

This section describes the available arithmetic **opcodes/mnemonics** and their corresponding operations.

All arithmetic instructions accept **only a single operand**.  
The **other operand**, as well as the **destination**, is taken from one of the **Link registers**:  
**L0, L1, L2, L3**.

🔗 See: [Register Reference – Link Registers](#)

## 1234 Addition

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

- **ADDI** — Add Signed Integer
- **ADDU** — Add Unsigned Integer
- **ADDf** — Add Floating Point

??? abstract "ADDI — *Add Signed Integer*"

```
=== "Properties"

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

=== "Algorithm"

...
L2 = L2 + <signed_imm>
...

=== "Example"

...
    ADDI 1
...
```

??? abstract "ADDU — *Add Unsigned Integer*"

```
=== "Properties"

| Property          | Value                                     |
|-----|-----|
```

<b>**Opcode**</b>	18	
<b>**Type**</b>	Arithmetic	
<b>**Operand Type**</b>	unsigned 64-bit value	
<b>**Destination**</b>	`L3` (implicit)	

=== "Algorithm"

```

L3 = L3 + <signed\_imm>

```

=== "Example"

```

ADDU 1

```

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◆ ADDU — Add Unsigned Integer

...

◆ ADDF — Add Floating Point

Opcode	Code	Operand Count	Opernads	Description
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SUBI				
------	--	--	--	--

MULI				
------	--	--	--	--

DIVI				
------	--	--	--	--

MODI				
------	--	--	--	--

ADDU				
------	--	--	--	--

SUBU				
------	--	--	--	--

MULU				
------	--	--	--	--

DIVU				
------	--	--	--	--

MODU				
------	--	--	--	--

ADDF				
------	--	--	--	--

SUBF				
------	--	--	--	--

MULF				
------	--	--	--	--

DIVF				
------	--	--	--	--