

The following opcodes are used for **Division**:

- DIVI — Divide by Signed Integer
- DIVU — Divide by Unsigned Integer
- DIVF — Divide by Floating Point

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### DIVI — *Divide by Signed Integer*{#DIVI}

```
L2 = L2 / <signed_imm>
L2 = L2 / <reg_val>
L2 = L2 / <const>
```

=== "DIVI Example"

```
```linenums="1" hl_lines="1 3 5 7"
; imm +ve
    DIVI    1
; imm -ve
    DIVI   -123
; reg val
    DIVI   val(QT)
; const
    DIVI   SOME_CONST_VAL
```
```

=== "DIVI Properties"

| Opcode | Operand Type          | Destination   |
|--------|-----------------------|---------------|
| 16     | Signed 64-bit integer | L2 (implicit) |

Identified as mnemonic [#16](#DIVI), DIVI is used to divide the L2 register by a 64-bit signed value

### DIVU — *Divide by Unsigned Integer*{#DIVU}

```
L3 = L3 / <unsigned_imm>
L3 = L3 / <reg_val>
L3 = L3 / <const>
```

=== "Properties"

| Property         | Value                 |
|------------------|-----------------------|
| -----            | -----                 |
| **Opcode**       | 21                    |
| **Type**         | Arithmetic            |
| **Operand Type** | Unsigned 64-bit value |
| **Destination**  | `L3` (implicit)       |

=== "DIVU Example"

```
```linenums="1" hl_lines="1 3 5"
; imm +ve
    DIVU    1
; reg val
    DIVU    val(QT)
; const
    DIVU    SOME_CONST_VAL
```
```

=== "DIVU Properties"

| Opcode | Operand Type            | Destination   |
|--------|-------------------------|---------------|
| -----  | -----                   | -----         |
| 21     | Unsigned 64-bit integer | L3 (implicit) |

Identified as mnemonic [#18](#DIVU), DIVU is used to divide the L3 register by a 64-bit unsigned value

**DIVF** — *Divide by Float value* {#DIVF}

```
L1 = L1 / <float>
L1 = L1 / <reg_val>
L1 = L1 / <const>
```

=== "DIVF Example"

```
```linenums="1" hl_lines="1 3 5"
; imm float
    DIVF    3.14
; reg val
    DIVF    val(QT)
; const
```

DIVF      SOME\_CONST\_VAL

...

=== "DIVF Properties"

Opcode	Operand Type	Destination
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26	64-bit Float Value	L1 (implicit)

Identified as mnemonic [#23](#DIVF), DIVF is used to divide the L1 register by a 64-bit float value

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