N76E616 Sample Code Directory

Directory Introduction for 8-bit 8051 MCU Family

Directory Information

Document	Revision history.
SampleCode	Sample code of N76E616.

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

www.nuvoton.com

1 Document Information

N76E616 Sample Code Revision History.pdf	This document shows the revision history of N76E616 sample code.

2 Sample Code Information

SampleCode	Demonstrate N76E616 function in Keil C51
Common	Common files for Tiny Board sample code.
Include	Header file of N76E616
Startup	Startup file of N76E616

3 \SampleCode

ADC	Demonstrate ADC function and show the conversion result to PC.
Clock_Out	Demonstrate clock output function from system clock.
Current	Demonstrate power down, idle or operating mode power consumption.
GPIO	Demonstrate GPIO toggling function.
GPIO – Simple for A51	Demonstrate GPIO toggling function by assembly code.
GPIO – Simple for C51	Demonstrate GPIO toggling function by C code.
I2C_EEPROM	Demonstrate I2C function to read/write a EEPROM device.
I2C_Master-Slave	Demonstrate I2C Master-Slave mode function.
Interrupt-Wake-Up	Demonstrate wake up function from power down mode through GPIO trigger.
ISP_AP-Program-AP	Demonstrate ISP function through APROM programming APROM.
ISP_LD-Program-AP	Demonstrate ISP function through LDROM programming APROM.
LCD_V1.0	Demonstrate LCD display function and show “N76E616” words by Nu-Edu 4COM-LCD Board V1.0
LCD_V1.1	Demonstrate LCD display function and show “N76E616” words by Nu-Edu 4COM-LCD Board V1.1
LCD-Temp_V1.1	Demonstrate LCD display function and show “Nuvoton” words and current temperature by Nu-Edu 4COM-LCD Board V1.1
Pin_Interrupt	Demonstrate wake up function from power down mode through GPIO trigger.
Timer01_mode_0	Demonstrate timer0/1 mode 0(13-bit timer) function.
Timer01_mode_1	Demonstrate timer0/1 mode 1(16-bit timer) function.

Timer01_mode_2	Demonstrate timer0/1 mode 2(8-bit auto reload timer) function.
Timer01_mode_3	Demonstrate timer0/1 mode 3(2 separate 8-bit timer) function.
Timer2_Auto_Reload	Demonstrate timer2 auto reload mode function.
Timer2_PWM	Demonstrate timer2 PWM mode function.
Timer3	Demonstrate timer3(16-bit auto reload) function.
UART0_AAR	Demonstrate UART0 AAR function.
UART0_mode_1	Demonstrate UART0 mode 1 function.
UART0_mode_2	Demonstrate UART0 mode 2 function.
UART0_mode_3	Demonstrate UART0 mode 3 function.
UART1_mode_1	Demonstrate UART1 mode 1 function.
Watch_Dog	Demonstrate WDT function.

Appendix 1. Limitations of KEIL™ C51 Evaluation Edition

KEIL™ development tools without a current product license run as an Evaluation edition and have the following restrictions:

- The 8051 compiler, assembler, linker, and debugger are limited to 2 Kbytes of object code. Source code may be of any size.
- Programs that generate more than 2 Kbytes of object code will not compile, assemble, or link.
- The debugger supports programs that are 2 Kbytes or smaller.
- The startup code generated includes LJMPs. Code generated cannot be used in single-chip devices that support 2 Kbytes or less of program space.
- Programs start at offset 0x0800. Programs generated with the evaluation software may not be programmed into single-chip devices with less than 2 Kbytes of on-chip ROM.
- No hardware support for multiple DPTR registers is provided.
- No support for floating-point arithmetic and no support for user libraries are provided.
- No support for in-line assembly using #pragma ASM.
- The following components which are present in the PK51 Full Version are not included in the Evaluation Version: Linker for Code Banking, Library Manager, and RTX51 Tiny Real-time Operating System.

Important Notice

Nuvoton Products are neither intended nor warranted for usage in systems or equipment, any malfunction or failure of which may cause loss of human life, bodily injury or severe property damage. Such applications are deemed, "Insecure Usage".

Insecure usage includes, but is not limited to: equipment for surgical implementation, atomic energy control instruments, airplane or spaceship instruments, the control or operation of dynamic, brake or safety systems designed for vehicular use, traffic signal instruments, all types of safety devices, and other applications intended to support or sustain life.

All Insecure Usage shall be made at customer's risk, and in the event that third parties lay claims to Nuvoton as a result of customer's Insecure Usage, customer shall indemnify the damages and liabilities thus incurred by Nuvoton.