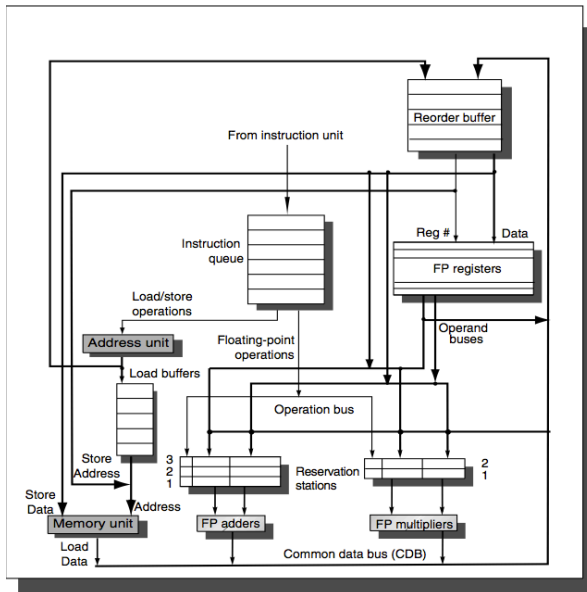


Out-of-Order Speculative Execution with a Retargetable ISA

David S. Greenberg and Bhaskar Mookerji

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Tomasulo with Speculation



Another idea: Retargetable ISA with register load-store architecture

- ▶ Generalize instruction translation and dispatch
- ▶ Exploration of higher-level instruction abstractions within Bluespec
- ▶ Replace execution rule with multiple modules (e.g., floating point, vector ops)
- ▶ Investigation tradeoffs between abstraction and hardware performance
- ▶ Precedent with microcode and ISA simulators