

CFP

Control Flow Prediction Restriction by Context prevents control flow predictions that predict execution addresses based on information gathered from earlier execution within a particular execution context. Control flow predictions determined by the actions of code in the target execution context or contexts appearing in program order before the instruction cannot be used to exploitatively control speculative execution occurring after the instruction is complete and synchronized.

For more information, see [CFP RCTX, Control Flow Prediction Restriction by Context](#).

This is an alias of [SYS](#). This means:

- The encodings in this description are named to match the encodings of [SYS](#).
- The description of [SYS](#) gives the operational pseudocode, any constrained unpredictable behavior, and any operational information for this instruction.

System

(FEAT_SPECRES)

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	0	0	0	1	0	1	1	0	1	1	1	0	0	1	1	1	0	0				Rt	
										L			op1			CRn			CRm			op2									

CFP RCTX, <Xt>

is equivalent to

[SYS](#) #3, C7, C3, #4, <Xt>

and is always the preferred disassembly.

Assembler Symbols

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

Operation

The description of [SYS](#) gives the operational pseudocode for this instruction.

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