Main Configuration

Files: init.c

Functions:

Void board\_init(void)

* This function sets up main clocks and starts periferals
* scif\_start\_rc120M();
  + starts the 120 MHz internal rc oscillator
* scif\_start\_rc8M();
  + starts the 8 MHz internal rc oscillator
* pm\_set\_clk\_domain\_div(AVR32\_PM\_CLK\_GRP\_CPU,1);
  + configures main cpu speed
    - AVR32\_PM\_CLK\_GRP\_CPU
      * Tells function you want to change cpu
    - 1
      * Cpu clock divide is CLK / 2^(1+) = CLK/4
* pm\_set\_mclk\_source(PM\_CLK\_SRC\_RC120M);
  + switches the main clock source from the 120 KHz OSC to the 120 MHz rc osc
  + CPU speed is now 120 MHz / 4 = 30 MHz
* Many periferals are clocked by the PBA, PBB and PBC clocks
* These clocks must be under Fcpu / 4. CPU is divided by 4 already. Therefore PB clocks must be divide by 16 = 7.5MHz
* pm\_set\_clk\_domain\_div(AVR32\_PM\_CLK\_GRP\_PBA,3);
  + set PBA clock to CLK / 2^(3+1) = CLK /16
* pm\_set\_clk\_domain\_div(AVR32\_PM\_CLK\_GRP\_PBB,3);
  + set PBB divide by 16
* pm\_set\_clk\_domain\_div(AVR32\_PM\_CLK\_GRP\_PBB,3);
  + set PBC divide by 16