## VMIPS instructions

| addvv.d va, vs, vt | Add elements of vs and vt , result in vd |
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| addvs.d vd, Vs, Ft | Add elements of vs to Ft, result in vd |
| subvv.d vd, vs, vt | Subtract elements of vt from vs , result in vd |
| subvs.d vd, Vs, Ft | Subtract Ft from elements of Vs , result in Vd |
| subsv.d Vd, Fs, Vt | Subtract elements of Vt from Fs , result in Vd |
| mulvv.d vd, vs, vt | Multiply elements of vs and vt, result in vd |
| mulvs.dvd, Vs, ft | Multiply elements of vs by Ft, result in Vd |
| divvv.d va, vs, vt | Divide elements of vs and vt , result in vd |
| divvs.d vd, Vs, Ft | Divide elements of vs by Ft , result in Vd |
| divsv.d Vd, Fs, vt | Divide Fs by elements of vt, result in Vd |
| lv Vd, (Rs) | Load into vd from memory starting at address Rs |
| Sv Vd, (Rs) | Store vd into memory starting at address Rs |
| lvws Vd, (Rs, Rt) | Load into Vd starting from Rs with stride Rt (i.e., addresses Rs, $\mathrm{Rs}+\mathrm{Rt}$, Rs $+2 \cdot \mathrm{Rt}, \ldots$ ) |
| Svws Vd, (Rs, Rt) | Store vd starting from Rs with stride Rt (i.e., addresses Rs, Rs + Rt, Rs + $2 \cdot \mathrm{Rt}, \ldots$ ) |
| lvi Vd, (Rs + vt) | Load into Vd at addresses $\mathrm{Rs}+\mathrm{Vt}_{i}$ |
| svi Vd, (Rs + vt) | Store vd at addresses $\mathrm{Rs}+\mathrm{Vt}_{i}$ |
| cvi Vd, Rs | Set vd to hold the indices 0, Rs, $2 \cdot \mathrm{Rs}, \ldots$ |
|  | Compare elements of vs with vt using $\mathbf{X X}=\mathrm{EQ} / \mathrm{NE/LT/LE/GT/GE} ; 0 / 1$ results into vm |
| $\boldsymbol{s X X V S . d} \mathrm{Vs}$, | Compare elements of vs with Ft using $\mathbf{X X}=\mathrm{EQ} / \mathrm{NE/LT/LE/GT/GE} ; 0 / 1$ results into vm |
| pop Rd, vm | Place into Rd the number the 1 s in vm |
| cvm | Set vm to all 1s. |
| mtc1 VLR, Rs | Move Rs into vector length register VLR |
| mfel Rd, VLR | Move vector length register vir into Rd |
| mvtm Vm, fs | Move Fs into vector mask register vm |
| mvfm Fd, VM | Move vector mask register vm into Fd |

