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RENESAS TECHNICAL UPDATE

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| Product Category | MPU/MCU | | Document No. | TN-RL*-A054A/E | Rev. | 1.00 |
|-----------------------|---------------------------|----------|-------------------------|---|------|------|
| Title | RL78/G1D Direction of use | | Information Category | Technical Notification | | |
| Applicable Product | RL78/G1D R5F11Axxx | Lot No. | | RL78/G1D User's Manual: | | |
| | | All lots | Reference Document | Hardware Rev.1.00 R01UH0515EJ0100 (April. 2015) | | |

[&]quot;RF oscillation circuits" directions of use on these products have been added to "RL78/G1D", it reports as below.

Direction added list

| No. | Description | Products | Pages in this document for corrections |
|-----|--|--------------|--|
| 1.1 | Restriction of RF oscillation circuits | All products | Pages 2 |

Direction previously notified

Not there.

Revision history

Revision history of "RL78/G1D Direction of use":

| Document No. | Date | Description |
|----------------|---------------|-----------------------------------|
| TN-RL*-A054A/E | Sep. 10, 2015 | Rev. 1.00. (This notification) |



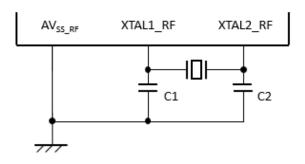
1. Direction of use added in this notice

1.1 Restriction of RF oscillation circuits

1.1.1 Restriction

RF oscillation circuits oscillate with crystal oscillator (32MHz)that be connected between XTAL1_RF and XTAL2_RF ports. However in some case there are oscillation circuits may not start oscillation in figure 1-1.

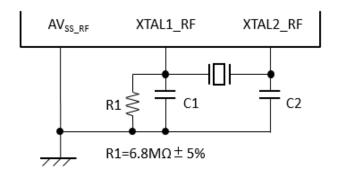
Figure 1-1. External Circuit of RF Unit Oscillation Circuit. (Previous this notice)



1.1.2 Workaround

As shown following figure 1-2, $6.8M\Omega\pm5\%$ must be implemented between port XTAL1_RF and GND(port AVSS_RF).

Figure 1-2. External Circuit of RF Unit Oscillation Circuit



1.1.3 Modification schedule

This matter is added to "CHAPTER 6.4.5 RF unit oscillation circuit on Figure 6-14. Examples of External Circuit of RF Unit Oscillation Circuit" and "CHAPTER 6.7 Resonator and Oscillator Constants on Figure 6-17. External Oscillation Circuit Example (c) Oscillator of RF" in the user's manual by the next revision.

1.1.4 Target products' name list

R5F11AGJANB, R5F11AGHANB, R5F11AGGANB, R5F11AGJDNB, R5F11AGHDNB, R5F11AGGDNB

2. Direction notified

Not there

