Thor is a superscalar processor. This implementation is using the RiSC-16 processor by Bruce L. Jacob as a starting point. RiSC-16 is related to the Little Computer (LC-896) developed by Peter Chen at the University of Michigan.

Differences from the RiSC-16 are significant:

* 64 bit processing
* 64 bit - 256 entry general purpose register array
* 16 branch target registers
* 16 predicate registers
* 16 segment registers
* variable length instructions
* (2,2) correlating branch prediction

This is currently a work-in-progress, that’s just beginning.