

need to implement data ownership

file name:	main	soc_fns	can_driver	ltc_driver	fault_handler	cell_balance	ltc_cmds	ltc_utilities
globals:						declare cell_needs_balancing array		
	system init							
	soc init	tmr1 init						
		adc1 init						
	CAN init		CAN1 init					
			CAN2 init					
	LTC init			PEC table init				
	fault handler init				initialize fault counter arrays			
	balance timer init					tmr2 init		
	calc soc	calc SoC using accumulated samples						
	read config A						rdcfga	
	declare cell voltages array							
	read cell voltages(cell_voltages)			start conversion			ADCV	
				poll ADC			PLADC	
				rdcv_reg			RDCV	
	cell voltage fault(cell_voltages)				check for over/under voltage			
					check for missing measurement			
	report cell voltages(cell_voltages)		construct message					
			send message					
	update cell balance array(cell_voltages)					update cell balance array		
	report_balancing		get cell balance array					
			construct message					
			send message					
	declare pack temperatures array							
	read temperatures(pack_temps)			start conversion			ADAUX	
	report pack temperatures(pack_temps)			poll ADC			PLADC	
				rdcv_reg			RDAUX	
	check for fault				iterate through arrays			
					shutdown car if necessary			
					stop cell balancing			
	report status		construct message					
			send message					
	self test							
	open sense line check							