## **RENESAS TECHNICAL UPDATE**

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| Product<br>Category   | MPU/MCU   |          | Document<br>No.         | TN-RX*-A030A/E  | Rev. | 1.00 |
|-----------------------|---|----------|-------------------------|---|------|------|
| Title                 | Caution on Clearing the Comparator Detection Flag |          | Information<br>Category | Technical Notification  |      |      |
| Applicable<br>Product | RX62T Group, RX62G Group,<br>and RX63T Group      | Lot No.  | Reference<br>Document   | RX62T Group User's Manual: Hardware<br>RX62G Group User's Manual: Hardware<br>RX63T Group User's Manual: Hardware |      |      |
|                       |   | All lots |                         |   |      |      |

Thank you for your valued patronage and best wishes for your continued success in business.

We would like to inform you of a precautionary note with regard to using the port output enable 3 (POE3) module to release pins from the high-impedance state in response to the comparator detection flags.

## 1.1 Caution

When a comparator detection flag S12AD.ADCMPFR.CnFLAG (n = 0 to 2, and 4 to 6) is used to control port output enabling, make sure to only write 0 to the given comparator detection flag to release the pin from the high-impedance state after performing A/D conversion to check that the analog input signal which led to detection by the comparator has returned to an appropriate value.

If the corresponding bit is cleared to 0 before this check and the analog signal remains below the low reference voltage or above the high reference voltage, the given comparator detection flag S12AD.ADCMPFR.CnFLAG will not be set to 1 again. When the corresponding bit is 0, it is only set to 1 on satisfaction of either condition below.

- 1) Detection of the input voltage crossing from a level above to a level below the low reference voltage
- 2) Detection of the input voltage crossing from a level below to a level above the high reference voltage

## 1.2 Countermeasure

A modification in accord with the above note will be made the next time the manuals for the RX62T, RX62G, and RX63T groups are updated.

