



MSP-EXP430FR5739 Experimenter Board Status: ACTIVE

MSP-EXP430FR5739

Description

The MSP-EXP430FR5739 Experimenter Board is a development platform for the MSP430FR57xx devices. It supports this new generation of MSP430 microcontroller devices with integrated Ferroelectric Random Access Memory (FRAM). The board is compatible with many TI low-power RF wireless evaluation modules such as the CC2520EMK. The Experimenter Board helps designers quickly learn and develop using the new MSP430FR57xx MCUs, which provide the industry's lowest overall power consumption, fast data read /write and unbeatable memory endurance. The MSP-EXP430FR5739 Experimenter Board can help evaluate and drive development for data logging applications, energy harvesting, wireless sensing, automatic metering infrastructure (AMI) and many others.

The MSP430FR5739 device on the experimenter board can be powered and debugged via the integrated ezFET, or via TI Flash Emulation Tool, like the MSP-FET430UIF.

Features

■ Integrated MSP430FR5739 :

- 16KB FRAM / 1KB SRAM
- 16-Bit RISC Architecture up to 8-MHz
- 2x Timer_A Blocks, 3x Timer_B Block
- 1x USCI (UART/SPI/IrDA/I2C) Blocks, 16Ch 10-Bit ADC12_B, 16Ch Comp_D, 32 I/Os

- 3 axis accelerometer
- NTC Thermistor
- 8 Display LED's
- Footprint for additional through-hole LDR sensor
- 2 User input Switches
- Connections

- Connection to MSP-EXP430F5438
- Connection to most Wireless Daughter Cards (CCxxxx RF)

■ User Experience

Preloaded with out-of-box demo code

4 Modes to test FRAM features:

Mode 1 - Max write speed

- Mode 2 - Flash write speed emulation

- Mode 3 - Fast sampling with writes using accelerometer

- Mode 4 - Fast sampling with writes using Thermistor

- Mode 1 & Mode 2 include ULP option to turn off display & optimize for power management

