<u>Base</u>	SIMD&FP	<u>SVE</u>	<u>SME</u>	Index by
<u>Instructions</u>	<u>Instructions</u>	<u>Instructions</u>	<u>Instructions</u>	<b>Encoding</b>

## **GMI**

Tag Mask Insert inserts the tag in the first source register into the excluded set specified in the second source register, writing the new excluded set to the destination register.

## Integer (FEAT MTE)

```
GMI <Xd>, <Xn SP>, <Xm>
if !IsFeatureImplemented(FEAT_MTE) then UNDEFINED;
integer d = UInt(Xd);
integer n = UInt(Xn);
integer m = UInt(Xm);
```

## **Assembler Symbols**

<Xd> Is the 64-bit name of the general-purpose destination

register, encoded in the "Xd" field.

<Xn|SP>
Is the 64-bit name of the first source general-purpose

register or stack pointer, encoded in the "Xn" field.

<Xm> Is the 64-bit name of the second general-purpose source

register, encoded in the "Xm" field.

## **Operation**

```
bits (64) address = if n == 31 then \underline{SP}[] else \underline{X}[n, 64]; bits (64) mask = \underline{X}[m, 64]; bits (4) tag = \underline{AArch64}.\underline{AllocationTagFromAddress} (address); mask<\underline{UInt}(tag)> = '1'; \underline{X}[d, 64] = mask;
```

<u>Base</u> <u>SIMD&FP</u> <u>SVE</u> <u>SME</u> <u>Index by</u> <u>Instructions</u> <u>Instructions</u> <u>Instructions</u> <u>Encoding</u>

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