

[Notes]

R20TS0600EJ0100

Rev.1.00

Aug. 01, 2020

RX Family

CAN API Firmware Integration Technology,

Driver Package

Outline

When using the products in the title, note the following point.

1. Notes on configuration

1. Notes on Configuration

1.1 Applicable Products

- (1) RX Family CAN API Firmware Integration Technology (CAN FIT module)

The applicable revision numbers and document numbers are as follows.

Table 1.1 CAN FIT module applicable products

Revision number of the included CAN FIT module	Document number
Rev.3.20	R01AN2472EU0320
Rev.3.11	R01AN2472EU0311
Rev.3.10	R01AN2472EU0310

- (2) RX Driver Package

The CAN FIT module in (1) is also included in the RX Driver Package.

The product names and revision numbers of the applicable RX Driver Package and the revision numbers of the CAN FIT module are as follows.

Table 1.2 Products which include the CAN FIT module

RX Driver Package product name	RX Driver Package revision number	Document number	Revision number of the included CAN FIT module
RX Family RX Driver Package Ver.1.25	Rev.1.25	R01AN5371EJ0125	Rev.3.20
RX Family RX Driver Package Ver.1.24	Rev.1.24	R01AN5267EJ0124	Rev.3.11
RX Family RX Driver Package Ver.1.23	Rev.1.23	R01AN4976EJ0124	Rev.3.11
RX Family RX Driver Package, Ver.1.22	Rev.1.22	R01AN4873EJ0122	Rev.3.10

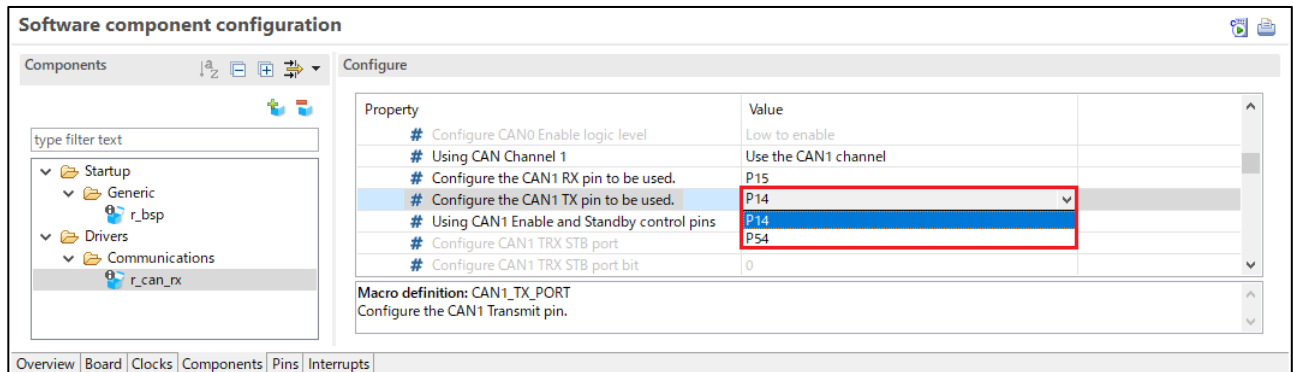
1.2 Applicable Devices

RX72M, RX72N, and RX66N groups

1.3 Details and Conditions

The pin function of CTX1 (CAN1 TX) cannot be assigned to port 23 (P23).

P23 cannot be selected for Value of 'Configure the CAN1 TX pin to be used'.



1.4 Workaround

Add the processing shown in red to r_can_rx_vX.XX.mdf (Note1) and r_can_rx_if.h in the CAN FIT module.

Note1: vX.XX is a revision number.

[CAN FIT module Rev.3.20 r_can_rx_vX.XX.mdf line 205]

• Before modification

```

----- (Omitted) -----
<property id="CAN1_TX_PORT" display="Configure the CAN1 TX pin to be used." default="P14"
type="combobox">
  <option id="CAN1_TX_PORT.P14" display="P14" value="P14"/>
  <option id="CAN1_TX_PORT.P54" display="P54" value="P54"/>
  <constraint display="Only valid for CAN1 enabled"
actionOnFail="disable">${CAN_USE_CAN1} == ${CAN_USE_CAN1.1}</constraint>
  <description>Configure the CAN1 Transmit pin.</description>
</property>
----- (Omitted) -----

```

• After modification

```
----- (Omitted) -----
<property id="CAN1_TX_PORT" display="Configure the CAN1 TX pin to be used." default="P14"
type="combobox">
    <option id="CAN1_TX_PORT.P14" display="P14" value="P14"/>
    <option id="CAN1_TX_PORT.P54" display="P54" value="P54"/>
    <option id="CAN1_TX_PORT.P23" display="RX72M, RX72N, RX66N: P23"
value="P23"/>
    <constraint display="Only valid for CAN1 enabled"
actionOnFail="disable">${CAN_USE_CAN1} == ${CAN_USE_CAN1.1}</constraint>
    <description>Configure the CAN1 Transmit pin.</description>
</property>
----- (Omitted) -----
```

[CAN FIT module Rev.3.20 r_can_rx_if.h line 275]

• Before modification

```
----- (Omitted) -----
/* CAN1 TX port configuration */
#if ((BSP_MCU_RX64M == 1) || (BSP_MCU_RX65N == 1) || (BSP_MCU_RX71M == 1) ||
(BSP_MCU_RX72M == 1) || (BSP_MCU_RX72N == 1) || (BSP_MCU_RX66N == 1))
    #if (CAN1_TX_PORT == P14)
        #define p_CAN1_TX_PIN_MPC        (&MPC.P14PFS.BYTE)
        #define p_CAN1_TX_PIN_PMR        (&PORT1.PMR.BYTE)
        #define p_CAN1_TX_PIN_PDR        (&PORT1.PDR.BYTE)
        #define p_CAN1_TX_PIN_PODR       (&PORT1.PODR.BYTE)
        #define CAN1_TX_PIN_MASK         (0x10) /* bit 4 */
    #elif (CAN1_TX_PORT == P54)
        #define p_CAN1_TX_PIN_MPC        (&MPC.P54PFS.BYTE)
        #define p_CAN1_TX_PIN_PMR        (&PORT5.PMR.BYTE)
        #define p_CAN1_TX_PIN_PDR        (&PORT5.PDR.BYTE)
        #define p_CAN1_TX_PIN_PODR       (&PORT5.PODR.BYTE)
        #define CAN1_TX_PIN_MASK         (0x10) /* bit 4 */
    #else
        #error " - Assigned CAN1 TX port not supported by device! -"
    #endif
#endif
----- (Omitted) -----
```

• After modification

```

----- (Omitted) -----
/* CAN1 TX port configuration */
#if ((BSP_MCU_RX64M == 1) || (BSP_MCU_RX65N == 1) || (BSP_MCU_RX71M == 1) ||
(BSP_MCU_RX72M == 1) || (BSP_MCU_RX72N == 1) || (BSP_MCU_RX66N == 1))
    #if (CAN1_TX_PORT == P14)
        #define p_CAN1_TX_PIN_MPC        (&MPC.P14PFS.BYTE)
        #define p_CAN1_TX_PIN_PMR        (&PORT1.PMR.BYTE)
        #define p_CAN1_TX_PIN_PDR        (&PORT1.PDR.BYTE)
        #define p_CAN1_TX_PIN_PODR       (&PORT1.PODR.BYTE)
        #define CAN1_TX_PIN_MASK          (0x10) /* bit 4 */
    #elif (CAN1_TX_PORT == P54)
        #define p_CAN1_TX_PIN_MPC        (&MPC.P54PFS.BYTE)
        #define p_CAN1_TX_PIN_PMR        (&PORT5.PMR.BYTE)
        #define p_CAN1_TX_PIN_PDR        (&PORT5.PDR.BYTE)
        #define p_CAN1_TX_PIN_PODR       (&PORT5.PODR.BYTE)
        #define CAN1_TX_PIN_MASK          (0x10) /* bit 4 */
    #elif (CAN1_TX_PORT == P23)
        #define p_CAN1_TX_PIN_MPC        (&MPC.P23PFS.BYTE)
        #define p_CAN1_TX_PIN_PMR        (&PORT2.PMR.BYTE)
        #define p_CAN1_TX_PIN_PDR        (&PORT2.PDR.BYTE)
        #define p_CAN1_TX_PIN_PODR       (&PORT2.PODR.BYTE)
        #define CAN1_TX_PIN_MASK          (0x08) /* bit 3 */
    #else
        #error " - Assigned CAN1 TX port not supported by device! -"
    #endif
    #else
        #error " - Assigned CAN1 TX port not supported by device! -"
    #endif
#endif
----- (Omitted) -----

```

[CAN FIT module Rev.3.10 and Rev.3.11 r_can_rx_vX.XX.mdf line 205]

• Before modification

```
----- (Omitted) -----
<property id="CAN1_TX_PORT" display="Configure the CAN1 TX pin to be used." default="P14"
type="combobox">
    <option id="CAN1_TX_PORT.P14" display="P14" value="P14"/>
    <option id="CAN1_TX_PORT.P54" display="P54" value="P54"/>
    <constraint display="Only valid for CAN1 enabled"
actionOnFail="disable">${CAN_USE_CAN1} == ${CAN_USE_CAN1.1}</constraint>
    <description>Configure the CAN1 Transmit pin.</description>
</property>
----- (Omitted) -----
```

• After modification

```
----- (Omitted) -----
<property id="CAN1_TX_PORT" display="Configure the CAN1 TX pin to be used." default="P14"
type="combobox">
    <option id="CAN1_TX_PORT.P14" display="P14" value="P14"/>
    <option id="CAN1_TX_PORT.P54" display="P54" value="P54"/>
    <option id="CAN1_TX_PORT.P23" display="RX72M: P23" value="P23"/>
    <constraint display="Only valid for CAN1 enabled"
actionOnFail="disable">${CAN_USE_CAN1} == ${CAN_USE_CAN1.1}</constraint>
    <description>Configure the CAN1 Transmit pin.</description>
</property>
----- (Omitted) -----
```

[CAN FIT module Rev.3.10r_can_rx_if.h line 252]

[CAN FIT module Rev.3.11 r_can_rx_if.h line 274]

· Before modification

```

----- (Omitted) -----

/* CAN1 TX port configuration */
#if ((BSP_MCU_RX64M == 1) || (BSP_MCU_RX65N == 1) || (BSP_MCU_RX71M == 1) ||
(BSP_MCU_RX72M == 1))
    #if (CAN1_TX_PORT == P14)
        #define p_CAN1_TX_PIN_MPC      (&MPC.P14PFS.BYTE)
        #define p_CAN1_TX_PIN_PMR      (&PORT1.PMR.BYTE)
        #define p_CAN1_TX_PIN_PDR      (&PORT1.PDR.BYTE)
        #define p_CAN1_TX_PIN_PODR     (&PORT1.PODR.BYTE)
        #define CAN1_TX_PIN_MASK       (0x10) /* bit 4 */
    #elif (CAN1_TX_PORT == P54)
        #define p_CAN1_TX_PIN_MPC      (&MPC.P54PFS.BYTE)
        #define p_CAN1_TX_PIN_PMR      (&PORT5.PMR.BYTE)
        #define p_CAN1_TX_PIN_PDR      (&PORT5.PDR.BYTE)
        #define p_CAN1_TX_PIN_PODR     (&PORT5.PODR.BYTE)
        #define CAN1_TX_PIN_MASK       (0x10) /* bit 4 */
    #else
        #error " - Assigned CAN1 TX port not supported by device! -"
    #endif
#endif
----- (Omitted) -----

```

• After modification

```

----- (Omitted) -----
/* CAN1 TX port configuration */
#if ((BSP_MCU_RX64M == 1) || (BSP_MCU_RX65N == 1) || (BSP_MCU_RX71M == 1) ||
(BSP_MCU_RX72M == 1))
    #if (CAN1_TX_PORT == P14)
        #define p_CAN1_TX_PIN_MPC      (&MPC.P14PFS.BYTE)
        #define p_CAN1_TX_PIN_PMR      (&PORT1.PMR.BYTE)
        #define p_CAN1_TX_PIN_PDR      (&PORT1.PDR.BYTE)
        #define p_CAN1_TX_PIN_PODR     (&PORT1.PODR.BYTE)
        #define CAN1_TX_PIN_MASK       (0x10) /* bit 4 */
    #elif (CAN1_TX_PORT == P54)
        #define p_CAN1_TX_PIN_MPC      (&MPC.P54PFS.BYTE)
        #define p_CAN1_TX_PIN_PMR      (&PORT5.PMR.BYTE)
        #define p_CAN1_TX_PIN_PDR      (&PORT5.PDR.BYTE)
        #define p_CAN1_TX_PIN_PODR     (&PORT5.PODR.BYTE)
        #define CAN1_TX_PIN_MASK       (0x10) /* bit 4 */
    #elif (CAN1_TX_PORT == P23)
    #if (BSP_MCU_RX72M == 1)
        #define p_CAN1_TX_PIN_MPC      (&MPC.P23PFS.BYTE)
        #define p_CAN1_TX_PIN_PMR      (&PORT2.PMR.BYTE)
        #define p_CAN1_TX_PIN_PDR      (&PORT2.PDR.BYTE)
        #define p_CAN1_TX_PIN_PODR     (&PORT2.PODR.BYTE)
        #define CAN1_TX_PIN_MASK       (0x08) /* bit 3 */
    #else
        #error " - Assigned CAN1 TX port not supported by device! -"
    #endif
    #else
        #error " - Assigned CAN1 TX port not supported by device! -"
    #endif
#endif
----- (Omitted) -----

```

1.5 Schedule for Fixing the Problem

This problem will be fixed in the next version.

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Aug.01.20	-	First edition issued

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