Contents of MSP430F543x, MSP430F541x Code Examples (slac166.zip) - asm (CCS), .s43 (IAR), and .c (CCS & IAR)

Link to zip file: http://www.ti.com/lit/zip/slac166

Applicable Devices: MSP430F4783, MSP430F4793, MSP430F4784, MSP430F4794

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

Contents:

.asm code examples – CCS	
File name	**Description**
msp430x54x_adc12_01.asm	ADC12, Sample A0, Set P1.0 if A0 > 0.5*AVcc
msp430x54x_adc12_02.asm	ADC12, Using the Internal Reference
msp430x54x_adc12_05.asm	ADC12, Using an External Reference
msp430x54x_adc12_06.asm	ADC12, Repeated Sequence of Conversions
msp430x54x_adc12_07.asm	ADC12, Repeated Single Channel Conversions
msp430x54x_adc12_08.asm	ADC12, Using A8 and A9 Ext Channels for Conversion
msp430x54x_adc12_09.asm	ADC12, Sequence of Conversions (non-repeated)
msp430x54x_adc12_10.asm	ADC12, Sample A10 Temp and Convert to oC and oF
msp430x54x_dma_01.asm	DMA0, Repeated Block to-from RAM, Software Trigger
msp430x54x_dma_02.asm	DMA0, Single Transfer in Block Mode UART1 9600, ACLK
msp430x54x_dma_03.asm	SPI TX & RX using DMA0 & DMA1 Single Transfer in Fixed Address Mode
msp430x54x_dma_04.asm	DMA0, Single transfer using ADC12 triggered by TimerB
msp430x54x_fet_01.asm	Blink the LED in a while loop
msp430x54x_flashwrite_01.asm	Single-Byte Flash In-System Programming, Copy SegC to SegD
msp430x54x_flashwrite_02.asm	Flash In-System Programming w/ Long-Word write at 0x1800
msp430x54x_flashwrite_03.asm	Bank Erase from a Block while Executing Code from Another Block.
msp430x54x_flashwrite_04.zip	Block Write and Memory Erase @ 0x10000 Executed from RAM
msp430x54x_LPM3_1.asm	Enters LPM3 (ACLK = LFXT1)
msp430x54x_LPM3_2.asm	Enters LPM3 (ACLK = VLO)
msp430x54x_MPY_1.asm	16x16 Unsigned Multiply
msp430x54x_MPY_2.asm	8x8 Unsigned Multiply
msp430x54x_MPY_3.asm	16x16 Signed Multiply
msp430x54x_MPY_4.asm	8x8 Signed Multiply
msp430x54x_MPY_5.asm	16x16 Unsigned Multiply Accumulate
msp430x54x_MPY_6.asm	8x8 Unsigned Multiply Accumulate
msp430x54x_MPY_7.asm	16x16 Signed Multiply Accumulate
msp430x54x_MPY_8.asm	8x8 Signed Multiply Accumulate
msp430x54x_MPY_9.asm	32x32 Unsigned Multiply
msp430x54x_MPY_10.asm	32x32 Signed Multiply
msp430x54x_MPY_11.asm	32x32 Signed Multiply Accumalate
msp430x54x_MPY_12.asm	32x32 Unsigned Multiply Accumalate
msp430x54x_MPY_13.asm	Saturation mode overflow test

msp430x54x_MPY_14.asm	Saturation mode underflow test
msp430x54x_MPY_15.asm	Fractional mode, Q15 multiplication
msp430x54x_OF_LFXT1_nmi.asm	LFXT1 Oscillator Fault Detection
msp430x54x_P1_01.asm	Software Poll P1.4, Set P1.0 if P1.4 = 1
msp430x54x_P1_02.asm	Software Port Interrupt Service on P1.4 from LPM4 with Internal Pull-up Resistance Enabled
msp430x54x_P1_05.asm	Write a byte to Port 1
msp430x54x_PA_05.asm	Write a Word to Port A (Port1+Port2)
msp430x54x_RTC_01.asm	RTC in Counter Mode toggles P1.0 every 1s
msp430x54x_ta3_01.asm	Timer_A3, Toggle P1.0, CCR0 Cont. Mode ISR, DCO SMCLK
msp430x54x_ta3_02.asm	Timer_A3, Toggle P1.0, CCR0 Up Mode ISR, DCO SMCLK
msp430x54x_ta3_03.asm	Timer_A3, Toggle P1.0, Overflow ISR, DCO SMCLK
msp430x54x_ta3_04.asm	Timer_A3, Toggle P1.0, Overflow ISR, 32kHz ACLK
msp430x54x_ta3_05.asm	Timer_A3, Toggle P1.0, CCR0 Up Mode ISR, 32kHz ACLK
msp430x54x_ta3_08.asm	Timer_A3, Toggle P1.0;P2.1-3, Cont. Mode ISR, 32kHz ACLK
msp430x54x_ta3_11.asm	Timer_A3, Toggle P2.1/TA1.0, Up Mode, 32kHz ACLK
msp430x54x_ta3_13.asm	Timer_A3, Toggle P2.1/TA1.0, Up/Down Mode, DCO SMCLK
msp430x54x_ta3_14.asm	Timer_A3, Toggle P2.1/TA1.0, Up/Down Mode, 32kHz ACLK
msp430x54x_ta3_16.asm	Timer_A3, PWM TA1.1-2, Up Mode, DCO SMCLK
msp430x54x_ta3_17.asm	Timer_A3, PWM TA1.1-2, Up Mode, 32kHz ACLK
msp430x54x_ta3_19.asm	Timer_A3, PWM TA1.1-2, Up/Down Mode, DCO SMCLK
msp430x54x_ta3_20.asm	Timer_A3, PWM TA1.1-2, Up/Down Mode, 32kHz ACLK
msp430x54x_tb_01.asm	Timer_B, Toggle P1.0, CCR0 Cont. Mode ISR, DCO SMCLK
msp430x54x_tb_02.asm	Timer_B, Toggle P1.0, CCR0 Up Mode ISR, DCO SMCLK
msp430x54x_tb_03.asm	Timer_B, Toggle P1.0, Overflow ISR, DCO SMCLK
msp430x54x_tb_04.asm	Timer_B, Toggle P1.0, Overflow ISR, 32kHz ACLK
msp430x54x_tb_05.asm	Timer_B, Toggle P1.0, CCR0 Up Mode ISR, 32kHz ACLK
msp430x54x_tb_10.asm	Timer_B, PWM TB1-6, Up Mode, DCO SMCLK
msp430x54x_UCS_1.asm	Software Toggle P1.0 at Default DCO
msp430x54x_UCS_2.asm	Software Toggle P1.0 with 8MHz DCO
msp430x54x_UCS_3.asm	Software Toggle P1.0 with 12MHz DCO
msp430x54x_UCS_4.asm	FLL+, Runs Internal DCO at 2.45MHz with LFXT1 as Ref
msp430x54x_UCS_5.asm	VLO sources ACLK
msp430x54x_UCS_6.asm	XT1 sources ACLK
msp430x54x_UCS_7.asm	FLL+, Output 32kHz Xtal + HF Xtal + Internal DCO
msp430x54x_UCS_8.asm	XT2 sources MCLK & SMCLK
msp430x54x_UCS_9.asm	LFXT1 HF Xtal + Internal DCO
msp430x54x_uscia0_duplex_9600.asm	USCI_A0, UART 9600 Full-Duplex Transceiver, 32K ACLK
MSP430x54x_uscia0_spi_09.asm	USCI_A0, SPI 3-Wire Master Incremented Data
MSP430x54x_uscia0_spi_10.asm	USCI_A0, SPI 3-Wire Slave Data Echo
MSP430x54x_uscia0_uart_01.asm	USCI_A0, 115200 UART Echo ISR, DCO SMCLK
MSP430x54x_uscia0_uart_02.asm	USCI_A0, Ultra-Low Pwr UART 2400 Echo ISR, 32kHz ACLK
MSP430x54x_uscia0_uart_03.asm	USCI_A0, Ultra-Low Pwr UART 9600 Echo ISR, 32kHz ACLK
MSP430x54x_uscia0_uart_04.asm	USCI_A0, 9600 UART, SMCLK, LPM0, Echo with over-sampling
MSP430x54x_uscib0_i2c_04.asm	USCI_B0 I2C Master RX single bytes from MSP430 Master

MSP430x54x_uscib0_i2c_05.asm	USCI_B0 I2C Slave TX single bytes to MSP430 Slave
MSP430x54x_uscib0_i2c_06.asm	USCI_B0 I2C Master TX single bytes to MSP430 Slave
MSP430x54x_uscib0_i2c_07.asm	USCI_B0 I2C Slave RX single bytes from MSP430 Master
MSP430x54x_uscib0_i2c_08.asm	USCI_B0 I2C Master TX multiple bytes to MSP430 Slave
MSP430x54x_uscib0_i2c_09.asm	USCI_B0 I2C Slave RX multiple bytes from MSP430 Master
MSP430x54x_uscib0_i2c_10.asm	USCI_B0 I2C Master RX multiple bytes from MSP430 Slave
MSP430x54x_uscib0_i2c_11.asm	USCI_B0 I2C Slave TX multiple bytes to MSP430 Master
MSP430x54x_wdt_01.asm	WDT, Toggle P1.0, Interval Overflow ISR, DCO SMCLK
MSP430x54x_wdt_02.asm	WDT, Toggle P1.0, Interval Overflow ISR, 32kHz ACLK
MSP430x54x_wdt_04.asm	WDT+ Failsafe Clock, WDT mode, DCO SMCLK
MSP430x54x_wdt_05.asm	Reset on Invalid Address fetch, Toggle P1.0

.asm code examples – IAR	
File name	**Description**
msp430x54x_adc12_01.asm	ADC12, Sample A0, Set P1.0 if A0 > 0.5*AVcc
msp430x54x_adc12_02.asm	ADC12, Using the Internal Reference
msp430x54x_adc12_05.asm	ADC12, Using an External Reference
msp430x54x_adc12_06.asm	ADC12, Repeated Sequence of Conversions
msp430x54x_adc12_07.asm	ADC12, Repeated Single Channel Conversions
msp430x54x_adc12_08.asm	ADC12, Using A8 and A9 Ext Channels for Conversion
msp430x54x_adc12_09.asm	ADC12, Sequence of Conversions (non-repeated)
msp430x54x_adc12_10.asm	ADC12, Sample A10 Temp and Convert to oC and oF
msp430x54x_dma_01.asm	DMA0, Repeated Block to-from RAM, Software Trigger
msp430x54x_dma_02.asm	DMA0, Single Transfer in Block Mode UART1 9600, ACLK
msp430x54x_dma_03.asm	SPI TX & RX using DMA0 & DMA1 Single Transfer in Fixed Address Mode
msp430x54x_dma_04.asm	DMA0, Single transfer using ADC12 triggered by TimerB
msp430x54x_flashwrite_01.asm	Single-Byte Flash In-System Programming, Copy SegC to SegD
msp430x54x_flashwrite_02.asm	Flash In-System Programming w/ Long-Word write at 0x1800
msp430x54x_flashwrite_03.asm	Bank Erase from a Block while Executing Code from Another Block.
msp430x54x_flashwrite_04.zip	Block Write and Memory Erase @ 0x10000 Executed from RAM
msp430x54x_LPM3_1.asm	Enters LPM3 (ACLK = LFXT1)
msp430x54x_LPM3_2.asm	Enters LPM3 (ACLK = VLO)
msp430x54x_MPY_1.asm	16x16 Unsigned Multiply
msp430x54x_MPY_2.asm	8x8 Unsigned Multiply
msp430x54x_MPY_3.asm	16x16 Signed Multiply
msp430x54x_MPY_4.asm	8x8 Signed Multiply
msp430x54x_MPY_5.asm	16x16 Unsigned Multiply Accumulate
msp430x54x_MPY_6.asm	8x8 Unsigned Multiply Accumulate
msp430x54x_MPY_7.asm	16x16 Signed Multiply Accumulate
msp430x54x_MPY_8.asm	8x8 Signed Multiply Accumulate
msp430x54x_MPY_9.asm	32x32 Unsigned Multiply
msp430x54x_MPY_10.asm	32x32 Signed Multiply
msp430x54x_MPY_11.asm	32x32 Signed Multiply Accumalate

msp430x54x_MPY_12.asm	32x32 Unsigned Multiply Accumalate
msp430x54x_MPY_13.asm	Saturation mode overflow test
msp430x54x_MPY_14.asm	Saturation mode underflow test
msp430x54x_MPY_15.asm	Fractional mode, Q15 multiplication
msp430x54x_OF_LFXT1_nmi.asm	LFXT1 Oscillator Fault Detection
msp430x54x_P1_01.asm	Software Poll P1.4, Set P1.0 if P1.4 = 1
msp430x54x_P1_02.asm	Software Port Interrupt Service on P1.4 from LPM4 with Internal Pull-up Resistance Enabled
msp430x54x_P1_05.asm	Write a byte to Port 1
msp430x54x_PA_05.asm	Write a Word to Port A (Port1+Port2)
msp430x54x_RTC_01.asm	RTC in Counter Mode toggles P1.0 every 1s
msp430x54x_ta3_01.asm	Timer_A3, Toggle P1.0, CCR0 Cont. Mode ISR, DCO SMCLK
msp430x54x_ta3_02.asm	Timer_A3, Toggle P1.0, CCR0 Up Mode ISR, DCO SMCLK
msp430x54x_ta3_03.asm	Timer_A3, Toggle P1.0, Overflow ISR, DCO SMCLK
msp430x54x_ta3_04.asm	Timer_A3, Toggle P1.0, Overflow ISR, 32kHz ACLK
msp430x54x_ta3_05.asm	Timer_A3, Toggle P1.0, CCR0 Up Mode ISR, 32kHz ACLK
msp430x54x_ta3_08.asm	Timer_A3, Toggle P1.0;P2.1-3, Cont. Mode ISR, 32kHz ACLK
msp430x54x_ta3_11.asm	Timer_A3, Toggle P2.1/TA1.0, Up Mode, 32kHz ACLK
msp430x54x_ta3_13.asm	Timer_A3, Toggle P2.1/TA1.0, Up/Down Mode, DCO SMCLK
msp430x54x_ta3_14.asm	Timer_A3, Toggle P2.1/TA1.0, Up/Down Mode, 32kHz ACLK
msp430x54x_ta3_16.asm	Timer_A3, PWM TA1.1-2, Up Mode, DCO SMCLK
msp430x54x_ta3_17.asm	Timer_A3, PWM TA1.1-2, Up Mode, 32kHz ACLK
msp430x54x_ta3_19.asm	Timer_A3, PWM TA1.1-2, Up/Down Mode, DCO SMCLK
msp430x54x_ta3_20.asm	Timer_A3, PWM TA1.1-2, Up/Down Mode, 32kHz ACLK
msp430x54x_tb_01.asm	Timer_B, Toggle P1.0, CCR0 Cont. Mode ISR, DCO SMCLK
msp430x54x_tb_02.asm	Timer_B, Toggle P1.0, CCR0 Up Mode ISR, DCO SMCLK
msp430x54x_tb_03.asm	Timer_B, Toggle P1.0, Overflow ISR, DCO SMCLK
msp430x54x_tb_04.asm	Timer_B, Toggle P1.0, Overflow ISR, 32kHz ACLK
msp430x54x_tb_05.asm	Timer_B, Toggle P1.0, CCR0 Up Mode ISR, 32kHz ACLK
msp430x54x_tb_10.asm	Timer_B, PWM TB1-6, Up Mode, DCO SMCLK
msp430x54x_UCS_1.asm	Software Toggle P1.0 at Default DCO
msp430x54x_UCS_2.asm	Software Toggle P1.0 with 8MHz DCO
msp430x54x_UCS_3.asm	Software Toggle P1.0 with 12MHz DCO
msp430x54x_UCS_4.asm	FLL+, Runs Internal DCO at 2.45MHz with LFXT1 as Ref
msp430x54x_UCS_5.asm	VLO sources ACLK
msp430x54x_UCS_6.asm	XT1 sources ACLK
msp430x54x_UCS_7.asm	FLL+, Output 32kHz Xtal + HF Xtal + Internal DCO
msp430x54x_UCS_8.asm	XT2 sources MCLK & SMCLK
msp430x54x_UCS_9.asm	LFXT1 HF Xtal + Internal DCO
msp430x54x_uscia0_duplex_9600.asm	USCI_A0, UART 9600 Full-Duplex Transceiver, 32K ACLK
MSP430x54x_uscia0_spi_09.asm	USCI_A0, SPI 3-Wire Master Incremented Data
MSP430x54x_uscia0_spi_10.asm	USCI_A0, SPI 3-Wire Slave Data Echo
MSP430x54x_uscia0_uart_01.asm	USCI_A0, 115200 UART Echo ISR, DCO SMCLK
MSP430x54x_uscia0_uart_02.asm	USCI_A0, Ultra-Low Pwr UART 2400 Echo ISR, 32kHz ACLK
MSP430x54x_uscia0_uart_03.asm	USCI_A0, Ultra-Low Pwr UART 9600 Echo ISR, 32kHz ACLK

MSP430x54x_uscia0_uart_04.asm	USCI_A0, 9600 UART, SMCLK, LPM0, Echo with over-sampling
MSP430x54x_uscib0_i2c_04.asm	USCI_B0 I2C Master RX single bytes from MSP430 Master
MSP430x54x_uscib0_i2c_05.asm	USCI_B0 I2C Slave TX single bytes to MSP430 Slave
MSP430x54x_uscib0_i2c_06.asm	USCI_B0 I2C Master TX single bytes to MSP430 Slave
MSP430x54x_uscib0_i2c_07.asm	USCI_B0 I2C Slave RX single bytes from MSP430 Master
MSP430x54x_uscib0_i2c_08.asm	USCI_B0 I2C Master TX multiple bytes to MSP430 Slave
MSP430x54x_uscib0_i2c_09.asm	USCI_B0 I2C Slave RX multiple bytes from MSP430 Master
MSP430x54x_uscib0_i2c_10.asm	USCI_B0 I2C Master RX multiple bytes from MSP430 Slave
MSP430x54x_uscib0_i2c_11.asm	USCI_B0 I2C Slave TX multiple bytes to MSP430 Master
MSP430x54x_wdt_01.asm	WDT, Toggle P1.0, Interval Overflow ISR, DCO SMCLK
MSP430x54x_wdt_02.asm	WDT, Toggle P1.0, Interval Overflow ISR, 32kHz ACLK
MSP430x54x_wdt_04.asm	WDT+ Failsafe Clock, WDT mode, DCO SMCLK
MSP430x54x_wdt_05.asm	Reset on Invalid Address fetch, Toggle P1.0

C code examples – IAR & CCS	
File name	**Description**
msp430x54x_adc12_01.c	ADC12, Sample A0, Set P1.0 if A0 > 0.5*AVcc
msp430x54x_adc12_02.c	ADC12, Using the Internal Reference
msp430x54x_adc12_05.c	ADC12, Using an External Reference
msp430x54x_adc12_06.c	ADC12, Repeated Sequence of Conversions
msp430x54x_adc12_07.c	ADC12, Repeated Single Channel Conversions
msp430x54x_adc12_08.c	ADC12, Using A8 and A9 Ext Channels for Conversion
msp430x54x_adc12_09.c	ADC12, Sequence of Conversions (non-repeated)
msp430x54x_adc12_10.c	ADC12, Sample A10 Temp and Convert to oC and oF
msp430x54x_dma_01.c	DMA0, Repeated Block to-from RAM, Software Trigger
msp430x54x_dma_02.c	DMA0, Single Transfer in Block Mode UART1 9600, ACLK
msp430x54x_dma_03.c	SPI TX & RX using DMA0 & DMA1 Single Transfer in Fixed Address Mode
msp430x54x_dma_04.c	DMA0, Single transfer using ADC12 triggered by TimerB
msp430x54x_flashwrite_01.c	Single-Byte Flash In-System Programming, Copy SegC to SegD
msp430x54x_flashwrite_02.c	Flash In-System Programming w/ Long-Word write at 0x1800
msp430x54x_flashwrite_03.c	Bank Erase from a Block while Executing Code from Another Block.
msp430x54x_flashwrite_04.zip	Block Write and Memory Erase @ 0x10000 Executed from RAM
msp430x54x_LPM3_1.c	Enters LPM3 (ACLK = LFXT1)
msp430x54x_LPM3_2.c	Enters LPM3 (ACLK = VLO)
msp430x54x_MPY_1.c	16x16 Unsigned Multiply
msp430x54x_MPY_2.c	8x8 Unsigned Multiply
msp430x54x_MPY_3.c	16x16 Signed Multiply
msp430x54x_MPY_4.c	8x8 Signed Multiply
msp430x54x_MPY_5.c	16x16 Unsigned Multiply Accumulate
msp430x54x_MPY_6.c	8x8 Unsigned Multiply Accumulate
msp430x54x_MPY_7.c	16x16 Signed Multiply Accumulate
msp430x54x_MPY_8.c	8x8 Signed Multiply Accumulate
msp430x54x_MPY_9.c	32x32 Unsigned Multiply

msp430x54x_MPY_10.c	32x32 Signed Multiply
msp430x54x_MPY_11.c	32x32 Signed Multiply Accumalate
msp430x54x_MPY_12.c	32x32 Unsigned Multiply Accumalate
msp430x54x_MPY_13.c	Saturation mode overflow test
msp430x54x_MPY_14.c	Saturation mode underflow test
msp430x54x_MPY_15.c	Fractional mode, Q15 multiplication
msp430x54x_OF_LFXT1_nmi.c	LFXT1 Oscillator Fault Detection
msp430x54x_P1_01.c	Software Poll P1.4, Set P1.0 if P1.4 = 1
msp430x54x_P1_02.c	Software Port Interrupt Service on P1.4 from LPM4 with Internal Pull-up Resistance Enabled
msp430x54x_P1_05.c	Write a byte to Port 1
msp430x54x_PA_05.c	Write a Word to Port A (Port1+Port2)
msp430x54x_RTC_01.c	RTC in Counter Mode toggles P1.0 every 1s
msp430x54x_ta3_01.c	Timer_A3, Toggle P1.0, CCR0 Cont. Mode ISR, DCO SMCLK
msp430x54x_ta3_02.c	Timer_A3, Toggle P1.0, CCR0 Up Mode ISR, DCO SMCLK
msp430x54x_ta3_03.c	Timer_A3, Toggle P1.0, Overflow ISR, DCO SMCLK
msp430x54x_ta3_04.c	Timer_A3, Toggle P1.0, Overflow ISR, 32kHz ACLK
msp430x54x_ta3_05.c	Timer_A3, Toggle P1.0, CCR0 Up Mode ISR, 32kHz ACLK
msp430x54x_ta3_08.c	Timer_A3, Toggle P1.0;P2.1-3, Cont. Mode ISR, 32kHz ACLK
msp430x54x_ta3_11.c	Timer_A3, Toggle P2.1/TA1.0, Up Mode, 32kHz ACLK
msp430x54x_ta3_13.c	Timer_A3, Toggle P2.1/TA1.0, Up/Down Mode, DCO SMCLK
msp430x54x_ta3_14.c	Timer_A3, Toggle P2.1/TA1.0, Up/Down Mode, 32kHz ACLK
msp430x54x_ta3_16.c	Timer_A3, PWM TA1.1-2, Up Mode, DCO SMCLK
msp430x54x_ta3_17.c	Timer_A3, PWM TA1.1-2, Up Mode, 32kHz ACLK
msp430x54x_ta3_19.c	Timer_A3, PWM TA1.1-2, Up/Down Mode, DCO SMCLK
msp430x54x_ta3_20.c	Timer_A3, PWM TA1.1-2, Up/Down Mode, 32kHz ACLK
msp430x54x_tb_01.c	Timer_B, Toggle P1.0, CCR0 Cont. Mode ISR, DCO SMCLK
msp430x54x_tb_02.c	Timer_B, Toggle P1.0, CCR0 Up Mode ISR, DCO SMCLK
msp430x54x_tb_03.c	Timer_B, Toggle P1.0, Overflow ISR, DCO SMCLK
msp430x54x_tb_04.c	Timer_B, Toggle P1.0, Overflow ISR, 32kHz ACLK
msp430x54x_tb_05.c	Timer_B, Toggle P1.0, CCR0 Up Mode ISR, 32kHz ACLK
msp430x54x_tb_10.c	Timer_B, PWM TB1-6, Up Mode, DCO SMCLK
msp430x54x_UCS_1.c	Software Toggle P1.0 at Default DCO
msp430x54x_UCS_2.c	Software Toggle P1.0 with 8MHz DCO
msp430x54x_UCS_3.c	Software Toggle P1.0 with 12MHz DCO
msp430x54x_UCS_4.c	FLL+, Runs Internal DCO at 2.45MHz with LFXT1 as Ref
msp430x54x_UCS_5.c	VLO sources ACLK
msp430x54x_UCS_6.c	XT1 sources ACLK. Toggles P1.0
msp430x54x_UCS_7.c	FLL+, Output 32kHz Xtal + HF Xtal + Internal DCO
msp430x54x_UCS_8.c	XT2 sources MCLK & SMCLK
msp430x54x_UCS_9.c	LFXT1 HF Xtal + Internal DCO
msp430x54x_uscia0_duplex_9600.c	USCI_A0, UART 9600 Full-Duplex Transceiver, 32K ACLK
MSP430x54x_uscia0_spi_09.c	USCI_A0, SPI 3-Wire Master Incremented Data
MSP430x54x_uscia0_spi_10.c	USCI_A0, SPI 3-Wire Slave Data Echo
MSP430x54x_uscia0_uart_01.c	USCI_A0, 115200 UART Echo ISR, DCO SMCLK

MSP430x54x_uscia0_uart_02.c	USCI_A0, Ultra-Low Pwr UART 2400 Echo ISR, 32kHz ACLK
MSP430x54x_uscia0_uart_03.c	USCI_A0, Ultra-Low Pwr UART 9600 Echo ISR, 32kHz ACLK
MSP430x54x_uscia0_uart_04.c	USCI_A0, 9600 UART, SMCLK, LPM0, Echo with over-sampling
MSP430x54x_uscib0_i2c_04.c	USCI_B0 I2C Master RX single bytes from MSP430 Master
MSP430x54x_uscib0_i2c_05.c	USCI_B0 I2C Slave TX single bytes to MSP430 Slave
MSP430x54x_uscib0_i2c_06.c	USCI_B0 I2C Master TX single bytes to MSP430 Slave
MSP430x54x_uscib0_i2c_07.c	USCI_B0 I2C Slave RX single bytes from MSP430 Master
MSP430x54x_uscib0_i2c_08.c	USCI_B0 I2C Master TX multiple bytes to MSP430 Slave
MSP430x54x_uscib0_i2c_09.c	USCI_B0 I2C Slave RX multiple bytes from MSP430 Master
MSP430x54x_uscib0_i2c_10.c	USCI_B0 I2C Master RX multiple bytes from MSP430 Slave
MSP430x54x_uscib0_i2c_11.c	USCI_B0 I2C Slave TX multiple bytes to MSP430 Master
MSP430x54x_wdt_01.c	WDT, Toggle P1.0, Interval Overflow ISR, DCO SMCLK
MSP430x54x_wdt_02.c	WDT, Toggle P1.0, Interval Overflow ISR, 32kHz ACLK
MSP430x54x_wdt_04.c	WDT+ Failsafe Clock, WDT mode, DCO SMCLK
MSP430x54x_wdt_05.c	Reset on Invalid Address fetch, Toggle P1.0

IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with TI's standard warranty. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

TI assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using TI components. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any TI patent right, copyright, mask work right, or other TI intellectual property right relating to any combination, machine, or process in which TI products or services are used. Information published by TI regarding third-party products or services does not constitute a license from TI to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. Reproduction of this information with alteration is an unfair and deceptive business practice. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI products or services with statements different from or beyond the parameters stated by TI for that product or service voids all express and any implied warranties for the associated TI product or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

TI products are not authorized for use in safety-critical applications (such as life support) where a failure of the TI product would reasonably be expected to cause severe personal injury or death, unless officers of the parties have executed an agreement specifically governing such use. Buyers represent that they have all necessary expertise in the safety and regulatory ramifications of their applications, and acknowledge and agree that they are solely responsible for all legal, regulatory and safety-related requirements concerning their products and any use of TI products in such safety-critical applications, notwithstanding any applications-related information or support that may be provided by TI. Further, Buyers must fully indemnify TI and its representatives against any damages arising out of the use of TI products in such safety-critical applications.

TI products are neither designed nor intended for use in military/aerospace applications or environments unless the TI products are specifically designated by TI as military-grade or "enhanced plastic." Only products designated by TI as military-grade meet military specifications. Buyers acknowledge and agree that any such use of TI products which TI has not designated as military-grade is solely at the Buyer's risk, and that they are solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI products are neither designed nor intended for use in automotive applications or environments unless the specific TI products are designated by TI as compliant with ISO/TS 16949 requirements. Buyers acknowledge and agree that, if they use any non-designated products in automotive applications, TI will not be responsible for any failure to meet such requirements.

Following are URLs where you can obtain information on other Texas Instruments products and application solutions:

Products		**Applications**	
Amplifiers	amplifier.ti.com	Audio	www.ti.com/audio
Data Converters	dataconverter.ti.com	Automotive	www.ti.com/automotive
DLP® Products	www.dlp.com	Broadband	www.ti.com/broadband
DSP	dsp.ti.com	Digital Control	www.ti.com/digitalcontrol
Clocks and Timers	www.ti.com/clocks	Medical	www.ti.com/medical
Interface	interface.ti.com	Military	www.ti.com/military
Logic	logic.ti.com	Optical Networking	www.ti.com/opticalnetwork
Power Mgmt	power.ti.com	Security	www.ti.com/security
Microcontrollers	microcontroller.ti.com	Telephony	www.ti.com/telephony
RFID	www.ti-rfid.com	Video & Imaging	www.ti.com/video
RF/IF and ZigBee® Solutions	www.ti.com/lprf	Wireless	www.ti.com/wireless

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265