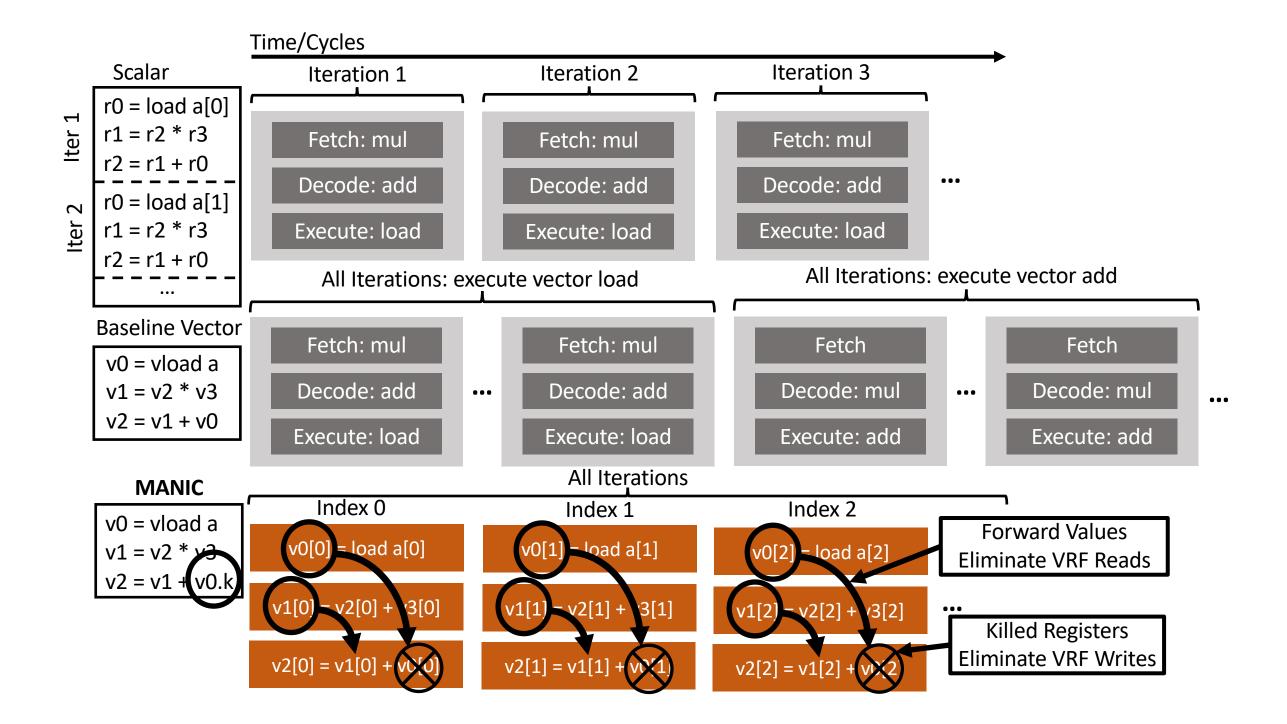
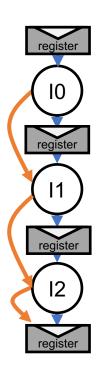
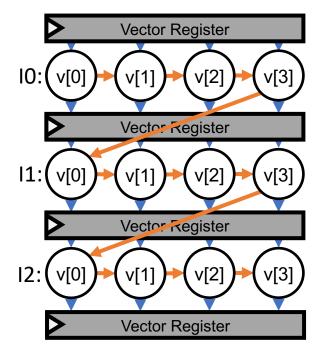
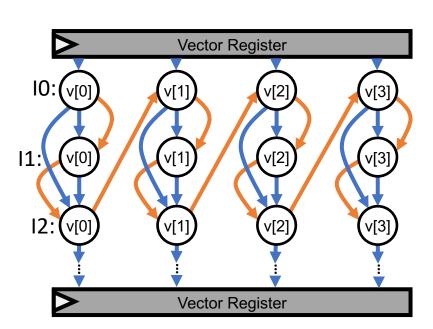


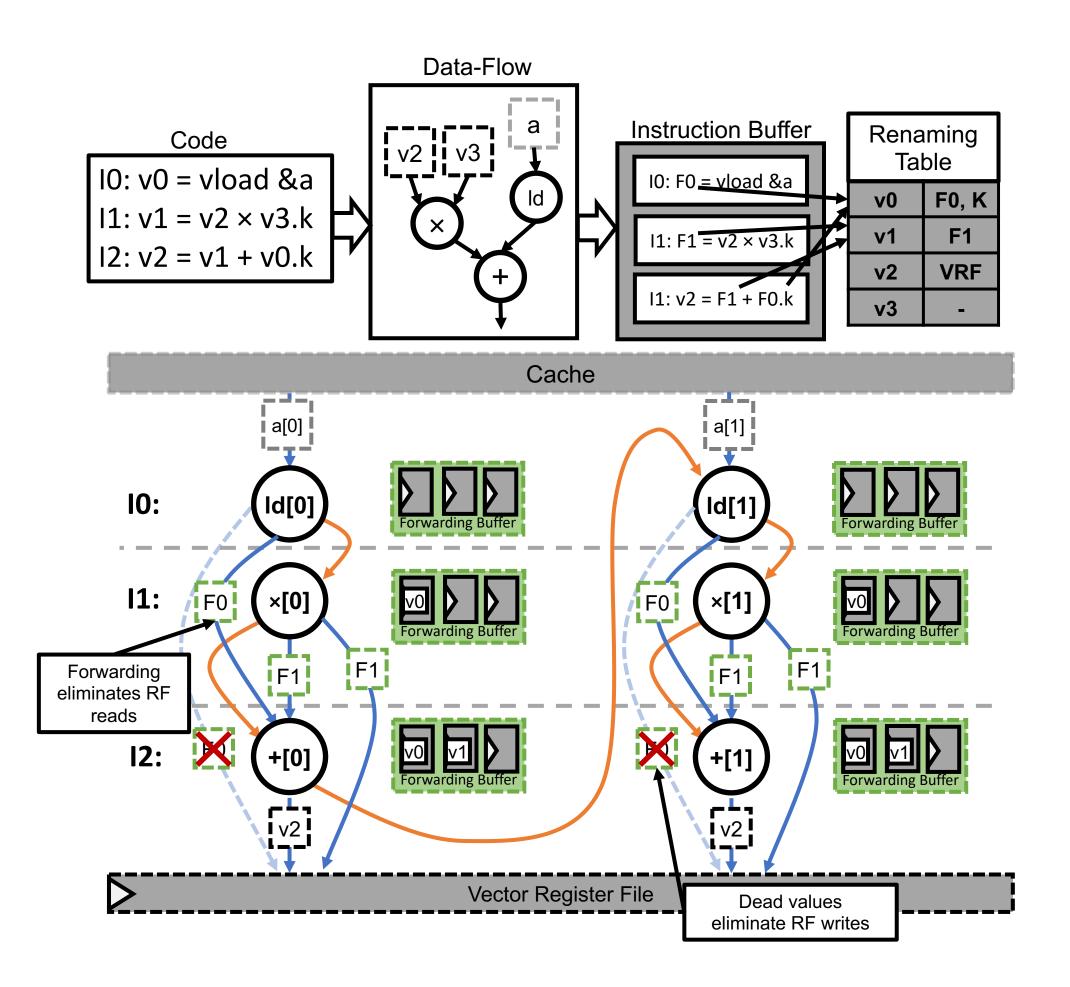
| Main | Fetch Decode Execute Scalar Core | Renaming Table  v0 F  v1 F  Issue Logic |                  |  | MANIC Vector Unit  Dotted – Stateful elements |                 |  |
|------|----------------------------------|---|------------------|--|---|-----------------|--|
|      | Cache                            | Forwarding<br>Buffer                    |                  |  | Data-flow<br>Control-flo                      |                 |  |
| VRF  | Compute                          | V                                       | op<br>oad<br>add |  | src1<br>F0<br>v0<br>ruction<br>uffer          | src2<br>-<br>F1 |  |

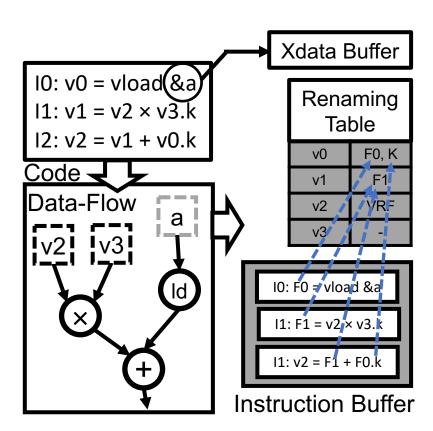


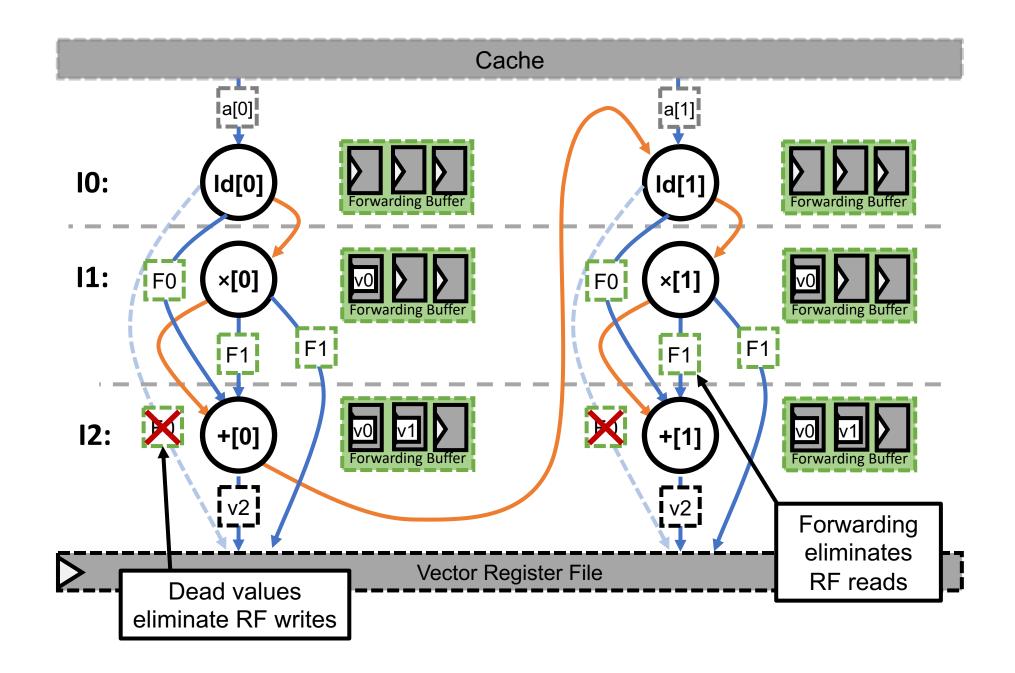


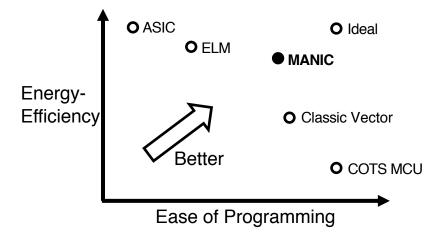












| Main | Fetch Decode Execute Scalar Core | Renan<br>v0<br>v1<br>Issue | ning Ta            | :    | State                           | _    |
|------|----------------------------------|----------------------------|--------------------|------|---------------------------------|------|
|      | Cache                            | Forwarding<br>Buffer       |                    |      | Control-flow<br>Xdata<br>Buffer |      |
|      | ,                                |                            | ор                 | dest | src1                            | src2 |
|      |                                  |                            | vload              | F1   | F0                              | -    |
|      | Community                        | 7 <u></u>                  | vadd               | v2   | v0                              | F1   |
| L    | Compute                          |                            | Instruction Buffer |      |                                 |      |

