

Ultra Low Power Design using MSP430 2 days

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Day1

9:30am-10:00 am→[Register with myTI.com](#)

10:00am-10:15am→ Download

1. [Datasheet](#)
2. [Workshop Workbook](#)

10:15am-11:00 am→MSP430-Architecture, Functional block diagram

3. [Product Reference](#)

11:00am-11:15 am→Break

11:15am-11:45am→ Getting Started with Code composer Studio V6

4. [CCS Training Reference](#)

11:45am- 1:00pm→ MSP430 G2 -Getting Started

5. [MSP430 User Guide](#)

LAB1: GPIO based LED Blink

Day2

9:30am-11:00 am→Data Acquisition & ADC
Configure ADC10 for
Single & multiple channels

1. [MSP430 ADC Overview](#)

LAB4: Reading on-chip temperature sensor

11:00-11:15 am→ Break

11:15-11:45 am→ Assignment (Multi-channel Sampling)

11:45am-01:00pm→ Ultra Low Power Design in MSP430

MSP430 Low Power Modes

2. [Design for Ultra low power](#)

LAB5: Measure active and low power mode current

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Day1

2:00 pm-3:00pm→ Switch Interface & Interrupts

LAB2: Interrupt based reading of on-board switch

3:00pm- 3:15pm→ Assignment

3:15 pm-3:30pm→ Break

3:30pm-4:45pm→Introduction to Timers

LAB3: Configure Timer to generate delays

Day2

2:00pm-03:00 pm→ Pulse width Modulation
Understand PWM
Generate PWM using timers

3. [MSP430 Timers in Depth](#)

LAB6: PWM speed control of DC motor

3:00pm- 3:15pm→ TI MSP430 BoosterPack Ecosystem overview

4. [CC110L BoosterPack](#)
5. [Capacitive Touch BoosterPack](#)

3:15pm-3:30pm→Break

3:30pm-4:15pm→Usage of Ultra Low Power Advisor tool

4:15pm-4:45pm→[TI E2E Community Overview](#)