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# **RENESAS TECHNICAL UPDATE**

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Product Category	MPU/MCU		Document No.	TN-R8C-A033B/E	Rev.	2.00
Title	Errata to notes of the port register	Information Category	Technical Notification			
Applicable Product	R8C/LA6A Group, R8C/LA5A Group, R8C/LA3A Group, R8C/LAPS Group	Lot No.	Reference Document			

This document describes corrections to the port Pi registers included in the following User's Manual: Hardware.

### 1. Applicable manuals and ports

Applicable Products	Applicable Manual and Page	Applicable Ports
R8C/LA6A Group	R01UH0051EJ0103 (Rev.1.03), Page 64 of 645	P1_0 to P1_1, P4_0 to P4_5, P6_0, and P7_0 to P7_6
R8C/LA3A Group	R01UH0024EJ0100 (Rev.1.00), Page 61 of 581	P0_0 to P0_7, P3_0 to P3_7, P7_0, and P7_2 to P7_7
R8C/LA5A Group	R01UH0024EJ0100 (Rev.1.00), Pages 61 of 581 and 70 of 581	P7_3 to P7_7
R8C/LAPS Group	R01UH0168EJ0100 (Rev.1.00), Page 59 of 411	P7_0, and P7_2 to P7_7

#### 2-1. Corrections of R8C/LA6A Group

Table 7.2 Programmable I/O Ports Provided for Each Group

Programmable	R8C/LA6A Group Total: 56 I/O pins							R8C/LA8A Group Total: 72 I/O pins								
I/O Port	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0	bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
P0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
P1	<b>√</b>	✓	✓	✓	✓	✓	_	_	✓	✓	✓	✓	✓	✓	✓	✓
P2	✓	✓	✓	✓	✓	✓	✓	√	✓	✓	✓	✓	✓	✓	✓	✓
P3	<b>√</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
P4	✓	✓	_	_	_	_	_	_	✓	✓	✓	✓	✓	✓	✓	✓
P5	_	✓	✓	✓	✓	✓	✓	√	_	✓	✓	✓	✓	✓	✓	✓
P6	✓	✓	✓	✓	✓	✓	✓	_	✓	✓	✓	✓	✓	✓	✓	✓
P7	_	_	_	_	_	_	_	_	_	✓	✓	✓	✓	✓	✓	✓
P8	✓	✓	✓	✓	✓	✓	✓	- √	✓	✓	✓	✓	✓	✓	✓	✓
P9	_	_	_	_	_	_	✓	√	_	_	_	_	_	_	✓	✓

#### Notes:

- The symbol "√" indicates a programmable I/O port.
- 2. The symbol "—" indicates the settings should be made as follows:
  - Set 0 to the corresponding bits in the PDi (i = 1, 4 to 7, 9) register. When read, the content is 0.
  - Set 0 to the corresponding bits in the Pi (i = 1, 4 to 7, 9) register. When read, the content is 0.
  - Set 0 to the corresponding bits in the P7DRR register. When read, the content is 0.

When the bits in red boxes are read, the content is undefined. Other bits are 0.

#### 2-2. Corrections of R8C/LA3A Group, R8C/LA5A Group

Table 7.2 Programmable I/O Ports Provided for Each Group

Programmable		R8C/LA3A Group Total: 26 I/O pins						R8C/LA5A Group Total: 44 I/O pins								
I/O Port	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
P0	_	_	_	_	_	_	_	_	✓	✓	✓	✓	✓	✓	✓	✓
P2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
P3	_	_	_	_	_	_	_	_	✓	✓	✓	✓	✓	✓	✓	✓
P5	_	✓	✓	✓	✓	✓	✓	✓	_	✓	<b>✓</b>	✓	✓	✓	✓	✓
P7	_	_	_	_	_	_	✓	_	_	_	_	_	_	✓	✓	✓
P8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
P9	_	_	_	_	_	_	✓	✓	_	_		_	_	_	✓	✓

#### Notes:

- 1. The symbol "√" indicates a programmable I/O port.
- 2. The symbol "—" indicates the settings should be made as follows:
  - Set 0 to the corresponding bits in the PDi (i = 0, 3, 5, 7, 9) register. When read, the content is 0.
  - Set 0 to the corresponding bits in the Pi (i = 0, 3, 5, 7, 9) register. When read, the content is 0.

When the bits in red boxes are read, the content is undefined. Other bits are 0.

#### 2-3. Corrections of R8C/LA5A Group

# 7.5.2 Port Pi Register (Pi) (i = 0, 2, 3, 5, 7 to 9)

Address 00E0h (P0), 00E4h (P2), 00E5h (P3), 00E9h (P5 (1)), 00EDh (P7(2)), 00F0h (P8), 00F1h (P9(3))

Bit	b7	b6	b5	b4	b3	b2	b1	b0
Symbol	Pi_7	Pi_6	Pi_5	Pi_4	Pi_3	Pi_2	Pi_1	Pi_0
After Reset	X	X	X	X	X	X	X	X

Bit	Symbol	Bit Name	Function	R/W
b0	Pi_0	Port Pi_0 bit	0: Low level	R/W
b1	Pi_1	Port Pi_1 bit	1: High level	R/W
b2	Pi_2	Port Pi_2 bit		R/W
b3	Pi_3	Port Pi_3 bit		R/W
b4	Pi_4	Port Pi_4 bit		R/W
b5	Pi_5	Port Pi_5 bit		R/W
b6	Pi_6	Port Pi_6 bit		R/W
b7	Pi_7	Port Pi_7 bit		R/W

#### Notes:

- 1. P5\_7 bit in the P5 register is reserved bit. When writing to the P5\_7 bit, set to 0. When read, the content is 0.
- 2. Bits P7\_3 to P7\_7 in the P7 register is reserved bit. When writing to bits P7\_3 to P7\_7, set to 0. When read, the content is 0.
- Bits P9\_2 and P9\_3 in the P9 register are reserved bits. When writing to bits P9\_2 and P9\_3, set to 0. When read, the content is 0.

Bits P9\_4 to P9\_7 in the P9 register are unavailable on this MCU. When writing to bits P9\_4 to P9\_7, set to 0. When read, the content is 0.

When read, the content is undefined.

#### 2-4. Corrections of R8C/LAPS Group

# 7.5.2 Port Pi Register (Pi) (i = 2, 5, 7 to 9)

Address 00E4h (P2), 00E9h (P5 (1)), 00EDh (P7(2)), 00F0h (P8), 00F1h (P9(3))

Bit	b7	b6	b5	b4	b3	b2	b1	b0
Symbol	Pi_7	Pi_6	Pi_5	Pi_4	Pi_3	Pi_2	Pi_1	Pi_0
After Reset	X	X	X	X	X	X	X	X

Bit	Symbol	Bit Name	Function	R/W
b0	Pi_0	Port Pi_0 bit	0: Low level	R/W
b1	Pi_1	Port Pi_1 bit	1: High level	R/W
b2	Pi_2	Port Pi_2 bit		R/W
b3	Pi_3	Port Pi_3 bit		R/W
b4	Pi_4	Port Pi_4 bit		R/W
b5	Pi_5	Port Pi_5 bit		R/W
b6	Pi_6	Port Pi_6 bit		R/W
b7	Pi_7	Port Pi_7 bit		R/W

## Notes:

- P5\_7 bit in the P5 register is reserved bit. When writing to the P5\_7 bit, set to 0. When read, the content is 0.
- Bits P7\_0, P7\_2 to P7\_7 in the P7 register are reserved bits. When writing to bits P7\_0, P7\_2 to P7\_7, set to 0. When read, the content is 0.
- 3. Bits P9\_2 and P9\_3 in the P9 register are reserved bits. When writing to bits P9\_2 and P9\_3, set to 0. When read, the content is 0.
  - Bits P9\_4 to F9\_7 in the P9 register are unavailable on this MCU. When writing to bits P9\_4 to P9\_7, set to 0. When read, the content is 0.

When read, the content is undefined.