

ASSEMBLY LANGUAGE PROGRAMMING AND 9S12 PORTS (PART 1)**Pre-Lab**

Questions to answer before lab:

- Hand-assemble this program, i.e., determine the op-codes the MC9S12 will use to execute the program in Figure 1.

- How long (in time) will this take on the MC9S12? (Do not consider the swi instruction.)

- What will be the state of the N, Z, V and C bits after each instruction has been executed (ignore the swi instruction.)

- What will be in address 0x2000 and 0x2001 after the program executed?

- How long will this take to execute in the MC9S12? (Again, ignore the swi instruction.)

- Use a text editor to enter the code into a program – you will have to add org statements and other assemble directives to make the program work.