MSP with Captivate™ Technology

Fram Examples

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Contents

- Simple FRAM variables
  - R/W control
  - Persistent and NoInit
- Reserving Sections of FRAM

MSP430FR2xxx CapTIvate Family MCUs

- There are two sections of FRAM memory that can be used to store non-volatile data
  - Main memory
  - Info memory
  - Check device datasheet for memory map

- Must disable FRAM write protect
  - SYSCONFIG
    - FRWPPW = FRAM write protection password (0xA500)
    - PFWP = Program (main) FRAM write protect
    - DFWP = Data (information) FRAM write protect

- SYSCFG0 = FRWPPW | PFWP | DFWP;

- See example code (embedded into this ppt)

main.c

TEXAS INSTRUMENTS

Persistent and NoInit variables

- Persistent and NoInit variables used for non-volatile memory (FRAM)
- Persistent
  - Initialized only once at load time
  - Example: calibration values known at build time
- NoInit
  - Not initialized
  - Example: array used for data logging
- Refer to section 5.12.22 for more details
  - https://www.ti.com/lit/ug/slau132v/slau132v.pdf

TEXAS INSTRUMENTS

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