

RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-RL*-A066A/E	Rev.	1.00
Title	RL78/G1D: Notes about RF power supply		Information Category	Technical Notification		
Applicable Product	RL78/G1D R5F11Axxx	Lot No.	Reference Document	RL78/G1D User's Manual: Hardware Rev.1.10 R01UH0515EJ0110 (Sep. 2015)		
		All lots				

This document describes append to User's Manual as the following description about a usage note regarding the RF power supply.

1. Notes at the power supply to RF power supply pin(V_{DD_RF} , AV_{DD_RF})
Concerning a power supply to the "VDDRF" or "AVDDRF", power supply noise may affect RF operation, especially in case of using a switching regulator bringing periodical noise. It might cause disconnection of Bluetooth communication.
2. Workaround
Please use a low noise power supply, such as a battery. If customer will adopt a power supply containing noise superimposed in output such as a switching regulator, customer shall validate that the device and system of the customer works without problem.
3. Revision of User's Manual
 - Append of the Caution in "chapter 2.5 Power Configuration"
Caution:
 - Please implement control measures to suppress noise at RF power supplies (V_{DD_RF} , AV_{DD_RF}) as low as possible.
 - Especially, in case of using a switching supply for the power supply, appropriate control measures depending on the device and system of the customer might be needed for the periodical noise of the power supply.
 - In such cases, customer shall validate that the device and system of the customer works without problem.