## Technical Article Lose Power, Not Data with New FRAM Microcontrollers



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New microcontrollers, a new LaunchPad and a new software library - all unique in their own rightfor the industry! OurCompute Through Power Loss (CTPL) library is part of the new MSP-FRAM-UTILITIES and now enables MSP FRAM microcontrollers to intelligently save and restores ystem state on power failure.

Now automation and control applications can re-start exactly where they left off when power is unexpectedly lost. In addition, the new library enables you to use our lowest power modes x.5 on all MSP430 FRAM MCUs without the increased start-up time that typically must be considered. This means battery life can be extended further than ever before!



## **New FRAM Microcontrollers**

The new CTPL embedded software library is enabled by the nearly unlimited write endurance and 100x faster writes than typical flash-based microcontrollers. What's more, our MSP430FRx FRAM microcontrollers offer advantages in terms of power consumption (see ULPBench benchmark), unmatched flexibility (unified program/ data code) and increased data security. Now you have even more options to choose from. The MSP430FR6972 microcontroller and derivatives are now available for purchase and offerintegration that includes a 116-segment LCD controller, a 12-bit single/differential modeADC with internal window comparator and a 256-bit hardware AES accelerator.

## **Discounted LaunchPad**

We also have a LaunchPad development kit to support the expansion of the MSP430FR6x/5x series of FRAM MCUs. Featuring the MSP430FR6989MCU, ourmost integrated FRAM device, this LaunchPad offers a 40-pin BoosterPack plug-in module connector and an on-board LCD. You also have direct access to the extended scan interface.

Are you ready for the best part? The MSP-EXP430FR6989 LaunchPad is available for**\$13.99 USD for the next month only**! This is more than 20 percent off the regular price. Head over to the LaunchPad page to get started today! If you need some motivation check out the latest industrial solutions from the TI Designs reference design library:TIDM-FRAM-CTPL and TIDM-WLMOTORMONITORshowcase our new Compute Through Power Loss technology and MSP430 FRAM microcontrollers in a low-power sensing application, respectively.Link to "The MSP430FR6989 Launchpad Development Kit with Compute Through Power Loss Technology"

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