

NEC Microcomputer Technical Information

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<p style="text-align: center;">μPD789800 Subseries</p> <p style="text-align: center;">Document Modification</p>		Document No.	SBG-DT-0032-E	1/1
		Date issued	November 7, 2001	
		Issued by	Microcomputer Group Sales Engineering Div. NEC Electron Devices NEC Corporation	
Related documents	User's manual: U12978EJ2V0UM00 Data sheet: U12627EJ3V0DS00 Data sheet: U12626EJ2V0DS00	Notification classification		Usage restriction
				Upgrade
			√	Document modification
				Other notification

1. Affected products

μPD789800GB-xxx-8ES

μPD78F9801GB-8ES

2. Technical information

The following point will be modified in the above products.

- The software to output the Resume signal described on pages 145 and 146 in the user's manual cannot conform to USB specification Rev1.1.

3. Details of modification

Details of the modification are shown in Attachment 2.

4. Modification schedule

This modification will be included in the next revision of the user's manual scheduled for January 2002.

5. List of erroneous descriptions

The restriction history and detailed information is described in Attachment 1.

List of Corrections to Documents in μ PD789800 Subseries

1. Document History

< User's manual >

	Description	U12978JJ2V0UMJ1
Item 1	Correction of erroneous description in data sheet	–
Item 2	Correction of erroneous description on flash memory writing communication pins	×
Item 3	Correction of erroneous description on resume signal output	×

< Data sheet for mask ROM version >

	Description	U12626JJ1V0DS00	U12626JJ2V0DS00
Item 1	Correction of erroneous description in data sheet	×	√
Item 2	Correction of erroneous description on flash memory writing communication pins	–	–
Item 3	Correction of erroneous description on resume signal output	–	–

< Data sheet for flash memory version >

	Description	U12626JJ1V0DS00	U12626JJ2V0DS00
Item 1	Correction of erroneous description in data sheet	×	√
Item 2	Correction of erroneous description on flash memory writing communication pins	×	√
Item 3	Correction of erroneous description on resume signal output	–	–

Note The meaning of each symbol is as follows.

–: Erroneous description does not exist.

√: Corrected.

×: Erroneous description not corrected (correction is planned)

2. Details of Correction

Item 1: Refer to Attachment 3 for details.

Item 2: Refer to Attachment 4 for details.

Item 3: Items corrected this time. Refer to Attachment 2 for details.

Item 3: Correction of erroneous description on Resume signal output

The software to output the Resume signal described on pages 145 and 146 in the user's manual cannot conform to USB specification Rev1.1. An example of the correct software is shown below.

Correction to page146

Incorrect) (Description in the present user's manual)

2. Be sure to follow the exact instruction sequence to append EOP when terminating Resume output.

```

CLR1 REMWUP.2      ; (PULLDP ← 0) , EOP generation
NOP                ; Be sure to input
SET1 REMWUP.3      ; (PULLDM ← 1) , "J" state generation
CLR1 REMWUP.0      ; (WAKETX ← 0) , Resume output end
CLR1 REMWUP.1      ; (PULLEN ← 0)

```

Correct)

2. The instruction sequence when terminating Resume output is as follows.

```

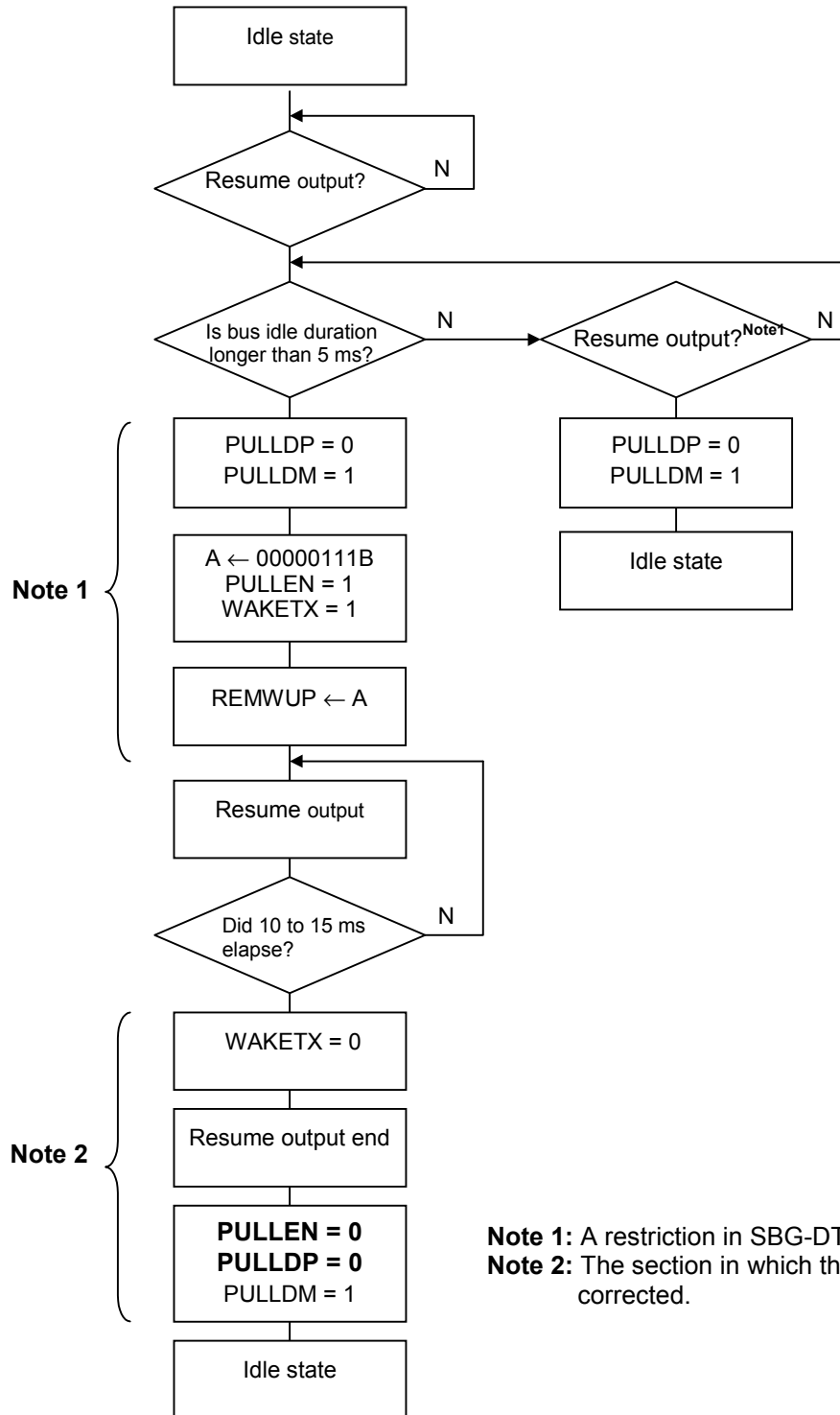
CLR1 REMWUP.0      ; (WAKETX ← 0), Resume output end
CLR1 REMWUP.1      ; (PULLEN ← 0),
CLR1 REMWUP.2      ; (PULLDP ← 0) }      "J" state generation
SET1 REMWUP.3      ; (PULLDM ← 1) }

```

The location of this correction is in Figure 8-31 Flow Chart of Remote Wake-Up Control Operation on page 145, which is shown below.

Correct)

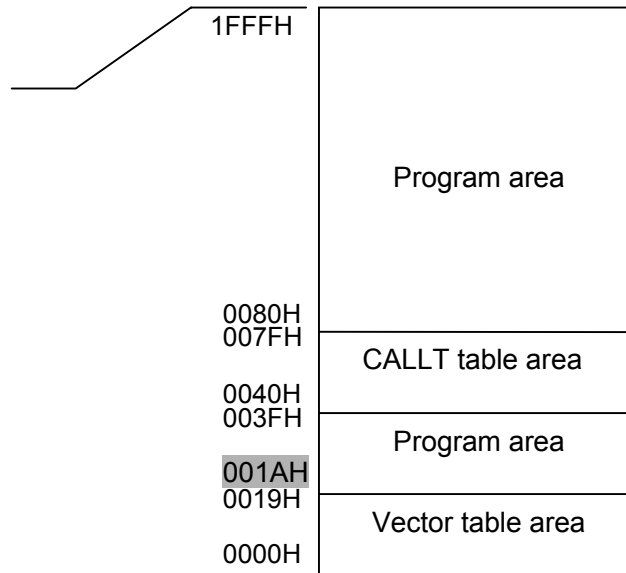
Figure 8-31. Flow Chart of Remote Wake-Up Control Operation



Item 1: Correction of erroneous description in data sheet

(1) The start address of the program area is incorrect in Figure 4-1 on page 13. The correction is as follows.

Incorrect) 0020H → Correct) 001AH



The shaded portion has been corrected.

(2) The condition for P33 low-level output voltage is incorrect. The correction is as follows.

Incorrect) IO = -10 mA → Correct) IO = 10 mA

<Specifications after correction>

Output low voltage	V _{OL1}	Pins other than USBDM and USBDP	IO = 10 mA			1.0	V
	V _{OL2}	USBDM, USBDP T _A = 0 to +70°C, R _L = 15 kΩ (connected to V _{DD}) ^{Note1}				0.3	V

The shaded portion has been corrected.

Item 2: Correction of erroneous description on flash memory writing communication pins

Table 14-2 Communication Mode List on page 188 in the user’s manual and Table 6-1 Communication Mode List on page 15 in the μ PD78F9801 data sheet include an erroneous description in the Pins Used column. This description should be corrected as shown below because the flash memory cannot be written using the following pseudo 3-wire serial pins.

- Pseudo 3-wire, Ver. 3.0 or later, without marking

P40 / KR00 (Serial clock input)
P41 / KR01 (Serial data output)
P42 / KR02 (Serial data input)

Incorrect)

Table 14-2. Communication Mode List

Communication Method	Pins Used		Number of V _{PP} Pulses
	Ver.2.3 or Earlier	Ver.3.0 or Later, Without Marking	
3-wire serial I/O	SCK10/P20 SO10/P21 SI10/P22		0
Pseudo 3-wire ^{Note}	P15 (Serial clock input) P16 (Serial data output) P17 (Serial data input)	P10 (Serial clock input) P11 (Serial data output) P12 (Serial data input)	12
	P45/KR05 (Serial clock input) P46/KR06 (Serial data output) P47/KR07 (Serial data input)	P40/KR00 (Serial clock input) P41/KR01 (Serial data output) P42/KR02 (Serial data input)	13

Note Serial communication is performed by controlling ports by software.

Correct)

Table 14-2. Communication Mode List

Communication Method	Pins Used		Number of V _{PP} Pulses
	Ver.2.3 or Earlier	Ver.3.0 or Later, Without Marking	
3-wire serial I/O	SCK10/P20 SO10/P21 SI10/P22		0
Pseudo 3-wire ^{Note}	P15(Serial clock input) P16(Serial data output) P17(Serial data input)	P10(Serial clock input) P11(Serial data output) P12(Serial data input)	12
	P45/KR05 (Serial clock input) P46/KR06 (Serial data output) P47/KR07 (Serial data input)		13

Note Serial communication is performed by controlling ports by software.

The shaded portion has been corrected.

The description in μ PD78F9801 Ver.2.3 or earlier will be deleted in the next revision of the user’s manual (U12978EJ3V0UM00).