

MSRR

Move two adjacent general-purpose registers to System Register allows the PE to write an AArch64 128-bit System register from two adjacent 64-bit general-purpose registers.

System

(FEAT_SYSREG128)

31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	1	0	1	0	1	0	1	0	1	0	1	0	0	1	0	0	op1		CRn		CRm		op2		Rt						
										L																					

MSRR (<systemreg>|s<op0>_<op1>_<Cn>_<Cm>_<op2>), <Xt>, <Xt+1>

```

if !IsFeatureImplemented(FEAT_SYSREG128) then UNDEFINED;
if Rt<0> == '1' then UNDEFINED;
AArch64.CheckSystemAccess('1':o0, op1, CRn, CRm, op2, Rt, L);

integer t = UInt(Rt);
integer t2 = UInt(Rt + 1);

integer sys_op0 = 2 + UInt(o0);
integer sys_op1 = UInt(op1);
integer sys_op2 = UInt(op2);
integer sys_crn = UInt(CRn);
integer sys_crm = UInt(CRm);

```

Assembler Symbols

<systemreg> Is a System register name, encoded in "o0:op1:CRn:CRm:op2".

<op0> Is an unsigned immediate, encoded in "o0":

o0	<op0>
0	2
1	3

<op1> Is a 3-bit unsigned immediate, in the range 0 to 7, encoded in the "op1" field.

<Cn> Is a name 'Cn', with 'n' in the range 0 to 15, encoded in the "CRn" field.

<Cm> Is a name 'Cm', with 'm' in the range 0 to 15, encoded in the "CRm" field.

<op2> Is a 3-bit unsigned immediate, in the range 0 to 7, encoded in the "op2" field.

<Xt> Is the 64-bit name of the first general-purpose source register, encoded in the "Rt" field.

<Xt+1> Is the 64-bit name of the second general-purpose source register, encoded as "Rt" +1.

Operation

[AArch64.SysRegWrite128](#)(sys_op0, sys_op1, sys_crn, sys_crm, sys_op2, t,

[Base
Instructions](#)

[SIMD&FP
Instructions](#)

[SVE
Instructions](#)

[SME
Instructions](#)

[Index by
Encoding](#)

[Sh
Pseu](#)

Internal version only: isa v33.64, AdvSIMD v29.12, pseudocode
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