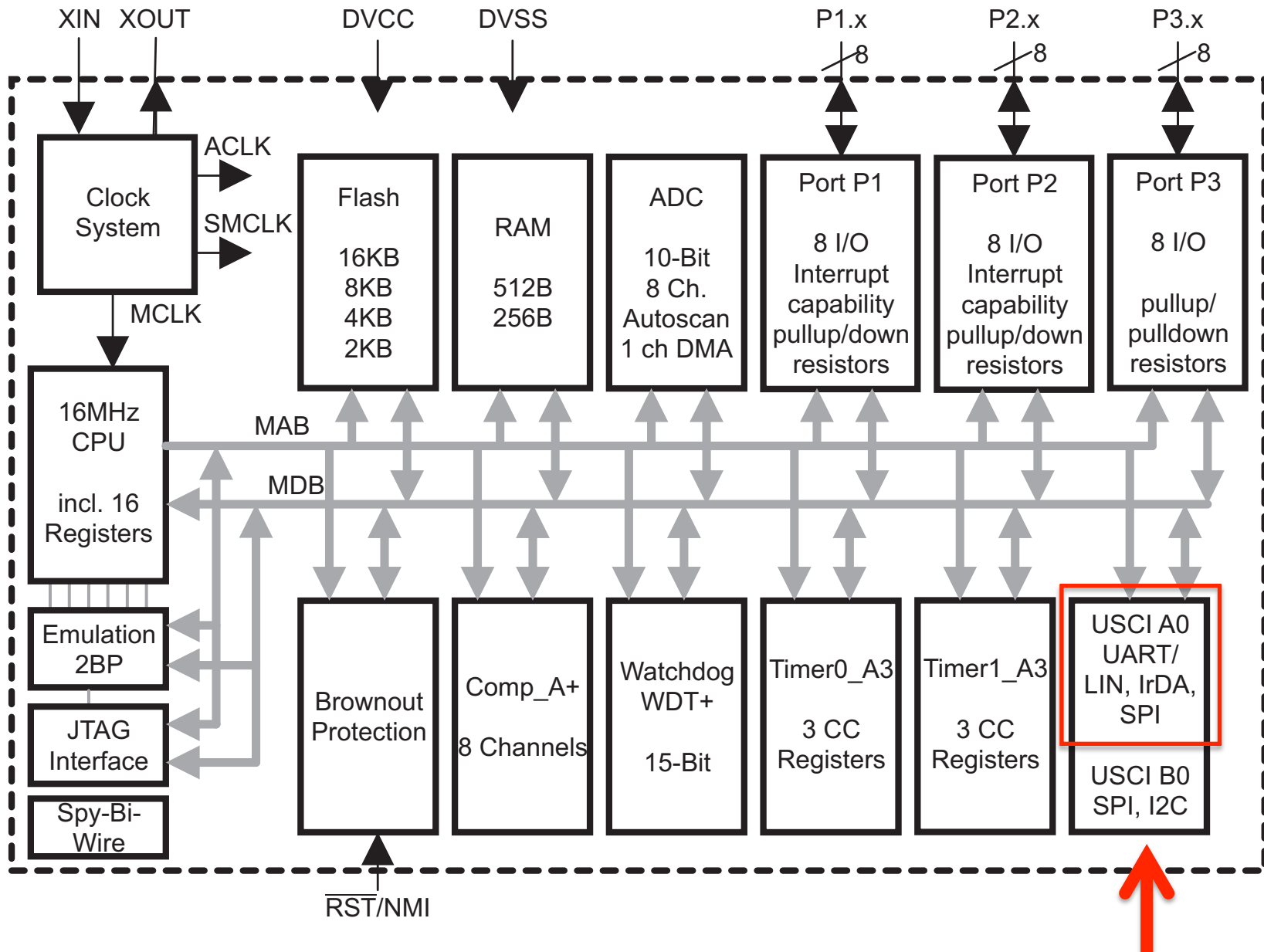


Midterm Exam

- You will configure the Universal Serial Communication Interface (USCI) A0 for SPI mode
 - ***Chapter 16: Universal Serial Communication Interface, SPI Mode***

MSP430G2553 Functional Blocks



Midterm Exam

- You will then rewrite the three functions in spi.h/spi.c to use USCI A0

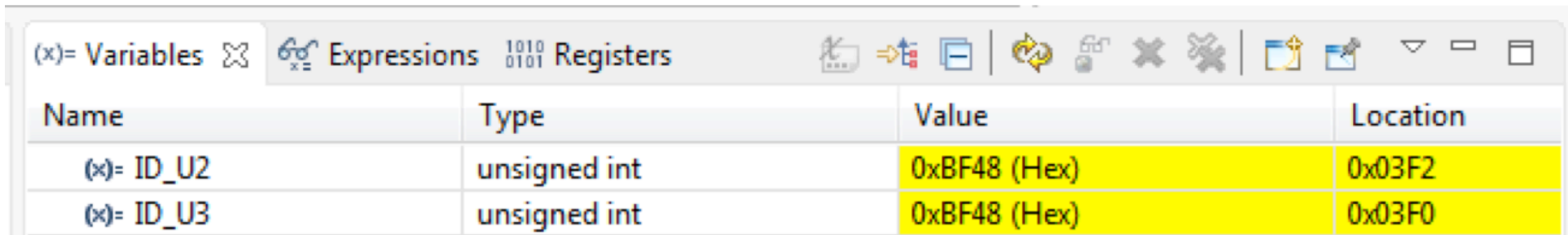
```
/*
 * This function initializes all hardware and port pins to support SPI.
 */
void InitializeSPI();

/*
 * This function sends the byte, SendValue, using SPI.
 */
void SPISendByte(unsigned char SendValue);

/*
 * This function receives a byte using SPI.
 *
 * Return Value: The byte that is received over SPI.
 */
unsigned char SPIReceiveByte();
```

Midterm Exam

- Finally, you will verify your code using the GPIO/Serial Flash header board
 - For example, reading the ID from each serial flash will suffice for evidence



Name	Type	Value	Location
(x)= ID_U2	unsigned int	0xBF48 (Hex)	0x03F2
(x)= ID_U3	unsigned int	0xBF48 (Hex)	0x03F0

- **In addition, you will submit your spi.h and spi.c files on Collab**

Midterm Exam

- You may use any resources you have available to you, including anything you find on the internet
- However, this is an individual effort, so you may not work together on this exam
 - No discussion of effort, no sharing of information, no sharing of code, and so forth
- In general, you should treat this just like a pledged, in-class exam

Midterm Exam

- You may not use any code from students from previous semesters or consult with them in any way
- You may not consult the undergraduate or graduate teaching assistants
- You may not consult any faculty other than me

Midterm Exam

- The total points equals the points for the two milestones for the SPI/Serial Flash project
 - Successful SPISendByte(): 10 points
 - Successful SPIReceiveByte(): 15 points
- Submissions will not be accepted late