

## I94100 CMSIS BSP Revision History

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### Revision 3.05.002 (Released 2018-10-02)

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- [Fixed]
  - "I2S\_Slave\_DPWM" might occur two channels swapping.
  - WindowsTool in "USBD\_HID\_Transfer", "USBD\_Printer\_And\_HID\_Transfer" and "USBD\_VCOM\_And\_HIDTransfer" has incorrect target PID. Resulting "HIDTransferTest.exe" could not work properly.
- [Revise]
  - Move buffer update process from main loop to EP3\_IRQHandler, to prevent noise. Revised samples: "USBD\_UAC\_DMIC\_DPWM\_PDMA\_4CH", "USBD\_UAC\_DPWM", "USBD\_UAC\_DMIC\_DPWM\_PDMA" and "USBD\_UAC\_I2S\_Output"

### Revision 3.05.001 (Released 2018-09-25)

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- [Note]
  - This version is target for EVB that using "12.288 MHz External Crystal". Before using this BSP, please make sure your external crystal is 12.288 MHz.
- [Add]
  - "SPI\_QuadFlash" Demonstrate how to use SPI quad-mode to read/write data to external SPI-Flash.
  - "USBD\_UAC\_85L40\_PDMA\_4CH\_VolCtrl" Demonstrate how to implement a USB 4-channel recording device using codec NAU85L40. "USBD\_UAC\_85L40\_PDMA\_4CH\_NoVolCtrl" is without volume control version.
  - "USBD\_UAC\_DMIC\_DPWM\_PDMA\_4CH" Demonstrate how to implement a USB 4-channel recording and playback device using DMIC and DPWM.
  - "USBD\_UAC\_DMIC\_PDMA\_4CH" Demonstrate how to implement a USB 4-channel recording device using DMIC.
  - "USBD\_UAC\_I2S\_Output" Demonstrate how to implement a UAC device and output audio data by I2S.
  - "I2S\_Slave\_DPWM" Demonstrate how to implement a I2S slave device to receive audio data from master and playback by DPWM.
  - "USBD\_UAC\_85L40\_DPWM\_PDMA\_4CH\_VolCtrl" Demonstrate how to implement a USB 4-channel recording playback device using codec NAU85L40 and DPWM.
- [Revised]
  - Revise "Set\_ModuleClock" API for new USBD default clock source setting and USBD related samples for new I94100 ver.D.
  - Revise "I2S\_Master", "I2S\_DPWM\_85L40", "I2S\_DPWM\_85L40\_PDMA", "USBD\_UAC\_85L40\_PDMA", "USBD\_UAC\_85L40\_PDMA\_4CH" PLL frequency to be compatible with the new HXT frequency.
  - "FMC\_ISPCTL" has new gerister, "PT" ISP Flash Program Time, at the FMC\_ISPCTL[10:8].
  - Revise VID and PID to USBD related samples.
- [Fixed]
  - SPI\_Open return incorrecty peripheral frequency.
  - Revise startup\_I94100.s to avoid WIC not reset after wake-up.

- "FMC\_IAP" All NVIC interrupt request need to be disabled before remapping.
- "USB\_Mass\_Storage\_DataFlash" LDO overdrive needs to be enabled if the HCLK is over 160 MHz.
- "SYS\_SPDMode\_Wakeup" The SRAM retention check address might be used by other variable after wake-up.
- API "CLK\_EnablePLL" has incorrect Input Divider - NR limitation.
- API "CLK\_SetPCLKDivider" has incorrect PCLKDIV calculation.

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## Revision 3.00.002 (Released 2017-05-17)

- EADC samples add extend sampling time.

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## Revision 3.00.001 (Released 2017-05-09)

- Add trim HIRC 48.000/49.152 MHz selection and checking.
- Modify IPs module reset calling flow.

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## Revision 3.00.000 (Released 2017-04-18)

- Initial Release.

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