

R9A06G037/ISL15102 Board Design

R30AN0418EJ0100

Rev.1.00

Aug 1, 2022

Reference Material Guide

For a design guide for circuit design and layout design when designing a PLC board using Renesas Electronics PLC modem LSI R9A06G037 and ISL15102 with built-in Power Amp, refer to the following application notes.

Table 1 Reference materials and items of circuit design guidelines

Major items		Reference materials	Reference items
1	R9A06G037	R30AN0410EJ0100	2
2	AFE circuit and AC coupling circuit	R30AN0412EJ0100	3
3	DC-DC power supply circuit	R30AN0412EJ0100	4
4	AC-DC power supply circuit	R30AN0412EJ0100	5

Table 2 Reference materials and items of PCB layout design guidelines

Major items		Reference materials	Reference items
1	Parts Layout for the High Voltage Circuit Domain	R30AN0408EJ0200 ¹⁾	2.1
2	Parts Layout for the Low Voltage Circuit Domain	R30AN0408EJ0200 ¹⁾	2.2
3	Parts Layout around R9A06G037 and PCB Pattern	R30AN0340EJ0400	2.3
4	Parts Layout around the AFE Circuit and PCB Pattern	R30AN0408EJ0200 ¹⁾	2.4
5	DC-DC Power Supply Circuit	R30AN0408EJ0200 ¹⁾	2.5
6	AC-DC Power Supply Circuit	R30AN0408EJ0200 ¹⁾	2.6
7-1	Layer structure PCB	R30AN0408EJ0200 ¹⁾	2.7
7-2	GND Pattern	R30AN0408EJ0200 ¹⁾	2.7
8	Power Supply Pattern	R30AN0408EJ0200 ¹⁾	2.8

Note1) Please replace R9A06G061 in the reference material with R9A06G037.

The reference material names are as follows.

- R30AN0410EJ0100: R9A06G037/NJM45001 Circuit Design Guideline
- R30AN0340EJ0400: R9A06G037/NJM45001 PCB Design Guideline (Layout Design)
- R30AN0412EJ0100: R9A06G061/ISL15102 Circuit Design Guideline
- R30AN0408EJ0200: R9A06G061/ISL15102 PCB Design Guideline (Layout Design)

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	2022.08.01		First Edition issued

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(Rev.5.0-1 October 2020)

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