

RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU	Document No.	TN-R8C-A053A/E	Rev.	1.00
Title	Precaution of low temp. slow start-up		Information Category	Technical Notification	
Applicable Product	Described below	Lot No.	Reference Document		

Precaution described below is added to the following products in the User's Manual.

1. Applied Product

R8C/35A Group, R8C/32C Group, R8C/33C Group, R8C/34C Group, R8C/35C Group,
R8C/36C Group, R8C/38C Group, R8C/3GC Group,
R8C/32D Group, R8C/33D Group, R8C/35D Group, R8C/3GD Group,
R8C/33T Group, R8C/34U Group, R8C/34K Group,

In the group mentioned above, the products which operating ambient temperature is $-40\sim 85$ degree Celsius are applicable. The products which operating ambient temperature is $-20\sim 85$ degree Celsius are inapplicable.

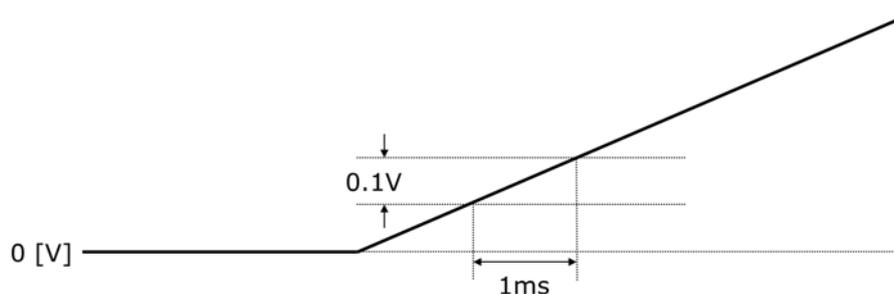
2. Condition of "Power On" at the low ambient temperature

In case operation temperature is lower than $T_a = -35^\circ\text{C}$ and power rises to 1.8V slower than 0.1V/1ms, reset function (Hardware reset, Power-on reset) may not operate correctly. (See figure below)

In case operation temperature is higher than $T_a = -35^\circ\text{C}$, MCU operates correctly.

In case even operation temperature is lower than $T_a = -35^\circ\text{C}$ and power rises to 1.8V higher than 0.1V/1ms, MCU operates correctly.

Since this issue does not happen on all devices in the concerned lots, customer can use the device which the error has not happened on board without any concerns.



3. Countermeasure

The hardware was revised.

Revised products become unrelated to this precaution. In addition, there is no change of electrical specifications from the non-revised version except becoming unrelated to this precaution.

Shipment start time and Lot number of revised products are different for each product.

Please contact our sales department with regard to the shipment of revised product.

Lot number on the package shows revised products.

First 3 digits of Lot number indicate year and week.

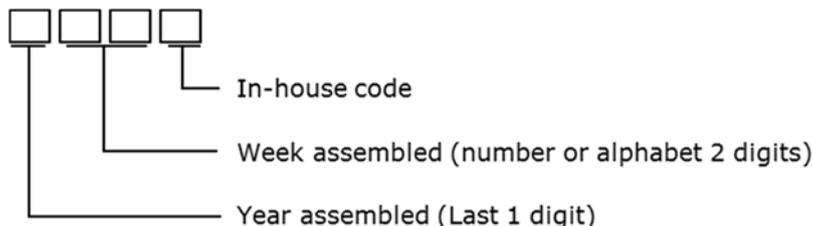
In case year & week code of the products is later than the year & week shown in the chart below, they are The revised products.

Group name	Product name	year and week code of Lot number	shipment start time	Package Code	View of year and week code
35A Group	R5F21356ADFP	-	planning Jun, 2015	52P6A	-
32C Group	R5F21321CDSP	-	planning Jun, 2015	20P2F	Refer to 4.1
	R5F21322CDSP	-	planning Jun, 2015		
	R5F21324CDSP	D3F	Week 35 of 2013		
	R5F21324CDXXXSP	-	From the first shipment		
33C Group	R5F21331CDFP	-	planning Jun, 2015	32P6U	Refer to 4.1
	R5F21332CDFP	-	planning Jun, 2015		
	R5F21334CDFP	E4K	Week 49 of 2014		
	R5F21335CDFP	-	planning Jun, 2015		
	R5F21336CDFP	E4K	Week 49 of 2014		
	R5F21334CDXXXFP	-	From the first shipment		
34C Group	R5F21344CDFP	E4C	Week 42 of 2014	48P6Q	Refer to 4.1
	R5F21345CDFP	D3G	Week 36 of 2013		
	R5F21346CDFP	D4C	Week 42 of 2013		
35C Group	R5F21354CDFP	334	Week 34 of 2013	52P6A	Refer to 4.2
	R5F21355CDFP	334	Week 34 of 2013		
	R5F21356CDFP	449	Week 49 of 2014		
	R5F21357CDFP	342	Week 42 of 2013		
	R5F21358CDFP	446	Week 46 of 2014		
	R5F2135ACDFP	439	Week 39 of 2014		
	R5F2135CCDFP	447	Week 47 of 2014		
36C Group	R5F21364CDFA	441	Week 41 of 2014	64P6U	Refer to 4.2
	R5F21367CDFA	441	Week 41 of 2014		
	R5F21368CDFA	441	Week 41 of 2014		
	R5F2136ACDFA	439	Week 39 of 2014		
	R5F2136CCDFA	433	Week 33 of 2014		
	R5F21364CDFP	-	planning Jun, 2015	64P6Q	Refer to 4.2
	R5F21366CDFP	433	Week 33 of 2014		
	R5F21367CDFP	417	Week 17 of 2014		
	R5F21368CDFP	429	Week 29 of 2014		
	R5F2136ACDFP	402	Week 2 of 2014		
	R5F2136CCDFP	402	Week 2 of 2014		
	R5F21364CDXXXFP	441	Week 41 of 2014		
	R5F21386CDFP	415	Week 15 of 2014		
R5F21387CDFP	446	Week 46 of 2014			
R5F21388CDFP	446	Week 46 of 2014			
R5F2138ACDFP	-	planning Jun, 2015			
R5F2138CCDFP	503	Week 3 of 2015			

Group name	Product name	year and week code of Lot number	shipment start time	Package Code	View of year and week code
3GC Group	R5F213G1CDSP	-	planning Jun, 2015	24P2F	Refer to 4.2
	R5F213G2CDSP	-	planning Jun, 2015		
	R5F213G6CDSP	432	Week 32 of 2014		
32D Group	R5F21321DDSP	E4H	Week 47 of 2014	20P2F	Refer to 4.1
	R5F21322DDSP	-	planning Jun, 2015		
	R5F21324DDSP	-	planning Jun, 2015		
33D Group	R5F21331DDFP	-	planning Jun, 2015	32P6U	Refer to 4.1
	R5F21332DDFP	-	planning Jun, 2015		
	R5F21334DDFP	-	planning Jun, 2015		
	R5F21336DDFP	E5A	Week 50 of 2014		
	R5F21332DDXXXFP	E5A	Week 50 of 2014		
35D Group	R5F21356DDFP	-	planning Jun, 2015	52P6A	-
3GD Group	R5F213G6DDSP	-	planning Jun, 2015	24P2F	-
33T Group	R5F21334TDFP	F0C	Week 2 of 2015	32P6U	Refer to 4.1
	R5F21336TDFP	-	planning Jun, 2015		
34U Group	R5F21346UDFP	E3D	Week 33 of 2014	48P6Q	Refer to 4.1
	R5F21348UDFP	F0D	Week 3 of 2015		
34K Group	R5F21348KDFP	E3D	Week 33 of 2014		
	R5F2134CKDFP	-	planning Jun, 2015		

4. View of Lot number

4.1. 20P2F(0.65mm pitch)、32P6U(0.8mm pitch)、48P6Q(0.5mm pitch)products (4 digits)



Week assmled code list

Number	0	1	2	3	4	5	6	7	8	9
Alphabet	A	B	C	D	E	F	G	H	J	K

4.2. 52P6A(0.65mm pitch)、64P6U(0.8mm pitch)、64P6Q(0.5mm pitch)、80P6Q(0.5mm pitch) products (8 digits)

24P2F(0.65mm pitch) products (6 digits)

