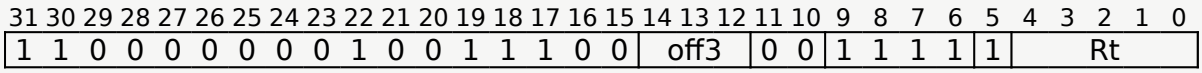
MOVT (scalar to ZT0)

Move 8 bytes from general-purpose register to ZT0

Move 8 bytes to the ZT0 register at the byte offset specified by the immediate index from a general-purpose register. This instruction is UNDEFINED in Non-debug state.

SME2
(FEAT_SME2)




```
MOVT ZT0[<offs>], <Xt>
```

```
if !HaveSME2() || !Halted() then UNDEFINED;
integer t = UInt(Rt);
integer offset = UInt(off3);
```

Assembler Symbols

<offs>	Is the immediate byte offset, a multiple of 8 in the range of 0 to 56, encoded in the "off3" field as <offs>/8.
<Xt>	Is the 64-bit name of the general-purpose register to be transferred, encoded in the "Rt" field.

Operation

```
CheckSMEEnabled();
CheckSMEZT0Enabled();
bits(512) result = ZT0[512];

Elem[result, offset, 64] = X[t, 64];
ZT0[512] = result;
```

Operational information

If PSTATE.DIT is 1:

- The execution time of this instruction is independent of:
  - The values of the data supplied in any of its registers.
  - The values of the NZCV flags.
- The response of this instruction to asynchronous exceptions does not vary based on:
  - The values of the data supplied in any of its registers.
  - The values of the NZCV flags.

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