

**Term Project Milestone 2 Evaluation Team # 1-2 Points: 35/40**

Evaluation Criteria Categories	Specific Criteria	Comments	Score
Consistency with higher level specifications	<ul style="list-style-type: none"> <li><input type="checkbox"/> Every instruction allowed by the machine language (ML) specification has a unique register transfer language (RTL) representation</li> <li><input type="checkbox"/> The sequences of register transfers specified by each RTL description correctly implement the functions described in the assembly language (AL) specification</li> <li><input type="checkbox"/> Every component referenced in the RTL descriptions is determined</li> <li><input type="checkbox"/> For each component, input, output, and control signals that are sufficient to implement the RTL descriptions are identified, including the size of each signal</li> </ul>	<p>All 25 instructions have RTL for them.</p> <p>Your RTL looks fine and make sure branch is good. Is jr always to go to Reg[2]?</p> <p>Every component is given with controls and size specified.</p>	(6/6)
Self-consistency	<ul style="list-style-type: none"> <li><input type="checkbox"/> The effect of each individual RTL statement is unambiguous</li> <li><input type="checkbox"/> No state element is assigned more than one value in any given clock cycle</li> </ul>	<p>These both appear to be done.</p>	(6/6)
Demonstration of design principles 1. Simplicity favors regularity 2. Smaller is faster 3. Good design demands good compromises 4. Make the common case fast	<ul style="list-style-type: none"> <li><input type="checkbox"/> Significant delays are balanced between cycles, so that the clock cycle can be as short as reasonably possible</li> <li><input type="checkbox"/> Each instruction uses as few clock cycles as possible without extending the clock cycle</li> <li><input type="checkbox"/> Each component is used efficiently at each clock cycle, and components are not duplicated unnecessarily</li> </ul>	<p>Delays are balanced.</p> <p>The instruction length appears to be minimized.</p> <p>Each component is appropriately used.</p>	(6/6)
Documentation (see below) <input type="checkbox"/> Organization <input type="checkbox"/> Completeness <input type="checkbox"/> Conciseness <input type="checkbox"/> Grammar and style	<ul style="list-style-type: none"> <li><input type="checkbox"/> Clear English specifications                             <ul style="list-style-type: none"> <li><input type="checkbox"/> The behavior of each component is described unambiguously</li> <li><input type="checkbox"/> Documentation, as listed in the following page, demonstrates all the design issues discussed above</li> </ul> </li> </ul>	<p>The components list is fine. I see no clear problems.</p> <p>The journal seems fine.</p> <p>Your memo is not up to date with last listed meeting for M2. It is also lacking by not explaining the AL changes. -2</p> <p>The design document is cluttered and has no table of contents. @epc is double specified. -3</p>	(11/16)

Milestone 1 updates	<ul style="list-style-type: none"><li><input type="checkbox"/> List of instructions described.</li><li><input type="checkbox"/> List of special purpose and general purpose registers.</li><li><input type="checkbox"/> Rules for machine language translation.</li><li><input type="checkbox"/> Sample programs in assembly and machine language.</li></ul>	M1 seems to be up to date aside from double description of EPC, one appears to need to be PC.	(6/6)
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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