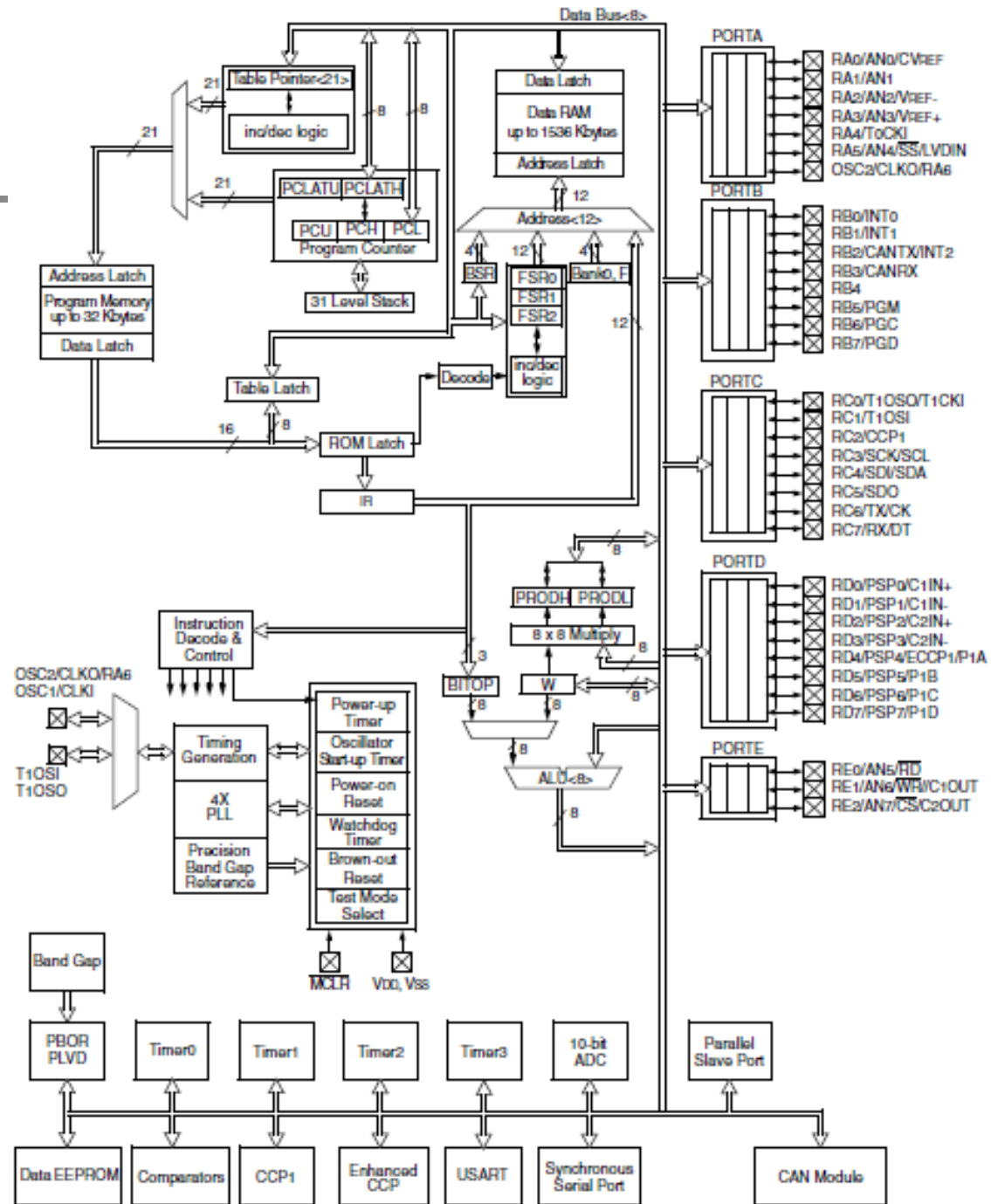


Advanced Microcontroller Experiment Using the PIC18

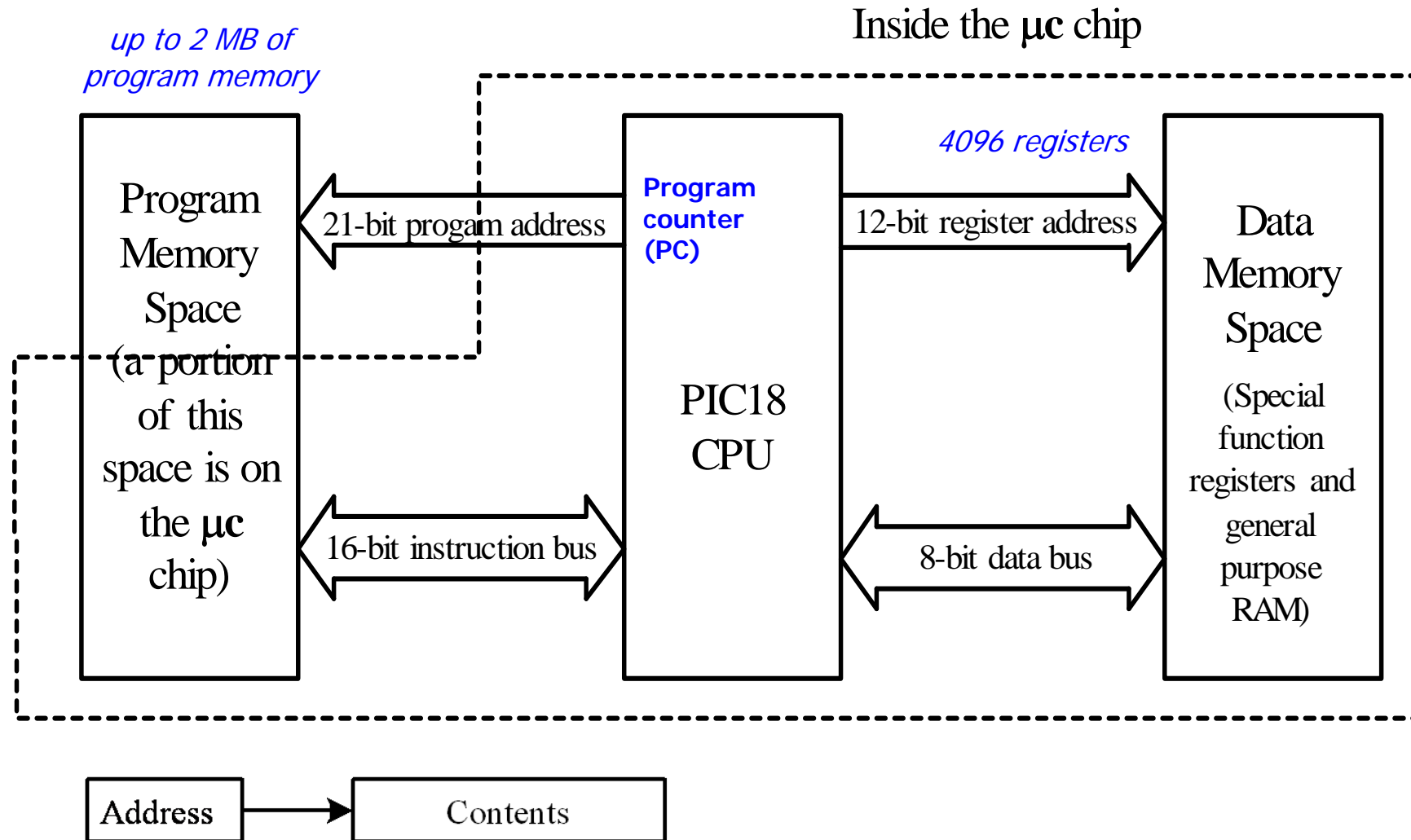


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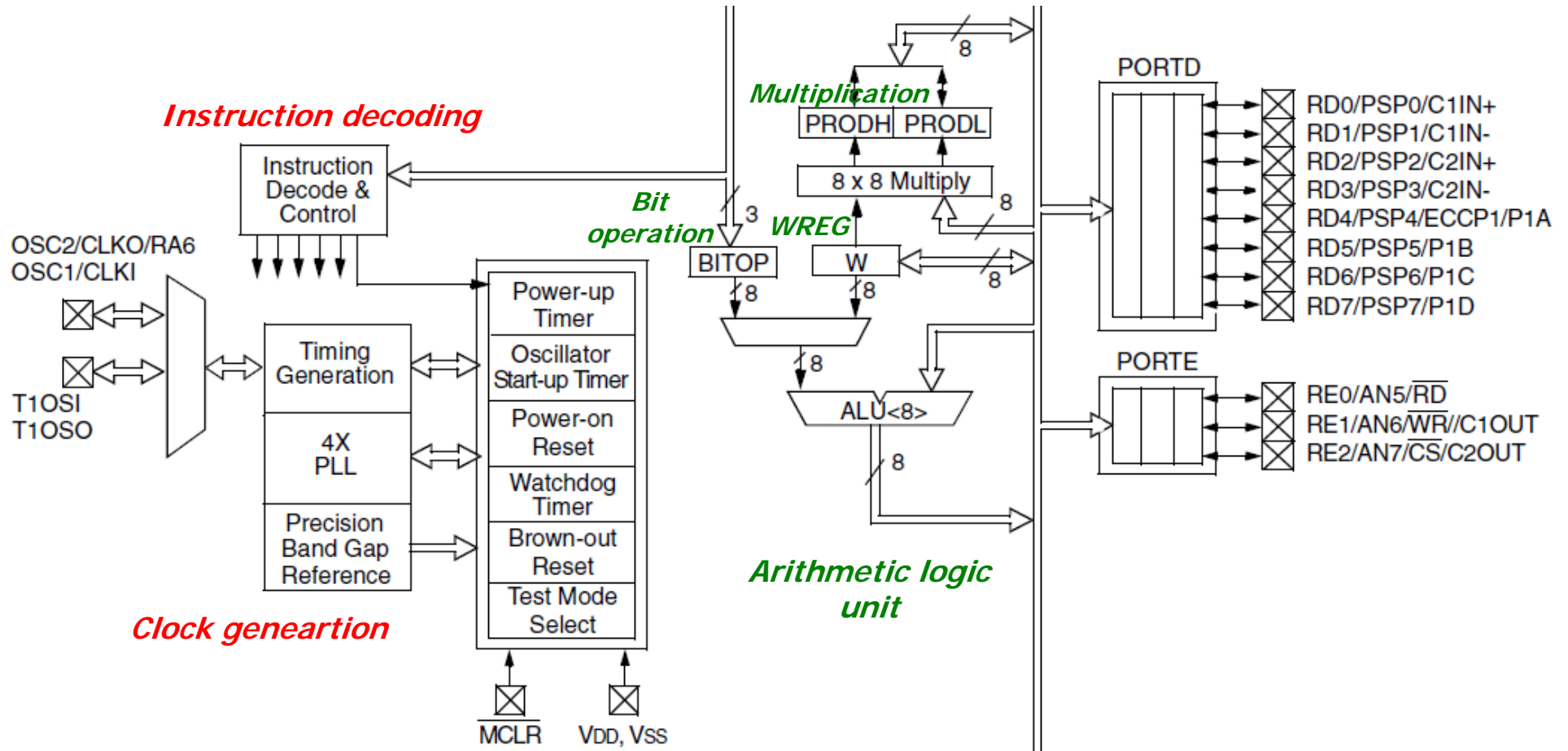
PIC18F448/458 block diagram



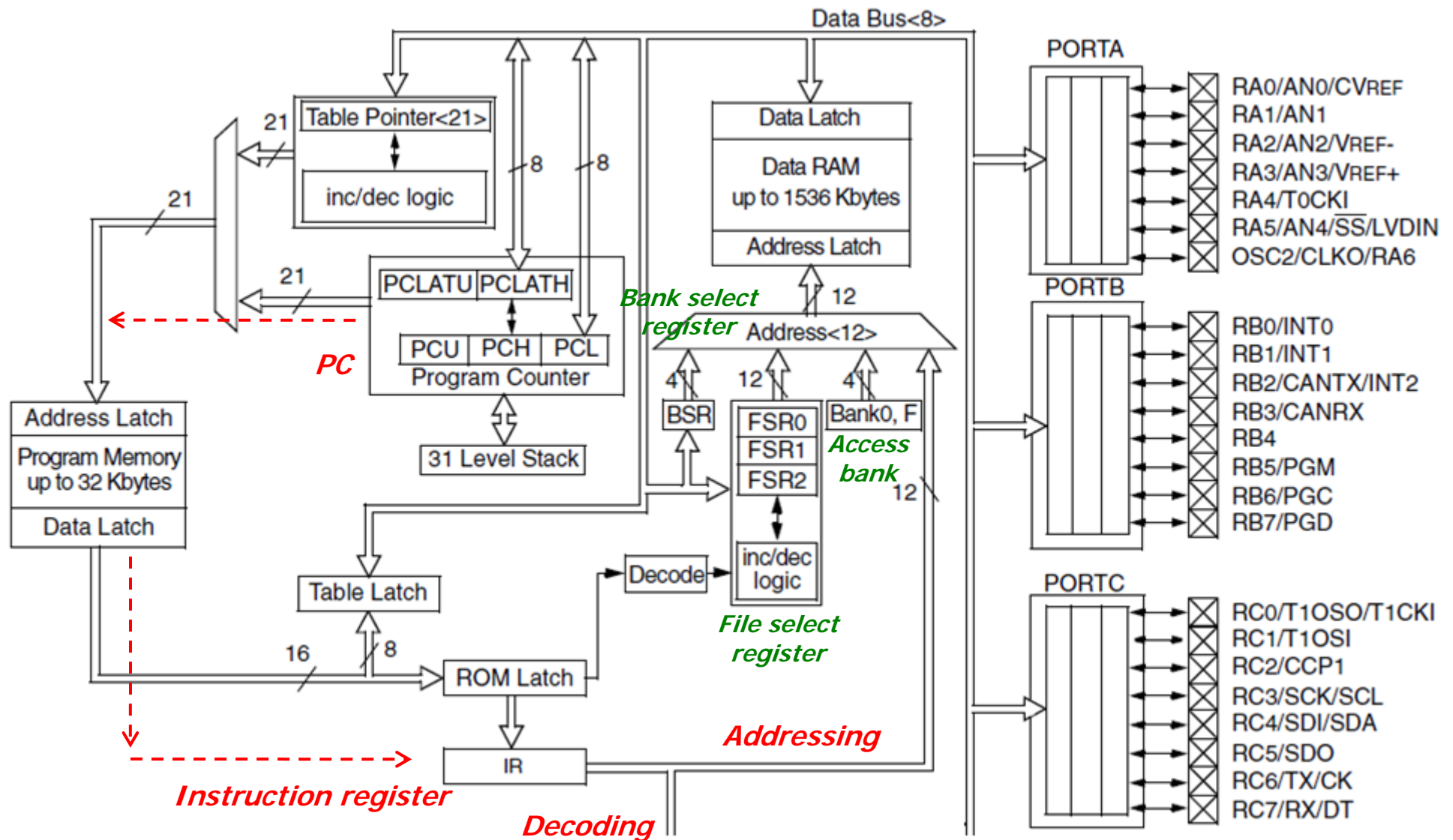
PIC18 memory access



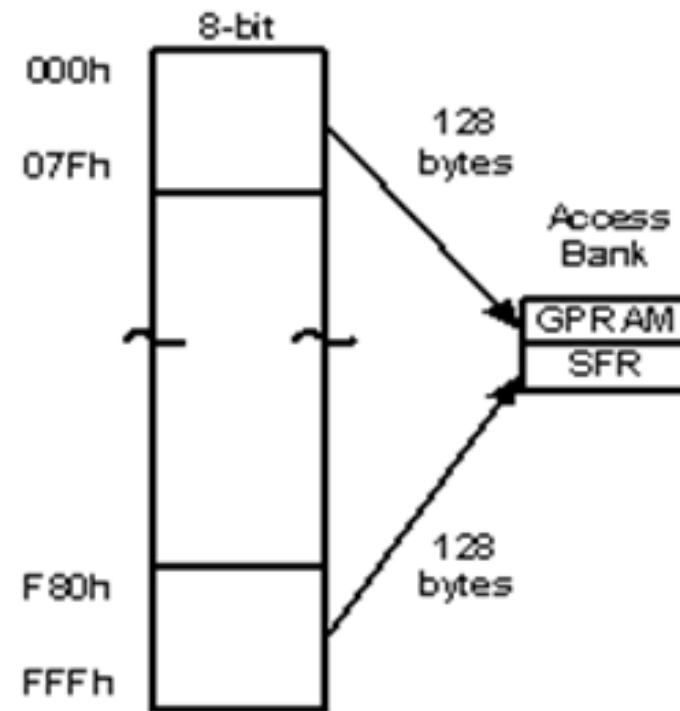
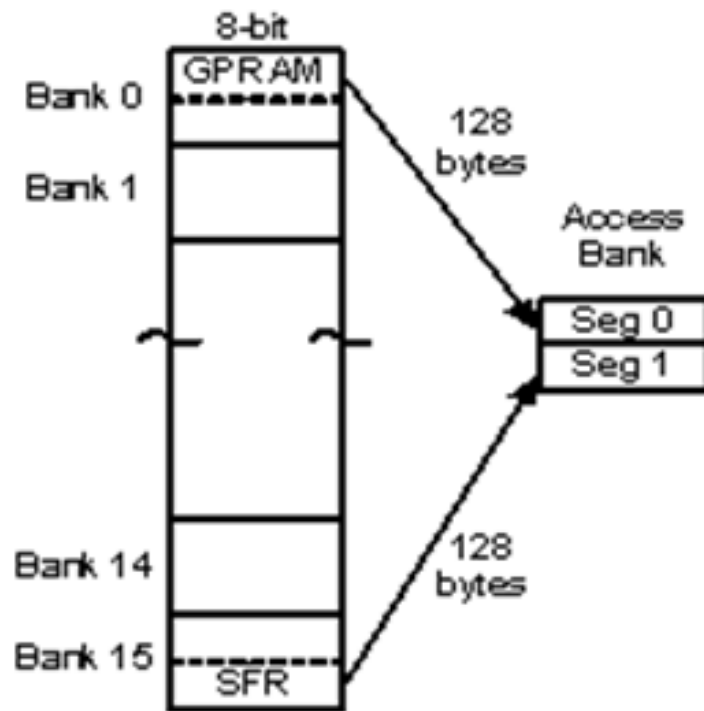
ALU operations



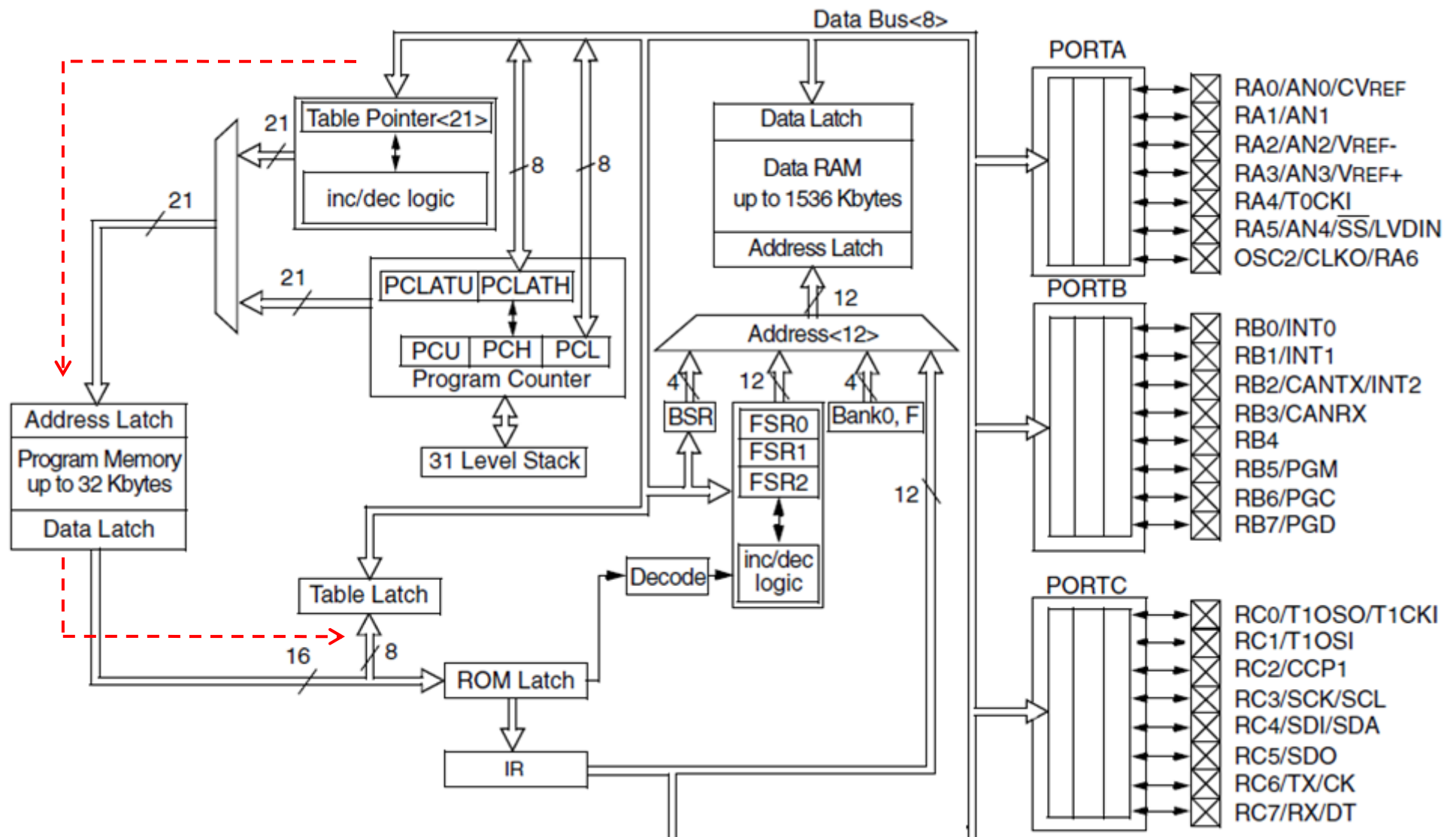
Instruction processing & data memory (RAM) addressing



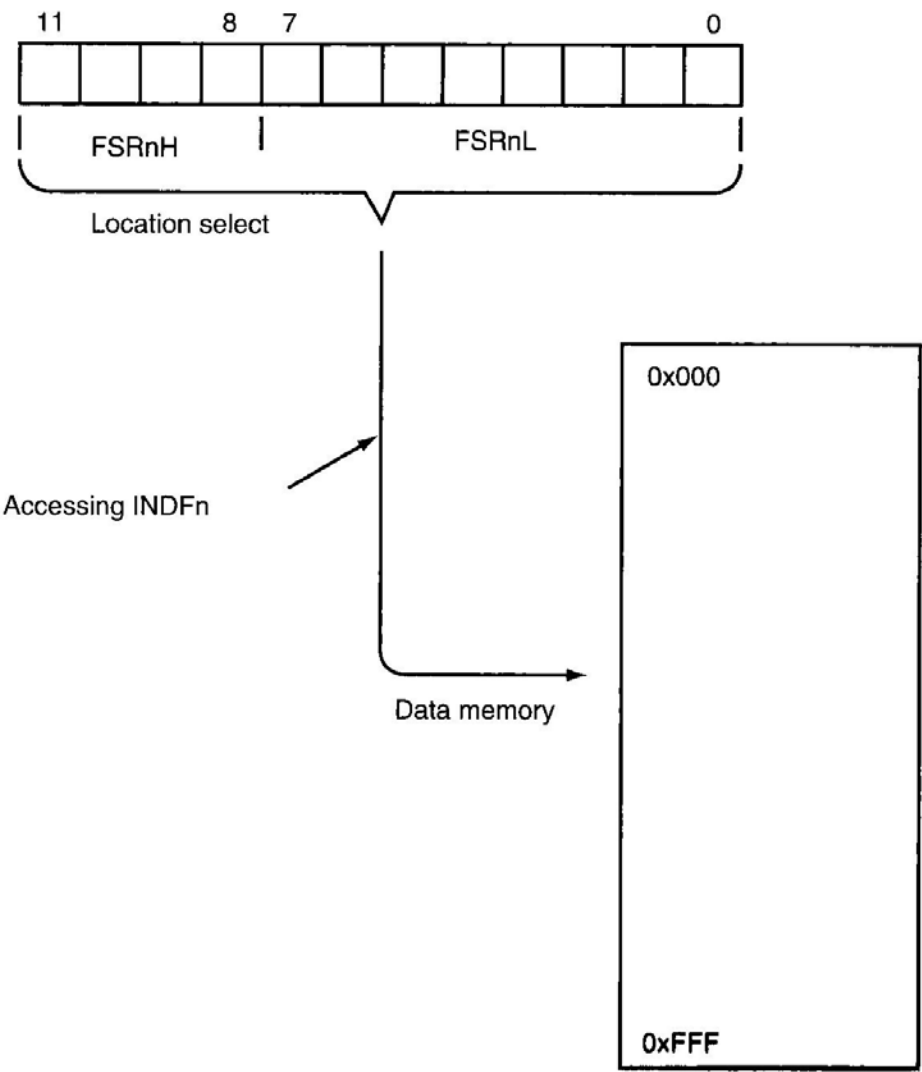
PIC18 banks and access bank



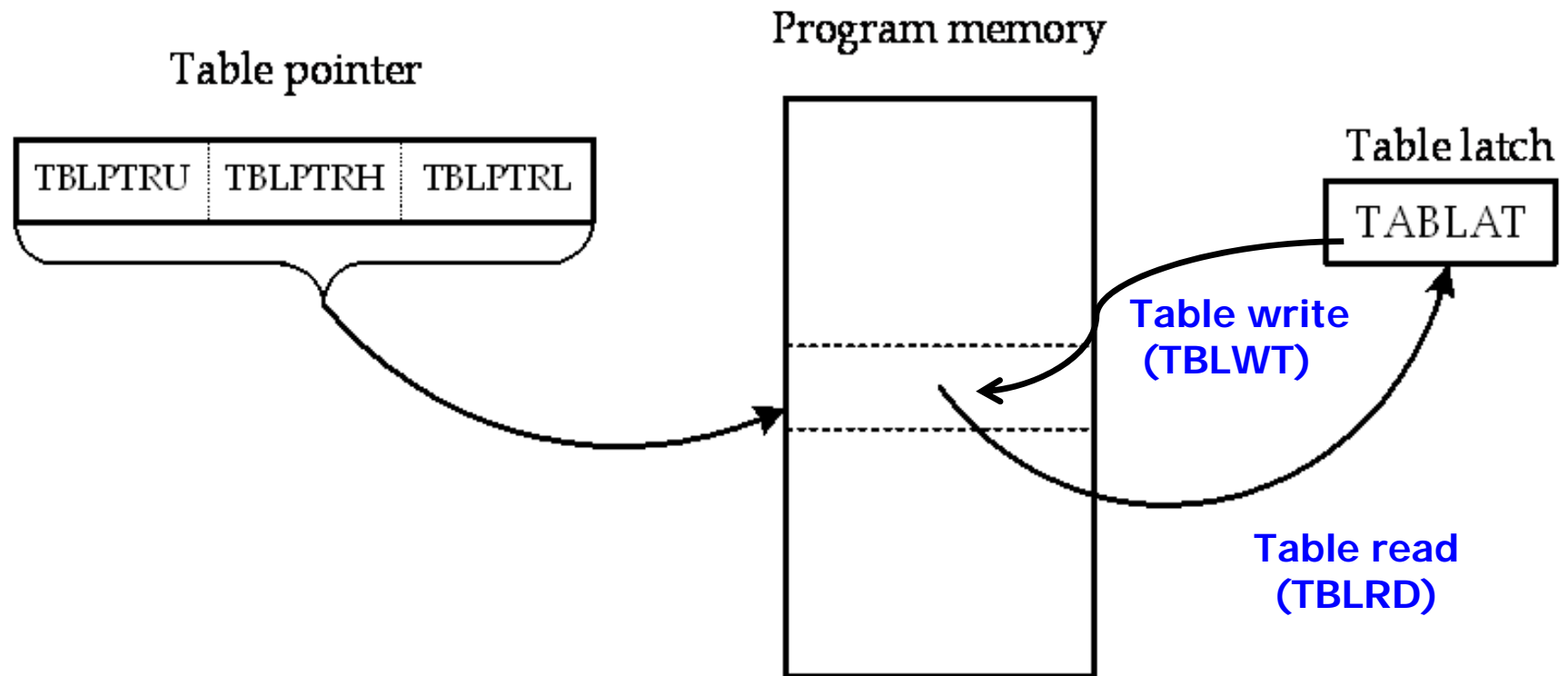
Accessing program memory by table pointer



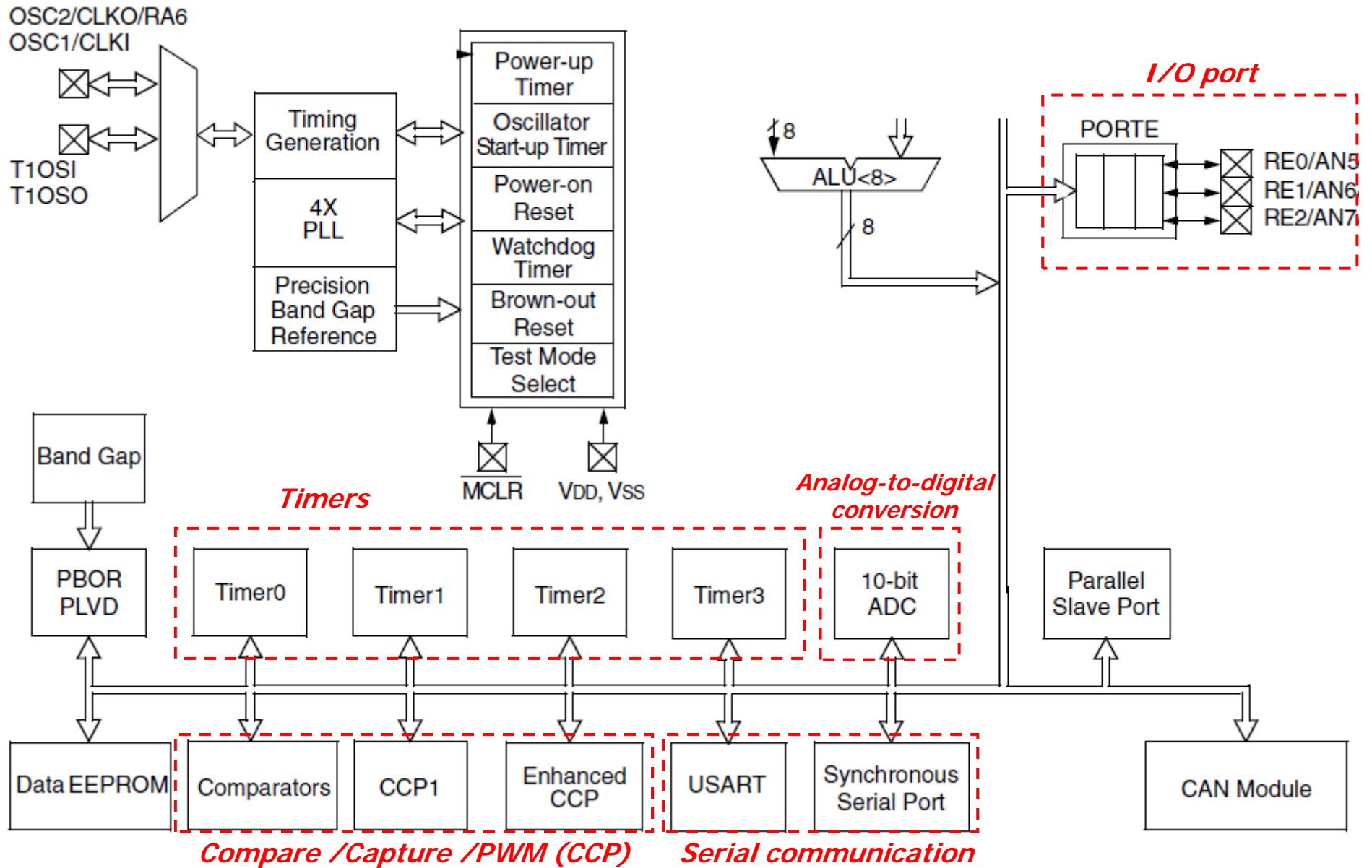
Indirect addressing through file select registers (FSR)



Look-up table and table processing



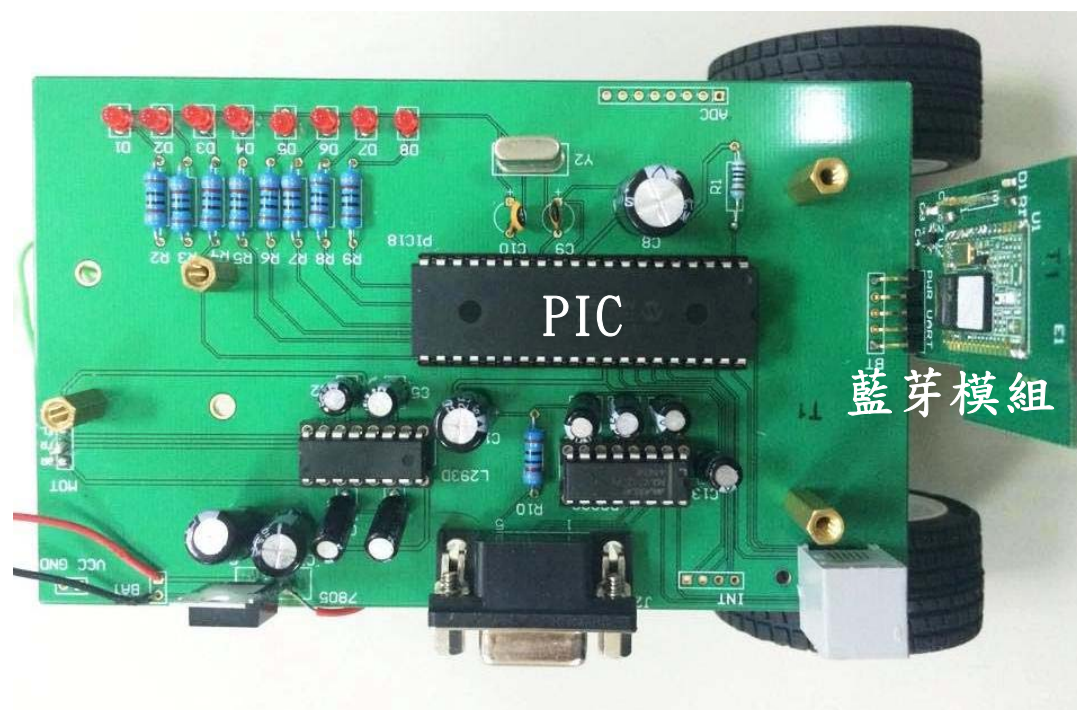
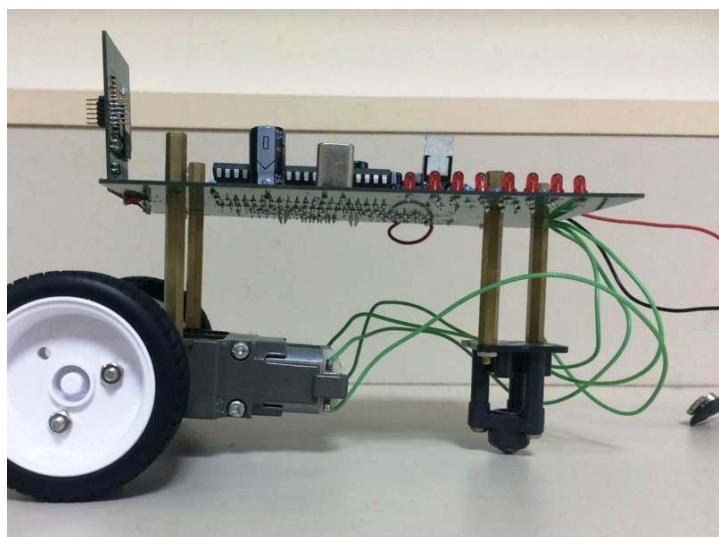
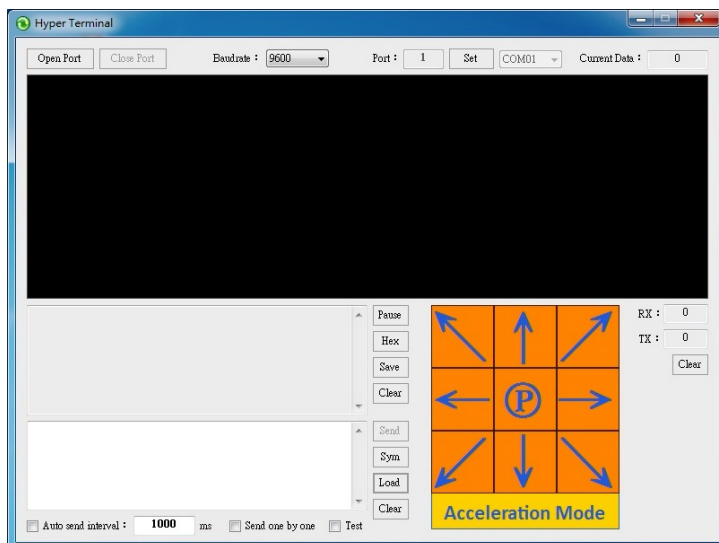
Peripheral operations



Outlines

- PIC18 C programming
- PIC18 timer programming
- PIC18 serial port programming
- Interrupt programming
- CCP programming
- Term project

Term project



Grading policy

- Examinations 70%
- Classworks + Attendance 15%
- Term project + Report + Attendance 15%

Textbook

- M.A. Mazidi, R.D. Mckinlay, D Causey, PIC Microcontroller and Embedded Systems Using Assembly and C for PIC18, Pearson Education Inc., 2008.