GITS_CWRITER, ITS Write Register

The GITS CWRITER characteristics are:

Purpose

Specifies the offset from <u>GITS_CBASER</u> where software writes the next ITS command.

Configuration

Bits [63:32] and bits [31:0] are accessible separately.

Attributes

GITS CWRITER is a 64-bit register.

Field descriptions

63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32

RESO

RESO

Offset

RESO

RES

Bits [63:20]

Reserved, res0.

Offset, bits [19:5]

Bits [19:5] of the offset from <u>GITS_CBASER</u>. Bits [4:0] of the offset are zero.

The reset behavior of this field is:

• On a GIC reset, this field resets to an architecturally unknown value.

Bits [4:1]

Reserved, res0.

Retry, bit [0]

Writing this bit has the following effects:

Retry	Meaning	
0d0	No effect on the processing	
	commands by the ITS.	
0b1	Restarts the processing of	
	commands by the ITS if it stalled	
	because of a command error.	
	Note	
	If the processing of	
	commands is not	
	stalled because of	
	a command error,	
	writing 1 to this bit	
	has no effect.	

When read, this bit is res0.

For more information, see 'The ITS command interface' in ARM® Generic Interrupt Controller Architecture Specification, GIC architecture version 3.0 and version 4.0 (ARM IHI 0069).

If GITS_CWRITER is written with a value outside of the valid range specified by <u>GITS_CBASER</u>.Physical_Address and <u>GITS_CBASER</u>.Size, behavior is a constrained unpredictable choice, as follows:

- The command queue is considered invalid, and no further commands are processed until GITS_CWRITER is written with a value that is in the valid range.
- The value is treated as a valid unknown value.

An implementation might choose to report a system error in an implementation defined manner.

Accessing GITS_CWRITER

GITS_CWRITER can be accessed through the memory-mapped interfaces:

Component	Offset	Instance
GIC ITS control	0x0088	GITS_CWRITER

Accesses on this interface are RW.

AArch32	AArch64	AArch32	AArch64	Index by	<u>External</u>
<u>Registers</u>	<u>Registers</u>	<u>Instructions</u>	<u>Instructions</u>	Encoding	<u>Registers</u>

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