

6. Revision history

IE-789871-NS-EM1 Emulation Board for μ PD789871 Subseries Usage Restrictions

Document Number	Issued on	Description
ZBG-CD-04-0036	July 16, 2004	Newly created. Addition of bug (No.2), change of specification (No.3)

Notes on Using IE-789871-NS-EM1

1. Product Version

Product name: IE-789871-NS-EM1

Control Code ^{Note}	Remark
A	μPD78F9872 ES1.1
B	μPD78F9872 ES1.1/1.2

Note The “control code” is the second digit from the left in the 10-digit serial number in the warranty supplied with the product you purchased (if it has not been upgraded). If the product has been upgraded, a label indicating the new version is attached to the product and the x in V-UP LEVEL x on this label indicates the control code.

2. Product History

No.	Bugs and Changes/Additions to Specifications	Control Code	
		A	B
1	Specification change in mask option setting	–	√
2	Fixed connection of pull-down resistor to P8 and P9 pins	Permanent restriction	
3	P8 I/O function	–	√

–: Specification not supported, ×: Bug applicable, √: Bug not applicable or specification supported

3. Details of Bugs and Added Specifications

No.1 Specification change in mask option setting

[Description]

Conventionally, a pull-down resistor can be connected to V_{LOAD} or GND using the mask option for the FIP17/P87 to FIP24/P80 pins. However, a pull-down resistor can be connected to V_{LOAD} only (fixed) in control code B due to the specification change in the target device.

[Note]

Use the device file DF789872 (E1.00h (May 30, 2002) or later).

<Details>

Device name	Version	Date
• d9870.78k	E1.00h	May 30, 2002
• d9871.78k	E1.00h	May 30, 2002
• df9872.78k	E1.00f	May 30, 2002

No.2 Fixed connection of pull-down resistor to P8 and P9 pins

[Description]

The P80/FIP24 to P87/FIP17 pins are connected to V_{LOAD} (fixed) via a 62 k Ω pull-down resistor.

The P90/FIP16 to P97/FIP9 pins are connected to V_{LOAD} (fixed) via a 68 k Ω pull-down resistor.

[Workaround]

There is no workaround. Regard this as a permanent restriction.

[Note]

No pull-down resistor is connected to the P80/FIP24 to P87/FIP17 pins and P90/FIP16 to P97/FIP9 pins of the μ PD78F9872 (flash memory version).

Note this point when emulating the μ PD78F9872.

No.3 P8 I/O function

[Description]

The I/O function of P80 to P87 has been changed to output-only in control code B due to the specification change in the target device.

4. Cautions

General cautions on handling this product

4.1 Cases in which NEC Electronics warranty does not apply

- When the product is disassembled, reconstructed, or modified by the user
- When the product receives a heavy shock such as being dropped or falling down
- When the product is used with excessive voltage or is stored outside the guaranteed temperature range or guaranteed humidity range
- When power is applied while the AC adapter, PC interface cable, or target system is not connected securely
- When the AC adapter cable, PC interface cable, or emulation probe is excessively twisted or stretched
- When an AC adapter other than the one supplied with the product is used
- When water is spilled on the product
- When the product and target system are connected in a system in which the voltage potential between GND of the product and the target system GND differ
- When the connector or cable is connected or disconnected while the power is being applied to the product
- When an excessive load is applied to the connector or socket

4.2 Cautions on safe use

- The product heats up (to approx. 50 to 60°C) when it operates for a long time. Take care not to receive injuries such as burns from a rise in the temperature.
- Be very careful to avoid electric shocks. There is risk of electric shock if the product is used as described in **4.1 Cases in which NEC Electronics warranty does not apply**.