GICR_SETLPIR, Set LPI Pending Register

The GICR_SETLPIR characteristics are:

Purpose

Generates an LPI by setting the pending state of the specified LPI.

Configuration

A copy of this register is provided for each Redistributor.

Attributes

GICR_SETLPIR is a 64-bit register.

Field descriptions

When GICR_TYPER.DirectLPI == 1:

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
RES0
pINTID
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

Bits [63:32]

Reserved, res0.

pINTID, bits [31:0]

The INTID of the physical LPI to be generated.

Note

The size of this field is implementation defined, and is specified by the GICD_TYPER.IDbits field. Unimplemented bits are res0.

When GICR_TYPER.DirectLPI == 0:

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
IMPLEMENTATION DEFINED
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

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
IMPLEMENTATION DEFINED
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

IMPLEMENTATION DEFINED, bits [63:0]

implementation defined.

Accessing GICR_SETLPIR

When written with a 32-bit write the data is zero-extended to 64 bits.

This register is mandatory in an implementation that supports LPIs and does not include an ITS. The functionality is implementation defined in an implementation that does include an ITS.

Writes to this register have no effect if either:

- The pINTID field corresponds to an LPI that is already pending.
- The pINTID field corresponds to an unimplemented LPI.
- GICR_CTLR.EnableLPIs == 0.

GICR_SETLPIR can be accessed through the memory-mapped interfaces:

Component	Frame	Offset	Instance
GIC Redistributor	RD_base	0x0040	GICR_SETLPIR

Accesses on this interface are **WO**.

28/03/2023 16:02; 72747e43966d6b97dcbd230a1b3f0421d1ea3d94