Concerned Products:	**Customer Notification**	Date: August 29th, 2001
IE-78K0-NS-P04		NEC-Electronics (Europe) GmbH EAD – Technical Product Support
	Bug Report	Source Doc: nn
		Author: A. Twardy

Date of initial issue:	Nov. 18th, 98	Doc. No.:	TPS-LE-B-0T010
1st revision :	Sep. 27th, 99	Doc. No.:	TPS-LE-B-0T010-1
2nd revision :	Aug. 29th, 01	Doc. No.:	TPS-LE-B-0T010-2

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(A) BUG LIST (1/2)

Bug No.	Outline	IE-78K0-NS-P04					
		Code “A”	Code “B”	Code "C"	Code "D"		
1	Read of int. expan. RAM when CAN is used	✋	✓	✓	✓		
2	Change of control code due to production	✋	✋	✓	✓		
3	Default jumper setting has changed	💣	💣	💣	✓		
4	Setting of ext. voltage supply not documented	💣	💣	💣	✋		

✓: No problem

✋: Bug (will be corrected by next version upgrade)

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

The (control) code of the version information is the second character of the serial number. Or is market on the tool with a "VERSION-UP" label.

(B) BUG DESCRIPTION

Bug No.	Outline	Description
1	Read of int. expan. RAM when CAN is used	The internal expansion RAM can not be read out correctly when this RAM area is used for the CAN.
2	Change of control code due to production	To be in line with products from different productions the control code has changed to the highest value at this time, which is "C".
3	Default jumper setting has changed	Default jumper setting on the IE-78K0-NS-P04 board has changed.
4	Setting of external voltage supply not documented.	The setting of the external supply voltage (LVDD) is described below. Aside from the setting of the LCD voltage, the socket SO1 on the IE-78K0-NS-P04 board is used for the external voltage. The details of the connections of SO1 are listed below: Assignment of the PINS on the socket SO1 on IE-78K0-NS-P04: PIN2 - PIN15 , external voltage (for the resistor Rx see below) PIN6 - PIN12 , LCD-voltage PIN6 - PIN11 , LCD-voltage PIN7 - PIN11 , LCD-voltage PIN7 - PIN10 , LCD-voltage A connection between PIN2 and PIN15 is needed if the emulationsystem should work with external voltage. The value of the resistance between PIN2 and PIN15 determines the level of the external voltage $U_{ext.}$ which is accepted as good by the emulationsystem. The detailed formula is given below. **$U_{ext.} \geq 1{,}25V \times (10K\Omega + Rx) / 10K\Omega$** Some examples for the relation between the needed $U_{ext.}$ and the resistor Rx are given below. Rx = 0 KΩ -> $U_{ext.}$ must be higher than 1.25V Rx = 26 KΩ -> $U_{ext.}$ must be higher than 4.50V Rx = 30 KΩ -> $U_{ext.}$ must be higher than 5.00V Rx = open -> $U_{ext.}$ will not be accepted at all Please note, that aside from setting up the socket SO1 on the IE-78K0-NS-P04 board correctly, the external voltage must be connected to the TP1 connector on the IE-78K0-NS-A emulator. In this case the current which flows into the emulator may be up to $I_{ext.}$ = 300mA. The sequence of start-up the emulationsystem is as listed below: 1. Switch ON the emulator. 2. Switch ON the external voltage. 3. Start the related software for the debugger.

(C) History List

Rev.	Part	Item	Modification
2nd	2, 3, 4		Addition of the restriction described under point 2, 3 and 4. Addition of the history list and table of contents.