

**LBUI** dst: wreg , base: wreg , idx: wreg

Behavior:

- $\text{addr} = \text{base} + \text{idx}$
- $\text{target} = [\text{addr} + 7: \text{addr}]$

**FMLA** add: wreg , lut\_base: wreg , idx: wreg , shift: imm

Behavior:

- $\text{index} = \text{idx} \ll \text{shift}[4: 0]$
- $\text{addr} = \text{lut\_base} + \text{index}$
- $\text{lut} = [\text{addr} + 31: \text{addr}]$
- $\text{add} = \text{add} + \text{lut}$

**LBSI** dst: wreg , base: wreg , idx: wreg

Behavior:

- $\text{addr} = \text{base} + \text{idx}$
- $\text{target}[31] = [\text{addr} + 7]$
- $\text{target}[6: 0] = [\text{addr} + 6: \text{addr}]$

**FMAL** add\_base: wreg , idx: wreg , shift: imm , lut: wreg

Behavior:

- $\text{index} = \text{idx} \ll \text{shift}[4: 0]$
- $\text{addr} = \text{add\_base} + \text{index}$
- $\text{add} = [\text{addr} + 31: \text{addr}]$
- $[\text{addr}] = \text{add} + \text{lut}$

**LHUI** dst: wreg , base: wreg , idx: wreg , shift: imm

Behavior:

- $\text{offset} = \text{idx} \ll \text{shift}[4: 0]$
- $\text{addr} = \text{base} + \text{offset}$
- $\text{target} = [\text{addr} + 15: \text{addr}]$

**LWI** dst: wreg , base: wreg , idx: wreg , shift: imm

Behavior:

- $\text{offset} = \text{idx} \ll \text{shift}[4: 0]$
- $\text{addr} = \text{base} + \text{offset}$
- $\text{target} = [\text{addr} + 31: \text{addr}]$

**LHSI** dst: wreg , base: wreg , idx: wreg , shift: imm

Behavior:

- $\text{offset} = \text{idx} \ll \text{shift}[4: 0]$
- $\text{addr} = \text{base} + \text{offset}$
- $\text{target}[31] = [\text{addr} + 15]$
- $\text{target}[14: 0] = [\text{addr} + 14: \text{addr}]$

**LDI** dst: dreg , base: wreg , idx: wreg , shift: imm

Behavior:

- $\text{offset} = \text{idx} \ll \text{shift}[4: 0]$
- $\text{addr} = \text{base} + \text{offset}$
- $\text{target} = [\text{addr} + 63: \text{addr}]$