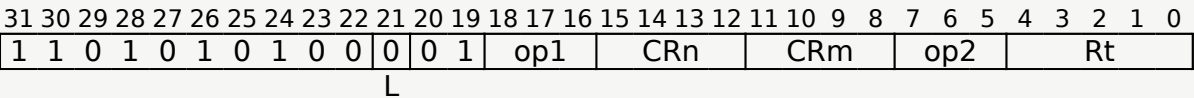


**SYS**

System instruction. For more information, see *Op0 equals 0b01, cache maintenance, TLB maintenance, and address translation instructions* for the encodings of System instructions.

This instruction is used by the aliases [AT](#), [BRB](#), [CFP](#), [COSP](#), [CPP](#), [DC](#), [DVP](#), [GCSPOPCX](#), [GCSPOPX](#), [GCSPUSHM](#), [GCSPUSHX](#), [GCSSS1](#), [IC](#), [TLBI](#), and [TRCIT](#).



**SYS** #<op1>, <Cn>, <Cm>, #<op2>{, <Xt>}

```
AArch64.CheckSystemAccess('01', op1, CRn, CRm, op2, Rt, L);  
  
integer t = UInt(Rt);  
  
integer sys_op1 = UInt(op1);  
integer sys_op2 = UInt(op2);  
integer sys_crn = UInt(CRn);  
integer sys_crm = UInt(CRm);
```

**Assembler Symbols**

- <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 optional general-purpose source register, defaulting to '11111', encoded in the "Rt" field.

**Alias Conditions**

Alias	Is preferred when
<a href="#">AT</a>	CRn == '0111' && CRm == '100x' && <a href="#">SysOp</a> (op1, '0111', CRm, op2)
<a href="#">BRB</a>	op1 == '001' && CRn == '0111' && CRm == '0010' && <a href="#">SysOp</a> ('00
<a href="#">CFP</a>	op1 == '011' && CRn == '0111' && CRm == '0011' && op2 == '1
<a href="#">COSP</a>	op1 == '011' && CRn == '0111' && CRm == '0011' && op2 == '1
<a href="#">CPP</a>	op1 == '011' && CRn == '0111' && CRm == '0011' && op2 == '1

Alias	Is preferred when
<a href="#">DC</a>	CRn == '0111' && <a href="#">SysOp</a> (op1, '0111', CRm, op2) == <a href="#">Sys_DC</a>
<a href="#">DVP</a>	op1 == '011' && CRn == '0111' && CRm == '0011' && op2 == '1
<a href="#">GCSPOPCX</a>	op1 == '000' && CRn == '0111' && CRm == '0111' && op2 == '1
<a href="#">GCSPOPX</a>	op1 == '000' && CRn == '0111' && CRm == '0111' && op2 == '1
<a href="#">GCSPUSHM</a>	op1 == '011' && CRn == '0111' && CRm == '0111' && op2 == '0
<a href="#">GCSPUSHX</a>	op1 == '000' && CRn == '0111' && CRm == '0111' && op2 == '1
<a href="#">GCSSS1</a>	op1 == '011' && CRn == '0111' && CRm == '0111' && op2 == '0
<a href="#">IC</a>	CRn == '0111' && <a href="#">SysOp</a> (op1, '0111', CRm, op2) == <a href="#">Sys_IC</a>
<a href="#">TLBI</a>	CRn == '100x' && <a href="#">SysOp</a> (op1, CRn, CRm, op2) == <a href="#">Sys_TLBI</a>
<a href="#">TRCIT</a>	op1 == '011' && CRn == '0111' && CRm == '0010' && op2 == '1

Operation

```
AArch64.SysInstr(1, sys_op1, sys_crn, sys_crm, sys_op2, t);
```