N76E003 BSP Guide

Directory Introduction for Nuvoton 8051 Family

Directory Information

Please extract the “N76E003_BSP_Keil_C51_V1.0.1.zip” file firstly, and confirm the following folder all contain.

This BSP folder contents:

Document	Driver reference manual and reversion history.
Common	The common usual subroutine include Timer delay and basic UART baud rate setting
Include	All include header file and define
Sample_Code	Driver sample code.
Startup	Startup file for N76E003

For additional information or questions, please contact: Nuvoton Technology Corporation.

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1 .\Document\

Nuvoton_N76E003_BSP_ Revision_History.pdf	This document shows the revision history of N76E003 BSP.

2 \Common

Common.c	UART0 Baud rate setting base on Time 1 or Timer 3, UART1 baud rate setting base on Timer 3
Delay.c	Timer0_Delay100us, Timer0_Delay1ms, Timer1_Delay10ms, Timer2_Delay500us, Timer3_Delay100ms setting

3 \Include

Common.h	Header file to extern function for Common.c
Delay.h	Header file of extern function for Delay.c
Function_Define.h	Function setting include GPIO initial, External pin interrupt trig mode, Timer value common value define, Timer 2 capture enable, PWM initial, ADC initial
N76E003.h	N76E003 SFR define header file
SFR_Macro.h	Extend N76E003 define for no-bit-addressable SFR with bit enable or disable function.

4 \Sample_Code

ADC_Bandgap	ADC band-gap input demo code
ADC_IO_Trig	ADC trig start polling or interrupt by special I/O
ADC_PWM_Trig	ADC trig start by PWM cycle finish
ADC_Simple	ADC trig start polling or interrupt by SFR start bit
Clock_Out	N76E003 HIRC clock out setting
Fsys_Select	System clock select demo
GPIO	All GPIO quasi / push pull/ input only/ open drain four status initial setting and toggle out
I2C_EEPROM	I^2C module connect with external EEPROM read writer demo
I2C_Master-Slave	Two piece of N76E003 I^2C module connect, the master and slave demo code
IAP_AP-program-AP_Dataflash	IAP run in APROM to program APROM demo code, It's also used as program data flash area.
IAP_Dataflash_EEPROM	Customer use this macro, each time call this subroutine, can use Data flash as EEPROM mode, the process include read old data / erase / modify new code/ write in.
IAP_LD-Program-AP	IAP run in LDROM to program APROM. This function is use in ISP function.
IAP_ModifyHIRC	The function to modify HIRC value to 16.6MHz for UART baud rate over 38400 application system.
IAP_program_Config	Use code IAP function to modify CONFIG area.
IAP_Read_Bandgap	Use IAP command to read actually band-gap value for each N76E003.
IAP_Read_UID	Use IAP command to read the UID of each N76E003.
Pin_Interrupt	Each GPIO of N76E003 can use as external interrupt pin. trig IC wakeup from idle / power down mode.

PWM_DeadTime	PWM output with dead time insert initial setting
PWM_INT	PWM output with interrupt subroutine
PWM_Simple	Simple PWM output setting initial
SPI_Flash	Read / writer W25Q16 sample code.
SPI_Master-Slave	SPI connect with two N76E003, Include master and slave sample code, use interrupt and polling.
Timer01_mode_0	Timer 0 and Timer 1 mode 0 demo code
Timer01_mode_1	Timer 0 and Timer 1 mode 1 demo code
Timer01_mode_2	Timer 0 and Timer 1 mode 2 demo code
Timer01_mode_3	Timer 0 and Timer 1 mode 3 demo code
Timer2_AutoReload_Delay	Timer 2 auto reload mode for delay function demo code
Timer2_Compare_Capture	Timer 2 capture with compare function demo code
Timer3	Timer 3 delay counter demo code
UART0	UART0 demo code
UART0_mode_3	UART0 mode 3 with TB8/RB8 function
UART1	UART1 demo code
WakeupTimer_INT	Wakeup timer with interrupt subroutine demo code
Watchdog_INT	Watch dog without reset, only interrupt function initial
Watchdog_Reset	Watch dog reset MCU function setting initial
xRAM_768B	XRAM 768 bit test, assembler and c code compiler in one project demo

5 REVISION HISTORY

Date	Revision	Description
2016.12.28	1.00.000	1. Initially issued.

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