

RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-RA*-A0054A/E	Rev.	1.00
Title	RA2L1 Group, RA2E1 Group, RA2E2 Group, Addition of register definition for Flash		Information Category	Technical Notification		
Applicable Product	RA2L1 Group RA2E1 Group RA2E2 Group	Lot No.	Reference Document	RA2L1 Group User's Manual Hardware Rev1.10 RA2E1 Group User's Manual Hardware Rev1.10 RA2E2 Group User's Manual Hardware Rev1.00		
		All				

The following register definitions should be added.

1. UIDRn: Unique ID Register n (n=0 to 3)

Address: 0x0100_1C00 + n x 4

Bit position: 31 0

Bit field: UID [31:0]

Value after reset: Unique value for each chip

Bit	Symbol	Function	R/W
31:0	UID [31:0]	Unique ID	R

The UIDRn is a read-only register that stores a 16-byte ID code (unique ID) for identifying the individual MCU.

The UIDRn register should be read in 32-bit units.

2. PNRn: Part Numbering Register n (n=0 to 3)

Address: 0x0100_1C10 + n x 4

Bit position: 31 0

Bit field: PNR [31:0]

Value after reset: Value depends on the product

Bit	Symbol	Function	R/W
31:0	PNR [31:0]	Part Number	R

The PNRn is a read-only register that stores a 16-byte part numbering. The PNRn register should be read in 32-bit units.

Each byte corresponds to the ASCII code representation of the product part number as detailed in product list.

In case of the part number is "R7FA2L1AB2DFP" 16-byte part numbering is stored as follows.

Address 0x0100_1C10: "P" ,0x50 in ASCII code

Address 0x0100_1C11: "F" ,0x46 in ASCII code

Address 0x0100_1C12: "D" ,0x44 in ASCII code

Address 0x0100_1C13: "2" ,0x32 in ASCII code

- Address 0x0100_1C14: “B” ,0x42 in ASCII code
- Address 0x0100_1C15: “A” ,0x41 in ASCII code
- Address 0x0100_1C16: “1” ,0x31in ASCII code
- Address 0x0100_1C17: “L” ,0x4C in ASCII code
- Address 0x0100_1C18: “2” ,0x32in ASCII code
- Address 0x0100_1C19: “A” ,0x41 in ASCII code
- Address 0x0100_1C1A: “F” ,0x46 in ASCII code
- Address 0x0100_1C1B: “7” ,0x37 in ASCII code
- Address 0x0100_1C1C: “R” ,0x52 in ASCII code
- Address 0x0100_1C1D: “_“(space) ,0x20 in ASCII code
- Address 0x0100_1C1E: “_“(space) ,0x20 in ASCII code
- Address 0x0100_1C1F: “_“(space) ,0x20 in ASCII code

3. MCOVER: MCU Version Register

Address: 0x0100_1C20

Bit position: 7 6 5 4 3 2 1 0

Bit field:



Value after reset: Value depends on the chip

Bit	Symbol	Function	R/W
7:0	MCUVE [7:0]	MCU Version	R

The MCOVER is a read-only register that stores a MCU version. The MCOVER register should be read in 8-bit units. The higher the value, the newer MCU version.