

**Contents of MSP430x41x, MSP430F42x, MSP430F42xA Code Examples (slac017.zip) - asm (CCS), .s43 (IAR), and .c (CCS & IAR)**

**Link to zip file:** <http://www.ti.com/lit/zip/slac017>

**Applicable Devices:** MSP430F412, MSP430F413, MSP430F415, MSP430417, MSP430F423A, MSP430F425A, MSP430F427A

*Consult readme.txt included in the zip file for disclaimer and coding style guidelines*

**Contents:**

- [Assembly Code Examples \(.asm, CCS compatible\)](#)
- [Assembly Code Examples \(.s43, IAR compatible\)](#)
- [C Code Examples \(.c, IAR & CCS compatible\)](#)

<b>.asm code examples – CCS</b>	
<b>File name</b>	<b>Description</b>
fet410_1.asm	Software Toggle P5.1
fet410_LFxtal_nmi.asm	LFXT1 Oscillator Fault Detection
fet410_bt_01.asm	Basic Timer, Toggle P5.1 Inside ISR, DCO SMCLK
fet410_bt_02.asm	Basic Timer, Toggle P5.1 Inside ISR, 32kHz ACLK
fet410_clks_01.asm	FLL+, Output MCLK, ACLK Using 32kHz XTAL and DCO
fet410_fll_01.asm	FLL+, Runs Internal DCO at 2.45MHz
fet410_fll_02.asm	FLL+, Runs Internal DCO at 8MHz
fet410_isp.asm	Flash In-System Program Memory
fet410_lcd_01.asm	LCD, Display "6543210" on STK/EVK LCD
fet410_lcd_02.asm	LCD, Display Numbers on a Static LCD
fet410_lcd_03.asm	LCD, Display Numbers on a 4-Mux LCD
fet410_lpm3.asm	FLL+, LPM3 Using Basic Timer ISR, 32kHz ACLK
fet410_sd16_01.asm	SD16, Continuous Conversion on a Group of Channels
fet410_sd16_02.asm	SD16, Single Conversion on a Group of Channels
fet410_sd16_03.asm	SD16, Continuous Conversion on a Single Channel
fet410_sd16_04.asm	SD16, Single Conversion on Single Channel Polling IFG
fet410_sd16_05.asm	SD16, Single Conversion on Single Channel Using ISR
fet410_sd16_06.asm	SD16, Using the Integrated Temperature Sensor
fet410_ta_01.asm	Timer_A, Toggle P5.1, CCR0 Cont. Mode ISR, DCO SMCLK
fet410_ta_02.asm	Timer_A, Toggle P5.1, CCR0 Up Mode ISR, DCO SMCLK
fet410_ta_03.asm	Timer_A, Toggle P5.1, Overflow ISR, DCO SMCLK
fet410_ta_04.asm	Timer_A, Toggle P5.1, Overflow ISR, 32kHz ACLK
fet410_ta_05.asm	Timer_A, Toggle P5.1, CCR0 Up Mode ISR, 32kHz ACLK
fet410_ta_16.asm	Timer_A, PWM TA1-2 Up Mode, DCO SMCLK
fet410_ta_17.asm	Timer_A, PWM TA1-2 Up Mode, 32kHz ACLK
fet410_ta_22.asm	Timer_A, Output 40kHz Square Wave, Up Mode, SMCLK DCO
fet410_ta_25.asm	Timer_A, Output DTMF, Cont. Mode, DCO SMCLK
fet410_ta_uart115k.asm	Timer_A, UART 115200 Echo, DCO SMCLK
fet410_ta_uart2400.asm	Timer_A, UART 2400 Ultra-low Power Echo, 32kHz ACLK
fet410_ta_uart9600.asm	Timer_A, UART 9600 Echo, DCO SMCLK
fet410_wdt_01.asm	WDT, Toggle P5.1, Interval Overflow ISR, DCO SMCLK
fet410_wdt_02.asm	WDT, Toggle P5.1, Interval Overflow ISR, 32kHz ACLK

**.s43 code examples – IAR**

<b>File name</b>	<b>Description</b>
fet410_1.s43	Software Toggle P5.1
fet410_LFxtal_nmi.s43	LFXT1 Oscillator Fault Detection
fet410_bt_01.s43	Basic Timer, Toggle P5.1 Inside ISR, DCO SMCLK
fet410_bt_02.s43	Basic Timer, Toggle P5.1 Inside ISR, 32kHz ACLK
fet410_clks_01.s43	FLL+, Output MCLK, ACLK Using 32kHz XTAL and DCO
fet410_fll_01.s43	FLL+, Runs Internal DCO at 2.45MHz
fet410_fll_02.s43	FLL+, Runs Internal DCO at 8MHz
fet410_isp.s43	Flash In-System Program Memory
fet410_lcd_01.s43	LCD, Display "6543210" on STK/EVK LCD
fet410_lcd_02.s43	LCD, Display Numbers on a Static LCD
fet410_lcd_03.s43	LCD, Display Numbers on a 4-Mux LCD
fet410_lpm3.s43	FLL+, LPM3 Using Basic Timer ISR, 32kHz ACLK
fet410_sd16_01.s43	SD16, Continuous Conversion on a Group of Channels
fet410_sd16_02.s43	SD16, Single Conversion on a Group of Channels
fet410_sd16_03.s43	SD16, Continuous Conversion on a Single Channel
fet410_sd16_04.s43	SD16, Single Conversion on Single Channel Polling IFG
fet410_sd16_05.s43	SD16, Single Conversion on Single Channel Using ISR
fet410_sd16_06.s43	SD16, Using the Integrated Temperature Sensor
fet410_ta_01.s43	Timer_A, Toggle P5.1, CCR0 Cont. Mode ISR, DCO SMCLK
fet410_ta_02.s43	Timer_A, Toggle P5.1, CCR0 Up Mode ISR, DCO SMCLK
fet410_ta_03.s43	Timer_A, Toggle P5.1, Overflow ISR, DCO SMCLK
fet410_ta_04.s43	Timer_A, Toggle P5.1, Overflow ISR, 32kHz ACLK
fet410_ta_05.s43	Timer_A, Toggle P5.1, CCR0 Up Mode ISR, 32kHz ACLK
fet410_ta_16.s43	Timer_A, PWM TA1-2 Up Mode, DCO SMCLK
fet410_ta_17.s43	Timer_A, PWM TA1-2 Up Mode, 32kHz ACLK
fet410_ta_22.s43	Timer_A, Output 40kHz Square Wave, Up Mode, SMCLK DCO
fet410_ta_25.s43	Timer_A, Output DTMF, Cont. Mode, DCO SMCLK
fet410_ta_uart115k.s43	Timer_A, UART 115200 Echo, DCO SMCLK
fet410_ta_uart2400.s43	Timer_A, UART 2400 Ultra-low Power Echo, 32kHz ACLK
fet410_ta_uart9600.s43	Timer_A, UART 9600 Echo, DCO SMCLK
fet410_wdt_01.s43	WDT, Toggle P5.1, Interval Overflow ISR, DCO SMCLK
fet410_wdt_02.s43	WDT, Toggle P5.1, Interval Overflow ISR, 32kHz ACLK

**C code examples – IAR & CCS**

<b>File name</b>	<b>Description</b>
fet410_1.c	Software Toggle P5.1
fet410_LFxtal_nmi.c	LFXT1 Oscillator Fault Detection
fet410_bt_01.c	Basic Timer, Toggle P5.1 Inside ISR, DCO SMCLK
fet410_bt_02.c	Basic Timer, Toggle P5.1 Inside ISR, 32kHz ACLK
fet410_clks_01.c	FLL+, Output MCLK, ACLK Using 32kHz XTAL and DCO
fet410_fll_01.c	FLL+, Runs Internal DCO at 2.45MHz
fet410_fll_02.c	FLL+, Runs Internal DCO at 8MHz
fet410_lcd_01.c	LCD, Display "6543210" on STK/EVK LCD
fet410_lcd_02.c	LCD, Display Numbers on a Static LCD
fet410_lcd_03.c	LCD, Display Numbers on a 4-Mux LCD
fet410_lpm3.c	FLL+, LPM3 Using Basic Timer ISR, 32kHz ACLK
fet410_sd16_01.c	SD16, Continuous Conversion on a Group of Channels
fet410_sd16_02.c	SD16, Single Conversion on a Group of Channels
fet410_sd16_03.c	SD16, Continuous Conversion on a Single Channel
fet410_sd16_04.c	SD16, Single Conversion on Single Channel Polling IFG
fet410_sd16_05.c	SD16, Single Conversion on a Single Channel Using ISR
fet410_sd16_06.c	SD16, Using the Integrated Temperature Sensor
fet410_ta_01.c	Timer_A, Toggle P5.1, CCR0 Cont. Mode ISR, DCO SMCLK
fet410_ta_02.c	Timer_A, Toggle P5.1, CCR0 Up Mode ISR, DCO SMCLK
fet410_ta_03.c	Timer_A, Toggle P5.1, Overflow ISR, DCO SMCLK
fet410_ta_04.c	Timer_A, Toggle P5.1, Overflow ISR, 32kHz ACLK
fet410_ta_05.c	Timer_A, Toggle P5.1, CCR0 Up Mode ISR, 32kHz ACLK
fet410_ta_16.c	Timer_A, PWM TA1-2 Up Mode, DCO SMCLK
fet410_ta_17.c	Timer_A, PWM TA1-2 Up Mode, 32kHz ACLK
fet410_ta_uart115k.c	Timer_A, UART 115200 Echo, DCO SMCLK
fet410_ta_uart2400.c	Timer_A, UART 2400 Ultra-low Power Echo, 32kHz ACLK
fet410_ta_uart9600.c	Timer_A, UART 9600 Echo, DCO SMCLK
fet410_wdt_01.c	WDT, Toggle P5.1, Interval Overflow ISR, DCO SMCLK
fet410_wdt_02.c	WDT, Toggle P5.1, Interval Overflow ISR, 32kHz ACLK

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Military	<a href="http://www.ti.com/military">www.ti.com/military</a>
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