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Rev.1.00
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[Notes]
CS+ Code Generator for RL78 (CS+ for CC),
CS+ Code Generator for RL78 (CS+ for CA,CX),
e^2 studio Code Generator Plug-in,
Applilet3 Coding Assistance Tool for RL78

Outline

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

1. When continuous transfer mode is selected in the CSI configuration

1. When Continuous Transfer Mode is Selected in the CSI Configuration

1.1 Applicable Products

- V2.03.00 and later versions of the CS+ Code Generator for RL78 (CS+ for CC)
- V2.03.00 and later versions of the CS+ Code Generator for RL78 (CS+ for CA,CX)
- V3.0.1.9 and later versions of e^2 studio (V2.0.2 and later versions of the Code Generator plug-in)
- V1.07.00 and later versions of Applilet3 for RL78

1.2 Applicable MCUs

- RL78 Family: RL78/D1A, RL78/F12, RL78/F13, RL78/F14, RL78/F15, and RL78/L12 groups

1.3 Details

When CSI transmission or CSI transmission/reception is selected in applicable products and "continuous transfer mode" is selected for the "transfer mode settings", an additional setting is required for the output code.

1.4 Workaround

The buffer empty interrupt settings of channel xx need to be specified in the SMR serial mode register.
Add SMRxx |= _0001_SAU_BUFFER_EMPTY to the transmission start function (R_CSIxx_Send) or the transmission/reception start function (R_CSIxx_Send_Receive).
(xx means the channel number.)

The following is an example of the modification required when CSI00 transmission/reception is selected for RL78/F14, channel 0, and the transfer mode is set to continuous transfer. The modification is shown in red.

Note: This addition is required every time code is generated.

R_CSI00_Send_Receive function in r_cg_serial.c

```
MD_STATUS R_CSI00_Send_Receive(uint8_t * const tx_buf, uint16_t tx_num, uint8_t * const
rx_buf)
{
    MD_STATUS status = MD_OK;

    if (tx_num < 1U)
    {
        status = MD_ARGERROR;
    }
    else
    {
        g_csi00_send_length = tx_num;    /* send data length */
        g_csi00_tx_count = tx_num;      /* send data count */
        SMR00 |= _0001_SAU_BUFFER_EMPTY;
        gp_csi00_tx_address = tx_buf;    /* send buffer pointer */
        gp_csi00_rx_address = rx_buf;    /* receive buffer pointer */
        CSIMK00 = 1U;    /* disable INTCSI00 interrupt */

        if (0U != gp_csi00_tx_address)
        {
            SDR00L = *gp_csi00_tx_address;    /* started by writing data to SDR[7:0] */
            gp_csi00_tx_address++;
        }
        else
        {
            SDR00L = 0xFFU;
        }

        g_csi00_tx_count--;
        CSIMK00 = 0U;    /* enable INTCSI00 interrupt */
    }

    return (status);
}
```

1.5 Schedule for Fixing the Problem

This problem will be fixed in a later version.
A revised version will be available in July 2018.

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Dec. 16, 2017	-	First edition issued

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