# GICC\_AIAR, CPU Interface Aliased Interrupt Acknowledge Register

The GICC AIAR characteristics are:

# **Purpose**

Provides the INTID of the signaled Group 1 interrupt. A read of this register by the PE acts as an acknowledge for the interrupt.

## **Configuration**

This register is present only when FEAT\_GICv3\_LEGACY is implemented. Otherwise, direct accesses to GICC AIAR are res0.

When <u>GICD\_CTLR</u>.DS==0, this register is an alias of the Non-secure view of <u>GICC\_IAR</u>. A Secure access to this register is identical to a Non-secure access to <u>GICC\_IAR</u>.

## **Attributes**

GICC AIAR is a 32-bit register.

# Field descriptions

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
RES0	INTID

#### Bits [31:24]

Reserved, res0.

### INTID, bits [23:0]

The INTID of the signaled interrupt.

#### Note

INTIDs 1020-1023 are reserved and convey additional information such as spurious interrupts.

When affinity routing is not enabled:

- Bits [23:13] are res0.
- For SGIs, bits [12:10] identify the CPU interface corresponding to the source PE. For all other interrupts these bits are res0.

## **Accessing GICC AIAR**

When affinity routing is enabled for a Security state, it is a programming error to use memory-mapped registers to access the GIC.

## GICC AIAR can be accessed through the memory-mapped interfaces:

Component	Offset	Instance	
GIC CPU interface	0x0020	GICC_AIAR	

This interface is accessible as follows:

- When GICD CTLR.DS == 0, accesses to this register are **RO**.
- When an access is Secure, accesses to this register are **RO**.
- When an access is Non-secure, accesses to this register are **RO**.

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

28/03/2023 16:01; 72747e43966d6b97dcbd230a1b3f0421d1ea3d94

Copyright © 2010-2023 Arm Limited or its affiliates. All rights reserved. This document is Non-Confidential.