RZ/T2H, RZ/N2H Industrial Network Package
Version 1.0.2

R01US0683EJ0102
Rev. 1.02
Apr. 15, 2025

Release Note

Introduction

This release note describes the contents and important points of the RZ/T2H, RZ/N2H Industrial Network Package.

Please also refer to the following documents that explain the Board Support Package (hereinafter referred to as "BSP") and the instruction to build BSP and boot the evaluation boards.

- r01us0681ej0102-rz-t2h-n2h(Release Note RZT2H_N2H).pdf

- r01us0682ej0102-rz-t2h-n2h(Linux_Start-up_Guide_RZT2H_N2H).pdf

Contents

1.   Release Items

- **Name and version**
  RZ/T2H, RZ/N2H Industrial Network Package Version 1.0.2

- **Target board**
  RZ/T2H Evaluation Board
  RZ/N2H Evaluation Board

- **Functions**
  Industrial Network Stack (EtherCAT, OPC UA, Modbus TCP, EtherNet/IP, PROFINET)

Table 1. Industrial Network List

Stack Name	OSS (Master)	OSS (Slave)	License	URL
EtherCAT	IgH-EtherCAT Master	-	LGPLv2.1 GPLv2	https://gitlab.com/etherlab.org/ethercat
OPC UA	Open62541	Open62541	MPLv2.0 (*1)	https://github.com/open62541/open62541
Modbus TCP	libmodbus	libmodbus	LGPL2.1	https://github.com/stephane/libmodbus
EtherNet/IP	-	OpENer	SOFTWARE DISTRIBUTION LICENSE FOR THE ETHERNET/IP(TM) COMMUNICATION STACK (*2)	https://github.com/EIPStackGroup/OpENer
PROFINET	-	P-Net	GPLv3 Commercial license (*3)	https://github.com/rtlabs-com/p-net

(*1) There are samples in the repository, and they have CC0 license.
(*2) To use the EtherNet/IP logo and other associated trademarks, a license from ODVA is required.
(*3) This software is also available under a commercial license with options for support and maintenance.
   If you intend to use this stack in a commercial product, you likely need to buy a license.

Renesas cannot warrant that the above information is exhaustive with respect to the licensing requirements. Please ensure that you personally verify the licenses for all software and technologies used in each OSS package to confirm their suitability for your product.

- **File contents**
  BSP is delivered by the files listed in Table 2.

Table 2. Industrial Network Package

Industrial Network Package v1.0.2

File	Description
RTK0EF0177Z01000ZJ-v1.0.2.zip (*)	Industrial Network Package. This file includes the Yocto recipe and the necessary document.
meta-rz-ia-network_v1.0.2.tar.gz	Yocto recipes.
r01us0683ej0102-rz-t2h-n2h(Network_Package_Release_Note).pdf	This document.
r11an0824ej0102-rz-t2h-n2h(Industrial_Network).pdf	This file describes how to build and use Industrial Network Package.

Basic Packages of BSPv1.0.2

File	Description
RTK0EF0177Z00002ZJ-v1.0.2.zip (*)	Board Support Package. This file includes the **Yocto recipe packages** and the necessary documents.
rzt2h_n2h_bsp_v1.0.2.tar.gz	**Yocto recipe packages**
- HDR NM - Flash_Programmer_SCIF_CR52_RZT2H_EVK.mot	Flash Programmer. These are used for writing the bootloaders on the evaluation board.
r01us0681ej0102-rz-t2h-n2h (Release_Note_RZT2H_N2H).pdf	BSP release note.
R01us0682ej0102-rz-t2h-n2h(Linux_Start-up_Guide_ RZ/T2H_N2H).pdf	Documents describing booting method and the required settings of bootloader for RZ/T2H, RZ/N2H.

(*)   These packages are provided "AS IS" with no warranty and the license which is described in the source code. Please check the contents of the license, then consider the applicability to the product carefully.

2. Components

The components which are commonly used in this release are listed in the following table. Please also refer to the manifest file for details. The manifest file is created in the following path after building the images:

Example:

`$WORK/build/tmp/deploy/images/rzt2h-dev/core-image-minimal-rzt2h-dev.manifest`

Or

`$WORK/build/tmp/deploy/images/rzn2h-dev/core-image-minimal-rzn2h-dev.manifest`

Table 3. Versions of commonly used components

Components	BSP v1.0.1	BSP v1.0.2
Linux kernel	5.10.145-cip17	5.10.145-cip17
GCC	8.3.0 (Arm GCC 8.3-2019.03)	8.3.0 (Arm GCC 8.3-2019.03)
busybox	1.30.1	1.30.1
Qt (LGPL version)	5.6.3	5.6.3
Docker	19.03.8-ce	19.03.8-ce

3. Changes

The following table lists the changes from the previous version.

Table 4. Changes from Industrial Network Package v1.0.1 to v1.0.2

Features	Description
Package	- Newly support RZ/N2H evaluation board.

4.　Restrictions

None

5. Notes

None.

6.   Revision History

Rev.	Date	Description	
		Page	**Summary**
1.00	Nov. 26, 2024	-	First edition for Industrial Network Package.
1.01	Dec. 23, 2024	-	Newly support RZ/T2H, RZ/N2H BSP v1.0.1.
1.02	Apr. 15, 2005	-	Newly support RZ/T2H, RZ/N2H BSP v1.0.2.

Website and Support

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