

# RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-SH7-A810A/E	Rev.	1.00
Title	Degradation in Accuracy of the 12-bit A/D Converters when Both Modules are in Use		Information Category	Technical Notification		
Applicable Product	SH7147 Series products	Lot No.	Reference Document	See below.		
		All lots				

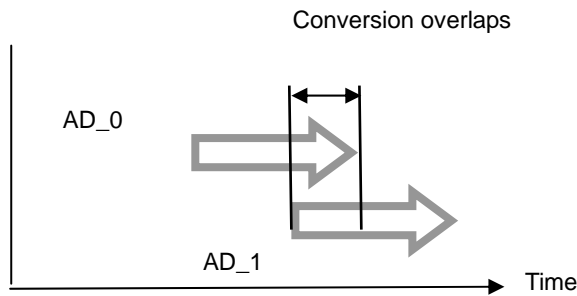
We would like to inform you of the following point for caution on usage of the A/D converter.

**[Point for Caution]**

The SH7147 incorporates two A/D converters, AD\_0 and AD\_1. Using both modules may lead to degraded accuracy.

**[Condition]**

Degradation may occur when conversion by both modules overlaps (figure 1).

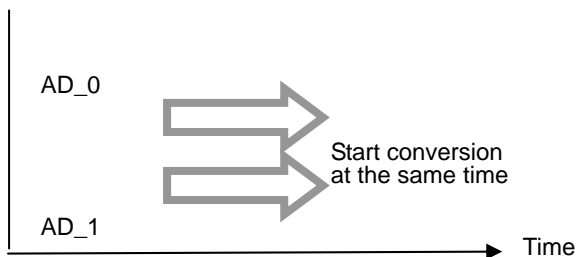


**Figure 1. Conversion Overlaps**

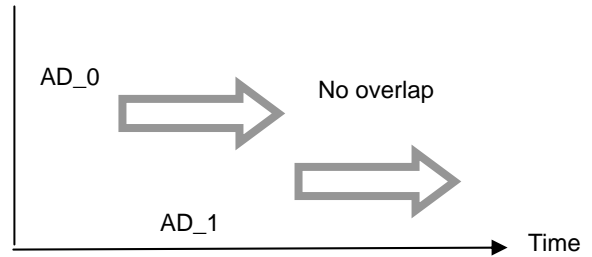
**[Remedies]**

Please follow either of the procedures below.

1. Start conversion by both modules at the same time (figure 2).
2. Start conversion by AD\_1 after conversion by AD\_0 has been completed (figure 3).



**Figure 2. Procedure 1**



**Figure 3. Procedure 2**

[Related manual]

Series	Group	Related Manual	Rev.	Document Number
SH7147	SH7147	SH7147 Group Hardware Manual	3.00	REJ09B0230-0300