

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

- MODI — Mod by Signed Integer
- MODU — Mod by Unsigned Integer

MODI — *Mod by Signed Integer* {#MODI}

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

=== "MODI Example"

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

```
```

=== "MODI Properties"

| Opcode | Operand Type | Destination |
|--------|-----------------------|---------------|
| ----- | ----- | ----- |
| 17 | Signed 64-bit integer | L2 (implicit) |

MODU — *Mod by Unsigned Integer* {#MODU}

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

=== "MODU Example"

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

```
```

=== "MODU Properties"

| Opcode | Operand Type | Destination |
|--------|-----------------------|---------------|
| ----- | ----- | ----- |
| 22 | Unsigned 64-bit value | L3 (implicit) |
