

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

- ADDI — Add Signed Integer
 - ADDU — Add Unsigned Integer
 - ADDF — Add Floating Point
-

ADDI — *Add Signed Integer* {#ADDI}

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

=== "ADDI Example"

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

=== "ADDI Properties"

| Type | Opcode | Operand Type | Destination |
|------------|--------|-----------------------|---------------|
| Arithmetic | 13 | Signed 64-bit integer | L2 (implicit) |

Identified as mnemonic [#13](#ADDI), ADDI is used to add a 64-bit signed value to the L2 register

ADDU — *Add Unsigned Integer* {#ADDU}

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

=== "ADDU Example"

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

### === "ADDU Properties"

Property	Value
-----	-----
Opcode	18
Type	Arithmetic
Operand Type	Unsigned 64-bit value
Destination	L3 (implicit)

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

### ADDF — *Add Float value* {#ADDF}

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

### === "ADDF Example"

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

=== "ADDF Properties"

Property	Value
-----	-----
Opcode	23
Type	Arithmetic
Operand Type	64-bit float value
Destination	L1 (implicit)

Identified as mnemonic [#23](#ADDF), ADDF is used to add a 64-bit floating point value to the L1 register
