Rose-Hulman Institute of Technology
Computer Science and Software Engineering
Prof. Archana Chidanandan

Term Project Milestone 2 Evaluation Team #__1-3__ Points: 34/ 40

Evaluation Criteria Categories	Specific Criteria	Comments	Score
Consistency with higher level specifications	❑ Every instruction allowed by the machine language (ML) specification has a unique register transfer language (RTL) representation ❑ The sequences of register transfers specified by each RTL description correctly implement the functions described in the assembly language (AL) specification ❑ Every component referenced in the RTL descriptions is determined ❑ For each component, input, output, and control signals that are sufficient to implement the RTL descriptions are identified, including the size of each signal	There is RTL for each instruction. The RTL appears to be able to do what the functions are supposed to do. Lw and sw can store from on reg to another reg? This isn't mentioned in the description of lw or sw. -1 The components are all determined, except for PC is not listed. -1 Signals for each component are given, except PC.	(4/6)
Self-consistency	❑ The effect of each individual RTL statement is unambiguous ❑ No state element is assigned more than one value in any given clock cycle	The RTL is a little confusing, but a key is given to help clear it up. LW and SW are confusing due to their disagreement with specs. -1 State elements are handled correctly.	(5/6)
Demonstration of design principles 1. Simplicity favors regularity 2. Smaller is faster 3. Good design demands good compromises 4. Make the common case fast	❑ Significant delays are balanced between cycles, so that the clock cycle can be as short as reasonably possible ❑ Each instruction uses as few clock cycles as possible without extending the clock cycle ❑ Each component is used efficiently at each clock cycle, and components are not duplicated unnecessarily	Delays are balanced appropriately. The clock cycles are minimized in each instruction. The components are used properly at every cycle.	(6/6)
Documentation (see below) ❑ Organization ❑ Completeness ❑ Conciseness ❑ Grammar and style	❑ Clear English specifications o The behavior of each component is described unambiguously o Documentation, as listed in the following page, demonstrates all the design issues discussed above	The journal is in good shape, it is very descriptive of each meeting and gives detail on decisions. The memo is also fine. I have no problems with the design document. The table of contents is helpful.	(16/16)

Milestone 1 updates	❑ List of instructions described. ❑ List of special purpose and general purpose registers. ❑ Rules for machine language translation. ❑ Sample programs in assembly and machine language.	The instruction list is given and is clear. The general purpose registers are listed, but the special purpose are only given in the components list, PC is still missing. -1 Machine and sample programs provided.	(5/6)

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Required Documents

- Memo
  - Objective assessment of design and status
- Design Documentation
  - Demonstration of conceptual understanding
  - Highlights interesting features
- Design Process Journal
  - Alternatives considered
  - Tradeoffs
  - Decisions
- Website