

RENESAS TECHNICAL UPDATE

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|--------------------|---|----------|----------------------|--|------|------|
| Product Category | MPU/MCU | | Document No. | TN-RZ*-A035A/E | Rev. | 1.00 |
| Title | RZ/G Series User's Manual: Hardware Correction (Pin Multiplexing) | | Information Category | Technical Notification | | |
| Applicable Product | RZ/G Series, RZ/G1H, M, and N | Lot No. | Reference Document | RZ/G Series, each product User's Manual: Hardware (refer to table 1) | | |
| | | All lots | | | | |

There are following documents corrections about the RZ/G series products.

[Summary]

DVFS and AVS function are not available.

[Products]

RZ/G1H, M, and N

[Note]

There is no specification change (document correction only).

[Corrections]

AVS pin description in Section 4, Pin Multiplexing is corrected as follows.

(Cancellation line parts (abcd) are deleted and gray highlighted parts (efgh) are newly added.)

1) RZ/G1H

- Table 4.1, No.205 and 206, and Table Note 2 (page 4-9):

| No. | Function 1 | GPIO | During POR |
|---------|-------------------------|--------|------------|
| Pin No. | Pin Name | | V/I/OH |
| | I/O | | Pull-up |
| 205 | AVS | | L |
| AA25 | AVS1 | GP5_24 | 3.3V/4mA |
| | O(H/L)* O(L) | IO | Off |
| 206 | AVS | | L |
| AB26 | AVS2 | GP5_25 | 3.3V/4mA |
| | O(H/L)* O(L) | IO | Off |

Notes: 1. (No.191): Must be fixed to VSS.

~~2. (No.205 and 206): Output value of the AVS[2:1] pins depends on each product.~~

- Table 4.2, No.205 and 206 (page 4-34):

| No. | Pin No. | Pin Name (Function 1) | I/O | During POR | Default Pin Function | Default State | Default Pull-up |
|-----|---------|-----------------------|-----|------------|----------------------|-------------------------|-----------------|
| 205 | AA25 | AVS1 | O | L | AVS1 | H or L* O(L) | Off |
| 206 | AB26 | AVS2 | O | L | AVS2 | H or L* O(L) | Off |

- Table Note 4 for table 4.2 (page 4-40):

Notes: 1. No.94, 95, 98 to 106 and 108 to 129: Default pin function

MD[28:27], [22] = 111: DBSC3 channel 1 32-bit operation

MD[28:27], [22] = 011 or 110: GP_DDRn (n = 1 to 29) operation

2. No.134 to 187: Default pin function

MD[28:27], [22] = 111: DBSC3 channel 1 32-bit operation

MD[28:27], [22] = 011: DBSC channel 0 64-bit (M0DQ[63:32] enable) operation

MD[28:27], [22] = 110: Reserved except for power supply pins.

3. No.191: EXREFIN

Must be fixed to VSS (; not user application).

~~4. No.205 and 206: AVS default state~~

~~The output is high or low, depending on product.~~

5. No.208 to 249, 251, 252, 259, 260, and 262 to 264: Default pin function

2) RZ/G1M and N

- Table 4.1, No.204 and 205, and Table Note 1 (page 4-9 for RZ/G1M, page 4-5 for RZ/G1N):

| Function 1 | | |
|------------|---------------|----------------------|
| No. | Module | During POR |
| Pin No. | Pin Name | V/[IOH] |
| | I/O | Pull-up(pull-down)*2 |
| 204 | AVS | L |
| U6 | AVS1 | 3.3V/4mA |
| | O(H/L)*4 O(L) | Off |
| 205 | AVS | L |
| U7 | AVS2 | 3.3V/4mA |
| | O(H/L)*4 O(L) | Off |

Notes: ~~1. (No.204 and 205): Output value of the AVS[2:1] pins depends on each product.~~

2. (No.212): ACK pin is available for pull-down function.

- Table 4.2, No.204 and 205 (page 4-32 for RZ/G1M, page 4-29 for RZ/G1N):

| No. | Pin No. | Pin Name (Function 1) | I/O | During POR | Default Pin Function | Default State | Default Pull-up |
|-----|---------|-----------------------|-----|------------|----------------------|---------------------------|-----------------|
| 204 | U6 | AVS1 | O | L | AVS1 | H or L *3 O(L) | Off |
| 205 | U7 | AVS2 | O | L | AVS2 | H or L *3 O(L) | Off |

- Table Note 3 for table 4.2 (page 4-41 for RZ/G1M, page 4-38 for RZ/G1N):

Notes: 1. No.94, 95, 98 to 106 and 108 to 129: Default Pin Function

MD[28:27],[22] = 111: DBSC3 channel 1 32-bit operation

MD[28:27],[22] = 011 or 110: GP_DDRn (n = 1 to 29) operation

2. No.134 to 187: Default Pin Function

MD[28:27],[22] = 111: DBSC3 channel 1 32-bit operation

MD[28:27],[22] = 011: DBSC channel 0 64-bit (M0DQ[63:32] enable) operation

MD[28:27],[22] = 110: Reserved except for power supply pins.

~~3. No.204 and 206: AVS Default State~~

~~The output is high or low, depending on product.~~

4. No.213 to 254: Default Pin Function

[Reference Document]

Table 1 Reference Document for each RZ/G Series Products

| Products | Document Title | Revision | Date | Document No. |
|----------|--------------------------------|----------|---------------|-----------------|
| RZ/G1H | RZ/G1H User's Manual: Hardware | 1.00 | Sep. 30, 2016 | R01UH0627EJ0100 |
| RZ/G1M | RZ/G1M User's Manual: Hardware | 1.00 | Sep. 30, 2016 | R01UH0626EJ0100 |
| RZ/G1N | RZ/G1N User's Manual: Hardware | 1.00 | Sep. 30, 2016 | R01UH0628EJ0100 |

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