# Converting 16-bit signed binary data to 32-bit unsigned binary data

## INT2UDINT(P)

<div style="display:inline-block">FX5S</div> <div style="display:inline-block">FX5UJ</div> <div style="display:inline-block">FX5U</div> <div style="display:inline-block">FX5UC</div>

These instructions convert the 16-bit signed binary data in the device specified by (s) to 32-bit unsigned binary data, and store the converted data in the device specified by (d).

| Ladder diagram | Structured text[1] |
|---|---|
|  | ENO:=INT2UDINT(EN,s,d);<br>ENO:=INT2UDINTP(EN,s,d); |

| FBD/LD |
|---|
|  |

*1   Supported by engineering tool version "1.035M" and later.

### Setting data

#### ■Descriptions, ranges, and data types

| Operand | Description | Range | Data type | Data type (label) |
|---|---|---|---|---|
| (s) | Data before conversion | -32768 to +32767 | 16-bit signed binary | ANY16_S |
| (d) | Data after conversion | — | 32-bit unsigned binary | ANY32_U |
| EN | Execution condition | — | Bit | BOOL |
| ENO | Execution result | — | Bit | BOOL |

#### ■Applicable devices

| Operand | Bit | Word | | | Double word | | Indirect specification | Constant | | | Others |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | X, Y, M, L, SM, F, B, SB, S | T, ST, C, D, W, SD, SW, R | U□\G□ | Z | LC | LZ | | K, H | E | $ | |
| (s) | ○ | ○ | ○ | ○ | — | — | ○ | ○ | — | — | — |
| (d) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | — | — | — | — |

### Processing details

• These instructions convert the 16-bit signed binary data in the device specified by (s) to 32-bit unsigned binary data, and store the converted data in the device specified by (d).
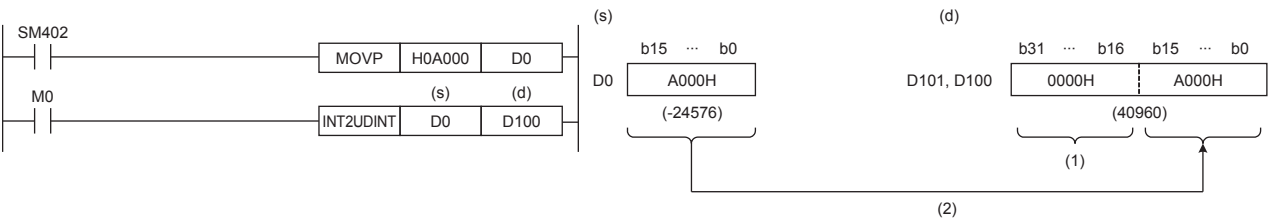


(1): The value 0 is stored.
(2): Data before conversion is stored in the lower 16 bits.

### Operation error

There is no operation error.