

Speculative Execution with Tomasulo

TABLE 1. Reservation Stations

| Unit name | Busy | Operation | Vj | Vk | Qj | Qk | Dest |
|-----------|------|-----------|----|----|----|----|------|
| Add1 | | | | | | | |
| Add2 | | | | | | | |
| Add3 | | | | | | | |
| Mult1 | | | | | | | |
| Mult2 | | | | | | | |

TABLE 2.

| Entry | Busy | Instruction | Issue | Ex Comp | Write Res | Commit | Dest | Value |
|-------|------|-------------|-------|---------|-----------|--------|------|-------|
| 1 | | | | | | | | |
| 2 | | | | | | | | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |

TABLE 3. Load/Store Unit Status

| Unit | Busy | Address | Unit | Busy | Address | Qj |
|-------|------|---------|--------|------|---------|----|
| Load1 | | | Store1 | | | |
| Load2 | | | Store2 | | | |
| Load3 | | | Store3 | | | |
| Load4 | | | | | | |
| Load5 | | | | | | |
| Load6 | | | | | | |

TABLE 4. Register Result Status

| Register | F0 | F2 | F4 | F6 | F8 | F10 | F12 |
|----------|----|----|----|----|----|-----|-----|
| Fj | | | | | | | |