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Criteria to evaluate the Assembly Language and Machine Language specifications and the document

a. For each instruction, a clear English language description is available, describing:
   i. Functionality of the instruction.
   ii. Number of operands and order of operands.
   iii. The instruction format.
   iv. The opcode
   v. The machine language representation for the different types of operands.

A couple of the instructions were not properly documented in all areas, including ADC, AST, and LLC.

b. For branch instructions (conditional and unconditional),
   i. The address field is large enough to hold any target address.
   ii. If the address field is not large enough, there is a sequence of operations, that will allow the flow of control to change to the target address.
   iii. The documentation indicates this sequence of operations, through an example or through a clear and concise description.

The address fields were large enough to hold every address that we needed to access. So this is okay.

c. Interrupt handling
   i. The documentation states which Interrupt-handling mechanism is being implemented(Vectored Interrupts method or Status Register method).
   ii. The documentation states which I/O handling mechanism is being implemented(Memory-mapped I/O, Register-mapped I/O, Special Instructions).
   iii. For memory-mapped I/O, the list of reserved addresses is specified, along with a description.
   iv. For register-mapped I/O, the list of reserved registers is specified, along with a description.
   v. For special instructions, the list of instructions is listed, with a description.

The type of interrupt-handling method is not specified. We had to make several assumptions (as noted in the code) to use interrupts. There was very little documentation on the interrupt handling, other than the fact that it existed.

d. A list of special purpose registers is provided, with a description for each register.

Yes.

e. Procedures
   i. An instruction or a short sequence of instructions exists, to transfer control to a procedure.
   ii. An instruction or a short sequence of instructions exists, to return control to the calling procedure.

Yes.

f. In a few sentences, comment on the ease of use of the document and on the ease of programming with the Instruction Set Architecture.

The difficulty in understanding this group's code was not arduous. The documentation, however, does need to be touched up a bit, especially in the interrupt handling areas.