

| Step | Product information        | Contents Type | Contents name                                                                           | Link                 | Video                |
|------|----------------------------|---------------|-----------------------------------------------------------------------------------------|----------------------|----------------------|
| 1    | Flyer                      | Document      | Renesas RZ/N2L Group                                                                    | <a href="#">Link</a> |                      |
|      | Datasheet                  | Document      | Datasheet                                                                               | <a href="#">Link</a> |                      |
|      | User's Manual              | Document      | User's Manual:Hardware                                                                  | <a href="#">Link</a> |                      |
|      | Introduction video         | video         | RZ/N2L MPU Enables Easy Implementation of Industrial Ethernet and TSN                   |                      | <a href="#">Link</a> |
|      | Product introduction video | video         | RZ/N2L Product Concept & Highlights                                                     |                      | <a href="#">Link</a> |
|      | Blog                       |               | RZ/N2L Microprocessor to Implement Industrial Ethernet and TSN for Industrial Equipment | <a href="#">Link</a> |                      |

| Step | Launch of board and evaluation environment | Contents Type  | Contents name                                                                      | Link                 | Video                |
|------|--------------------------------------------|----------------|------------------------------------------------------------------------------------|----------------------|----------------------|
| 1    | Board Information/ how to get              | Info/Purchase  | Renesas Starter Kit+ for RZ/N2L Web page                                           | <a href="#">Link</a> |                      |
| 2    | How to start up the board                  | Document       | Renesas Starter Kit+ for RZ/N2L Quick Start Guide                                  | <a href="#">Link</a> |                      |
|      |                                            | Document       | Renesas Starter Kit+ for RZ/N2L User's Manual                                      | <a href="#">Link</a> |                      |
|      |                                            | video          | RZ/T2M RZ/T2L RZ/N2L Boot Mode Overview                                            |                      | <a href="#">Link</a> |
|      |                                            | video          | RZ/T RZ/N FSP Tutorial -Pin Configuration Funtion                                  |                      | <a href="#">Link</a> |
|      |                                            | video          | RZ/T RZ/N FSP Tutorial for FSP Configuration (1/2) - Introduction of Tabs          |                      | <a href="#">Link</a> |
| 3    | Evaluation Environment start-up method     | Document       | Getting Started with Flexible Software Package                                     | <a href="#">Link</a> |                      |
| 3-1  | Renesas e <sup>2</sup> studio +FSP         | exe File       | Installer of e <sup>2</sup> studio and RZ/N2L FSP                                  | <a href="#">Link</a> | <a href="#">Link</a> |
|      |                                            | Zipファイル        | e2 studio Macro for RZ/N2L                                                         | <a href="#">Link</a> |                      |
| 3-2  | Segger J-Link                              | Tool Info/Get  | J-Link                                                                             | <a href="#">Link</a> |                      |
|      | IAR Embedded Workbench for Arm             | Tool Info/Get  | Installer of EWARM(ver.9.30.1 or later)                                            | <a href="#">Link</a> |                      |
|      | IAR I-jet ICE                              | Tool Info/Get  | I-jet                                                                              | <a href="#">Link</a> |                      |
|      | smart configurator for EWARM +FSP          | exe File       | RZ/N2L FSP SC and FSP Installer(for IAR Embedded Workbench)                        | <a href="#">Link</a> | <a href="#">Link</a> |
| 3-3  | FSP                                        | Zip File       | RZ/N2 FSP_Packs                                                                    | <a href="#">Link</a> |                      |
| 3-3  | Flexible Software Package(FSP)             | Tool Info/Get  | GitHub : renesas/rzn-fsp                                                           | <a href="#">Link</a> |                      |
| 3-4  | BACnet Start up                            | Tool Info/Get  | BACnet Start up                                                                    | <a href="#">Link</a> |                      |
| 4    | How to get various software                | Sample Program | RZ/N2L Example program → <a href="#">For detail, see next page</a>                 | <a href="#">Link</a> |                      |
|      |                                            | Sample Program | RZ/T2, RZ/N2 Group Firmware Update Sample program                                  | <a href="#">Link</a> |                      |
|      |                                            | Sample Program | RZ/T2, RZ/N2 Group Device Setup Guide for Flash boot Sample program                | <a href="#">Link</a> |                      |
|      |                                            | Sample Program | RZ/N2L Group Example of separating loader program and application program projects | <a href="#">Link</a> |                      |
|      |                                            | Sample Program | RZ/N2L Group TCP/IP lwIP Sample Program Package                                    | <a href="#">Link</a> |                      |
|      |                                            | Sample Program | RZ/N2L Group SHOSTIF Sample program Package                                        | <a href="#">Link</a> |                      |
|      |                                            | Sample Program | RZ/T2, RZ/N2 Group CMSIS-DSP Library                                               | <a href="#">Link</a> |                      |
|      |                                            | Sample Program | RZ/T2, RZ/N2 How to Use Mbed TLS                                                   | <a href="#">Link</a> |                      |
|      |                                            | Sample Program | RZ/T2M, T2L, N2L Group Security Solution                                           | <a href="#">Link</a> |                      |
|      |                                            | Sample Program | RZ/N2L Group Encoder I/F SSI sample Program                                        | <a href="#">Link</a> |                      |
| 4-1  | Encoder I/F Sample Program                 | Sample Program | RZ/N2L Group Encoder I/F FA-CODER sample Program                                   | <a href="#">Link</a> |                      |
| 4-2  | Industrial Network Sample Program          | Sample Program | RZ/N2L Group EtherCAT Sample Program                                               | <a href="#">Link</a> | <a href="#">Link</a> |
|      |                                            | Sample Program | RZ/N2L Group Modbus TCP Sample Program Package                                     | <a href="#">Link</a> |                      |
|      |                                            | Sample Program | RZ/N2L Group EtherNet/IP OpENer Sample Program Package                             | <a href="#">Link</a> | <a href="#">Link</a> |
|      |                                            | Sample Program | RZ/N2L Group OPC UA Server Sample Software                                         | <a href="#">Link</a> |                      |
|      |                                            | Sample Program | RZ/T2, RZ/N2 PROFINET IRT DEVKIT                                                   | <a href="#">Link</a> | <a href="#">Link</a> |
| 4-3  | Building Automation Sample Program         | Sample Program | RZ/N2L Group Industrial Ethernet Protocol Auto-Detection                           | <a href="#">Link</a> |                      |
|      |                                            | Sample Program | RZ/N2L BACnet Sample Software                                                      | <a href="#">Link</a> | <a href="#">Link</a> |
|      |                                            | Sample Program | RZ/N2L BACnet to OPC UA Gateway Sample Software                                    | <a href="#">Link</a> |                      |

| Step | Motor Slution Kit(AC 240V version) | Contents Type  | Contents name                                                      | Link                 | Video |
|------|------------------------------------|----------------|--------------------------------------------------------------------|----------------------|-------|
| 1    | Board Information/ how to get      | Info           | AC Servo Solution Kit                                              | <a href="#">Link</a> |       |
|      |                                    | Schematic      | CN032 AC Servo Solution Design Package                             | <a href="#">Link</a> |       |
| 2    | How to start up the board          | Document       | CN032 AC Servo Solution Startup Guide (for Motion Control Utility) | <a href="#">Link</a> |       |
|      |                                    | Document       | CN032 AC Servo Solution Hardware Manual (for RZ/T2M, RZ/N2L)       | <a href="#">Link</a> |       |
|      |                                    | Document       | CN032 AC Servo Solution Firmware Manual                            | <a href="#">Link</a> |       |
|      |                                    | Document       | CN032 AC Servo Solution Startup Guide (for EtherCAT)               | <a href="#">Link</a> |       |
| 3    | How to run software                | Sample Program | CN032 AC Servo Solution Package                                    | <a href="#">Link</a> |       |

| Step      | RZ/N2L Industrial Network SOM Kit  | Contents Type  | Contents name                                                              | Link                 | Video |
|-----------|------------------------------------|----------------|----------------------------------------------------------------------------|----------------------|-------|
| 1         | Board Information/ how to get      | Info           | YCONNECT-IT-RZN2L web page                                                 | <a href="#">Link</a> |       |
|           |                                    | Zip File       | RZ/N2L Industrial Network SOM Kit Design Data+F:F                          | <a href="#">Link</a> |       |
| 2         | How to start up the board          | Document       | RZ/N2L Industrial Network SOM Kit User's Manual                            | <a href="#">Link</a> |       |
|           |                                    | Document       | RZ/N2L Industrial Network SOM Kit Startup Guide: LED Blinky Sample Program | <a href="#">Link</a> |       |
| 3         | How to get various software        | Sample Program | RZ/N2L Industrial Network SOM Kit Software Package                         | <a href="#">Link</a> |       |
|           |                                    | Document       | Application Note: HTTP Server Sample Program                               | <a href="#">Link</a> |       |
|           |                                    | Document       | Application Note: EtherCAT Slave Software                                  | <a href="#">Link</a> |       |
|           |                                    | Document       | Application Note: EtherCAT CiA402 Slave Software                           | <a href="#">Link</a> |       |
|           |                                    | Document       | Application Note: EtherNet/IP OpENer Sample Program                        | <a href="#">Link</a> |       |
| Step      | RZ/N2L Remote I/O Solution Kit     | Contents Type  | Contents name                                                              | Link                 | Video |
| 1         | Board Information/ how to get      | Info           | CN032-GATEWAYREFZ Web page                                                 | <a href="#">Link</a> |       |
|           |                                    | Zip File       | RZ/N2L Gateway Solution Design Data                                        | <a href="#">Link</a> |       |
| 2         | How to start up the board          | Document       | RZ/N2L Gateway Board Hardware Manual                                       | <a href="#">Link</a> |       |
| 3         | How to get various software        | Sample Program | RZ/N2L Remote IO Solution EtherNet/IP OpENer Sample Program Package        | <a href="#">Link</a> |       |
|           |                                    | Document       | RZ/N2L Remote IO Solution EtherCAT Sample Program Package                  | <a href="#">Link</a> |       |
| Step      | Custom board development           | Contents Type  | Contents name                                                              | Link                 | Video |
|           | Design guide                       | Document       | RZ/T2M, RZ/N2L Group Hardware Design Guide                                 | <a href="#">Link</a> |       |
|           | IBIS (for LSI)                     | IBIS           | RZ/N2L 225pin IBIS                                                         | <a href="#">Link</a> |       |
|           |                                    | IBIS           | RZ/N2L 121pin IBIS                                                         | <a href="#">Link</a> |       |
|           | Boundary Scan Description Language | BSDL           | RZ/N2L 225pin FBGA (R9A07G084GBG) BSDL                                     | <a href="#">Link</a> |       |
|           |                                    | BSDL           | RZ/N2L 121pin FBGA (R9A07G084GBA) BSDL                                     | <a href="#">Link</a> |       |
|           | Reliability Report                 | Document       | R9A07G084MXXGBX Reliability Report                                         | <a href="#">Link</a> |       |
|           | Semiconductor Package Mount Manual | Document       | Semiconductor Package Mount Manual                                         | <a href="#">Link</a> |       |
| Step      | Information for engineer           | Contents Type  | Contents name                                                              | Link                 | Video |
| As needed | FAQ                                | Info           | RZ/N2L FAQ page                                                            | <a href="#">Link</a> |       |
|           | Notes                              | Info           |                                                                            |                      |       |
|           |                                    | Document       | Renesas Starter Kit+ for RZ/N2L Differences of EEPROM size                 | <a href="#">Link</a> |       |
|           |                                    | Document       | Renesas Starter Kit+ for RZ/N2L: Quick Start Guide                         | <a href="#">Link</a> |       |
|           |                                    | Document       | Ethernet MAC (GMAC) function issue                                         | <a href="#">Link</a> |       |
|           |                                    | Document       | Withdrawal of SCI/USB authentication function                              | <a href="#">Link</a> |       |
|           |                                    | Document       | Renesas Starter Kit+ for RZ/N2L: Free Replacement                          | <a href="#">Link</a> |       |

RZ/N2L Example program Detail

| Category                | Function                                             | Module name               | File name                            |
|-------------------------|------------------------------------------------------|---------------------------|--------------------------------------|
| System                  | Bus State Controller                                 | r_bsc                     | RZN2L_RSK_bsc_Rev200.zip             |
|                         |                                                      | r_bsc_sdram               | RZN2L_RSK_bsc_sdram_Rev200.zip       |
|                         | Clock Generation Circuit                             | r_cgc                     | RZN2L_RSK_cgc_Rev200.zip             |
| Timer & Peripheral      | Analog to Digital Converter                          | r_adc                     | RZN2L_RSK_adc_Rev200.zip             |
|                         | Compare Match Timer                                  | r_cmt                     | RZN2L_RSK_cmt_Rev200.zip             |
|                         | Compare Match Timer W                                | r_cmtw                    | RZN2L_RSK_cmtw_Rev200.zip            |
|                         | Delta-sigma interface                                | r_dsmif                   | RZN2L_RSK_dsmif_gpt_poeg_Rev200.zip  |
|                         | General PWM Timer                                    | r_gpt                     |                                      |
|                         | Port Output Enable for GPT                           | r_poeg                    |                                      |
|                         | Multi-Function Timer Pulse Unit 3 Port Output Enable | r_mtu3                    | RZN2L_RSK_mtu3_poe3_Rev200.zip       |
|                         |                                                      | r_poe3                    |                                      |
| Direct memory access    | Direct Memory Access Controller                      | r_dmac                    | RZN2L_RSK_dmac_Rev200.zip            |
| Event Link              | Event Link Controller                                | r_elc                     | RZN2L_RSK_elc_Rev200.zip             |
| Communication Interface | Ethernet                                             | r_ether                   | RZN2L_RSK_Ethernet_Rev200.zip        |
|                         | Ethernet PHY                                         | r_ether_phy               |                                      |
|                         | Ethernet SWITCH                                      | r_ether_switch            |                                      |
|                         | Ethernet SELECTOR                                    | r_ether_selector          |                                      |
|                         | Controller Area Network - Flexible Data (CAN-FD)     | r_canfd                   | RZN2L_RSK_canfd_Rev200.zip           |
|                         | I2C Master on IIC                                    | r_iic_master              | RZN2L_RSK_iic_master_Rev200.zip      |
|                         |                                                      |                           | RZN2L_RSK_iic_master_dmac_Rev200.zip |
|                         | I2C Slave on IIC                                     | r_iic_slave               | RZN2L_RSK_iic_slave_Rev200.zip       |
|                         | Serial Communications Interface (SCI) UART           | r_scif_uart               | RZN2L_RSK_sci_uart_Rev200.zip        |
|                         |                                                      |                           | RZN2L_RSK_sci_uart_dmac_Rev200.zip   |
|                         | Serial Peripheral Interface                          | r_spi                     | RZN2L_RSK_spi_Rev200.zip             |
|                         |                                                      |                           | RZN2L_RSK_spi_dmac_Rev200.zip        |
|                         | USB Host Communications Device Class Driver          | r_usb_basic               | RZN2L_RSK_usb_hcdc_Rev200.zip        |
|                         |                                                      | r_usb_hcdc                |                                      |
|                         | USB Host Human Interface Device Class Driver         | r_usb_hhid                | RZN2L_RSK_usb_hhid_Rev200.zip        |
|                         | USB Host Mass Storage Class Driver                   | r_usb_basic               | RZN2L_RSK_usb_hmsc_Rev200.zip        |
|                         |                                                      | r_usb_hmasc <sup>*1</sup> |                                      |
|                         | USB Peripheral Communications Device Class           | r_usb_basic               | RZN2L_RSK_usb_pcdc_Rev200.zip        |
|                         |                                                      | r_usb_pcdc                |                                      |
|                         | USB Peripheral Mass Storage Class                    | r_usb_pmsc                | RZN2L_RSK_usb_pmsc_Rev200.zip        |
|                         | Expanded Serial Peripheral Interface (xSPI) OSPI     | r_xspi_ospi               | RZN2L_RSK_xspi_ospi_Rev200.zip       |
|                         | Expanded Serial Peripheral Interface (xSPI) QSPI     | r_xspi_qspi               | RZN2L_RSK_xspi_qspi_Rev200.zip       |
|                         | Expanded Serial Peripheral Interface (xSPI) QSPI     | r_xspi_qspi               | RZN2L_RSK_xspi_qspi_xip_Rev200.zip   |
| Other                   | FreeRTOS Port                                        | rm_Freertos_port          | RZN2L_RSK_FreeRTOS_Rev200.zip        |
|                         | FreeRTOS, TCP                                        | rm_Freertos_plus_tcp      | RZN2L_RSK_FreeRTOSplusTCP_Rev200.zip |
|                         | - <sup>*2</sup>                                      | -                         | RZN2L_RSK_HyperRAM_Rev200.zip        |

<sup>\*1</sup>: This driver is not included in FSP.

<sup>\*2</sup>: This program does not use any mainly modules.