
4	LCD C/D supply voltage	In the LCD display mode register (LCDM), it is not possible to select the low voltage operation. Set „0“ for LCDM register bit 3

Figure 1: uPD78P0308 Marking (Reference)



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Instructions unusable for LCD Display Data Memory

Mnemonic	Operand	Mnemonic	Operand
MOV	A,!addr16 A, [DE] A, [HL] A, [HL+byte] A, [HL+B] A, [HL+C]	AND	A,!addr16 A, [HL] A, [HL+byte] A, [HL+B] A, [HL+C]
XCH	A,!addr16 A, [DE] A, [HL] A, [HL+byte] A, [HL+B] A, [HL+C]	OR	A,!addr16 A, [HL] A, [HL+byte] A, [HL+B] A, [HL+C]
MOVW	AX,!addr16	XOR	A,!addr16 A, [HL] A, [HL+byte] A, [HL+B] A, [HL+C]
ADD	A,!addr16 A, [HL] A, [HL+byte] A, [HL+B] A, [HL+C]	CMP	A,!addr16 A, [HL] A, [HL+byte] A, [HL+B] A, [HL+C]
ADDC	A,!addr16 A, [HL] A, [HL+byte] A, [HL+B] A, [HL+C]	MOV1	CY,[HL].bit [HL].bit,CY
SUB	A,!addr16 A, [HL] A, [HL+byte] A, [HL+B] A, [HL+C]	AND1	CY, [HL].bit
SUBC	A,!addr16 A, [HL] A, [HL+byte] A, [HL+B] A, [HL+C]	OR1	CY, [HL].bit
ROR4	[HL]	XOR1	CY, [HL].bit
ROL4	[HL]	SET1	[HL].bit
		CLR1	[HL].bit
		BT	[HL].bit, \$addr16
		BF	[HL].bit, \$addr16
		BTCLR	[HL].bit, \$addr16