

RAA2P3226 Linear Evaluation Kit (RTKA2P3226S00L00BE)

This guide provides step-by-step instructions for setting up the hardware of the RAA2P3226 linear evaluation kit.

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1. Evaluation Kit Hardware

The RAA2P3226 hardware and software ecosystem is designed to provide quick setup and easy evaluation of the device's capabilities. Contact the local Renesas representative to obtain the required components and development boards.

1.1 Hardware Kit Content

Table 1 lists components that are included in the kit.

Table 1. Evaluation Kit Contents

Name	Ordering Number	Information	Quantity
RAA2P-COMBOARD	RAA2P-COMBOARD	Programming board	1
10-wire sensor cable	N/A		2
USB-B cable	N/A		1
1x5 U-Type Cable	N/A		1
RAA2P3226L0264	N/A	264mm Linear Sensing Module	1

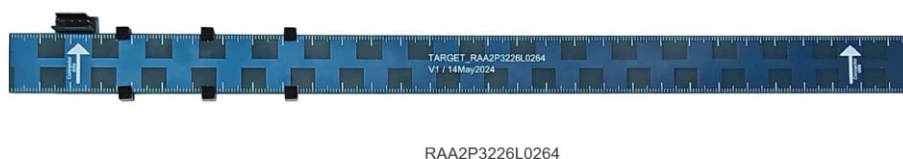


Figure 1. RAA2P3226 Linear Kit Content

2. Hardware Setup

The kit includes one sensor module that could be interfaced with the RAA2PCOMBARD to communicate, configure, and perform position sensing.

2.1 RAA2P3226L0264 Module

RAA2P3226L0264 module is a linear sensor with the following characteristics:

- Absolute high resolution 26.4cm motion range linear sensing in a compact size of 4.8cm
- 18-bit resolution
- $\pm 0.06\text{mm}$ accuracy
- Nonius dual channel for high accuracy 16/15
- 2-wire UART interface

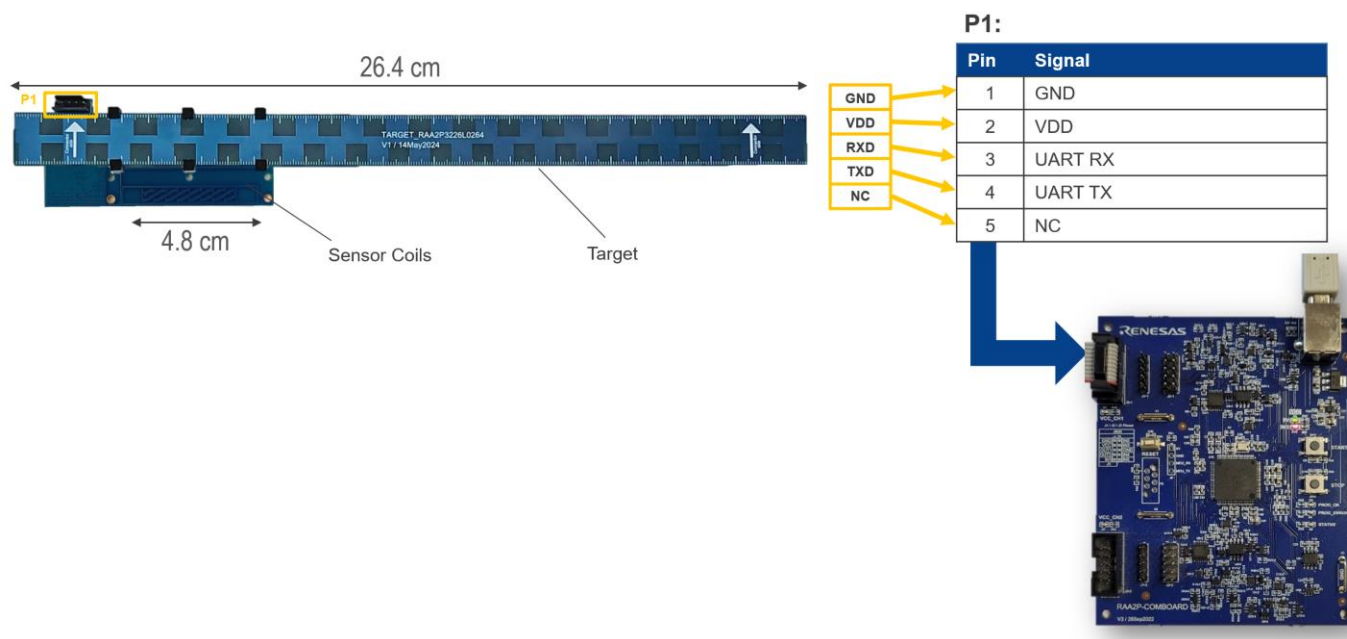


Figure 2. RAA2P3226L0264 Module Connection

This module can perform absolute linear position sensing of 26.4cm, without having 26.4cm receiver coils. The sensing coil receivers are implemented in 4.8cm enabling a more compact and cost-effective sensing solution.

2.2 RAA2P-COMBOARD Connections

The three sensor modules could be interfaced to the RAA2P-COMBOARD by the following steps:

1. Connect the sensor module P1 connector to the J1 header of the RAA2P-COMBOARD using the provided cable according to Figure 3
2. Connect the RAA2P-COMBOARD to your PC using the provided USB-B cable.

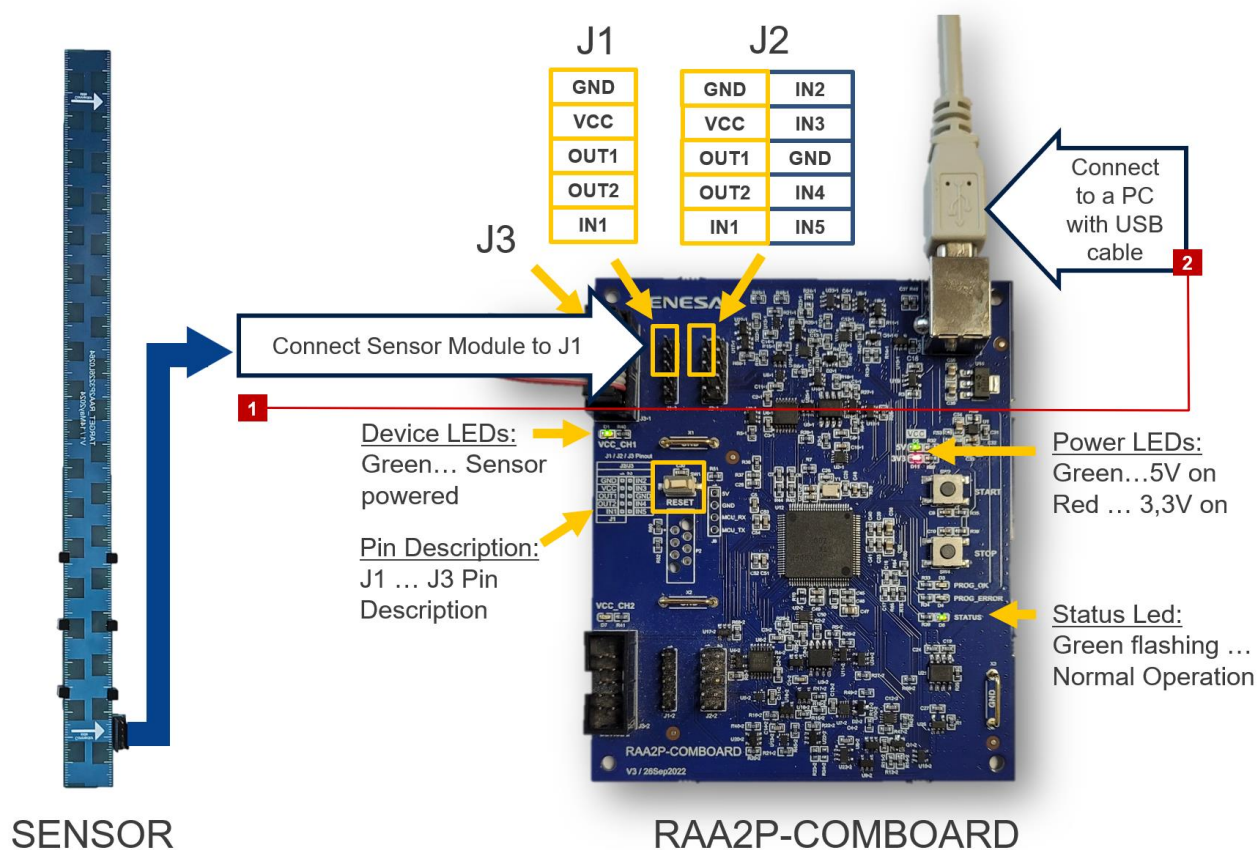


Figure 3. Evaluation Kit Connection Setup

3. Software Setup

Once the hardware setup is done, please refer to the RAA2Pxxxx Evaluation Kit Software GUI Quick Start Guide to setup the software.

4. Revision History

Revision	Date	Description
1.00	Oct 2, 2025	Initial release.