Release Notes for SPD1148 Standard Peripherals Library Drivers

V1.8.0/ 31- Dec -2021

Main Changes

1. **Bug Fix**

- gpio.c
  - Modify GPIO_ResetAllPin()
- comp.h/.c
  - Modify COMP_Init(), add code to enable bandgap
  - Modify COMP_EnableDAC(), add code to enable bandgap
  - Modify COMP_DACBufferInit(), add code to enable bandgap
- adc.c
  - Modify ADC_SetSampleAndConvertTime()
  - Modify ADC_PowerUp(), add code to enable bandgap
- pga.c
  - Modify PGA_DifferentialInit(), add code to enable bandgap
- clock.c
  - Modify CLOCK_ConfigurePLL()
- timer.h
  - Delete TIMER_EnableCounterHold() and TIMER_DisableCounterHold()
- uart.h
  - Modify UART_ClearRxFIFO() and UART_ClearTxFIFO()
- spc1168_reg.h/spc1168_bitfield.h
  - Reserve TMRCTL.HOLD register bit-field
  - Modify the width of UARTFOR.BYTECNT register bit-field

2. **Other Change**

- pga.c
  - Add PGA_EnableSensorMode() and PGA_DisableSensorMode()
- flash.h/.c
  - Add FLASH_EraseBlock()
  - Modify FLASH_ProgramWord()
  - Add macro definition *FLASH_CMD_ERASE_BLOCK*
- clock.c
  - Add note for CLOCK_TrimPLL()
  - Modify CLOCK_Init()
- adc.h/.c
  - Modify ADC_CalculatePreciseTemperature() and ADC_CalculateTemperature()
  - Add ADC_EnableBandgap() and ADC_DisableBandgap()
- spc1168_reg.h/spc1168_bitfield.h
  - Reserve XOCTL.FREQSEL register bit-field

- Rename XOCTL.FEEDXOUT register bit-field to XOCTL. FEEDXIO
- crc.h
  - Modify CRC_ModeEnum
- gpio.h
  - Modify the post-fix of const number
- Update SPC1168.svd, SPC1168.SFR, SPC1168.FLM and SPC1168_NVR.FLM files
- iar/startup_spc1168.s
  - Add code comment
- hv.h/.c
  - Add macro definition *HV_TIMEOUT_MAX*
  - Modify HV_Command()
  - Modify HV_InitReg()
  - Add HV_EnableLowVoltageOperation()
- hv_bitfield.h
  - Add macro definition for *PDRVCTL.CPPROTEN* register bit-field
- Example Code
  - Modify Flash_M_Access_User
  - Modify Flash_User_FuncWrap
  - Modify AES/main.c
  - Modify High_Voltage_5dot5V_Operation/main.c
  - Modify TSenser/main.c

V1.7.0/ 26-May-2021

Main Changes

- spc1168.h
  - Add macro function READ_BITS().
  - Add macro function WRITE_FIELD(), READ_FIELD() and CLEAR_FIELD().
  - Add macro function POSITION_VAL().
  - Add macro function UNUSED().
- spc1168_bitfield.h
  - Update TZBCTL.DCBEVT1D bit-field macro definitions.
- flash.c
  - Update function FLASH_SetTiming().
- i2c.c
  - Update function I2C_MasterWrite(), I2C_MasterRead(), I2C_MasterBulkWrite() and I2C_MasterBulkRead().
  - Update function I2C_SlaveBulkWrite().
- clock.c
  - Update CLOCK_Init(), CLOCK_InitWithRCO(), CLOCK_ConfigurePLL() and CLOCK_ConfigurePLLWithRCO().
  - Update CLOCK_HCLKSelEnum, CLOCK_RefSelEnum definitions.
- comp.c
  - Update function COMP_Init() and COMP_SetFilterWindowTimeNs().
- delay.h/delay.c
  - Update Delay method control macros.
- ssp.c
  - Update function SSP_MasterB2BTransceive() and SSP_SlaveTransceive().
- ecap.c
  - Update function ECAP_CaptureModeInit().
  - Rename function ECAP_SetInputPin() to ECAP_SetInput().
  - Update function ECAP_SetInput().
- pwm.c
  - Update function PWM_ComplementaryPairChannelInit() and PWM_SingleChannelInit().
- hv.h/hv.c
  - Add function HV_ConnectTSensorToAnalogTest().
  - Modify macro definition of pin map between HV and MCU.
  - Remove function HV_WriteRegBits() and add function HV_WriteRegField().
  - Add function HV_SetChargePumpClockDiv() and HV_GetChargePumpClockDiv().
- Demo code
  - Update ECAP_Continue_Absolute\main.c
  - Update ECAP_Continue_Delta\main.c
  - Update ECAP_Oneshot_Absolute\main.c
  - Update UART_TX_and_CheckRX\main.c
  - Update UART_RX_and_SentBack\main.c
  - Update SSP_Master_B2B_TxRx_Polling\main.c

- Update SSP_Master_TxRx_INT\main.c
- Update SSP_Master_TxRx_Polling\main.c
- Update SSP_Slave_B2B_TxRx_Polling\main.c
- Update SSP_Slave_TxRx_INT\main.c
- Update SSP_Slave_TxRx_Polling\main.c
- Update PWM_Trigger_ADC_Sample\main.c
- Update PWM_Current_Protect_Trigger_TZ\main.c
- Update PGA_Calibration\main.c
- Update I2C_Master_Polling_TxRx\main.c
- Update I2C_Master_Bulk_Polling_TxRx\main.c
- Update I2C_Master_INT_Rx\main.c
- Update GPIO_Edge_Detect\main.c
- Update Flash_With_INT\main.c
- Update Flash_EEPROM_Emulation\EWARM\spc1168.icf
- Update Flash_Frequency_Reduction\EWARM\spc1168.icf
- Update Flash_M_Access_User\EWARM\spc1168.icf
- Update Flash_Operation\EWARM\spc1168.icf
- Update Flash_Sector_Protect\EWARM\spc1168.icf
- Update Flash_User_FuncWrap\EWARM\spc1168.icf
- Update Flash_With_INT\EWARM\spc1168.icf
- Update DAC\main.c

V1.5.0/ 18-November-2019

Main Changes

- Initial release.