

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

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

DIVI — *Divide by Signed Integer*

```
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*

=== "Properties"

| Property | Value |
|------------|------------|
| **Opcode** | 21 |
| **Type** | Arithmetic |

| | | | |
|--|-------------------------|-----------------------|--|
| | **Operand Type** | Unsigned 64-bit value | |
| | **Destination** | `L3` (implicit) | |

```

=== "Algorithm"
    ...
    L3 = L3 / <unsigned_imm>
    L3 = L3 / <reg_val>
    L3 = L3 / <const>
    ...

=== "Example"
    ...
    ; imm +ve
        DIVU    1
    ; reg val
        DIVU    val(QT)
    ; const
        DIVU    SOME_CONST_VAL
    ...

```

DIVF — *Divide by Float value*

```

=== "Properties"

    | Property          | Value                                     |
    |-----|-----|
    | **Opcode**      | 26                                     |
    | **Type**        | Arithmetic                             |
    | **Operand Type** | 64-bit float value                     |
    | **Destination** | `L1` (implicit)                       |

=== "Algorithm"
    ...
    L1 = L1 / <float>
    L1 = L1 / <reg_val>
    L1 = L1 / <const>
    ...

=== "Example"
    ...
    ; imm float
        DIVF    3.14
    ; reg val
        DIVF    val(QT)
    ; const

```

DIVF SOME_CONST_VAL

...
