

ERRDEVARCH, Device Architecture Register

The ERRDEVARCH characteristics are:

Purpose

Provides discovery information for the component.

Configuration

ERRDEVARCH is implemented only as part of a memory-mapped group of error records.

Attributes

ERRDEVARCH 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
ARCHITECT											PRESENT	REVISION				ARCHVER				ARCHPART											

ARCHITECT, bits [31:21]

Architect. Defines the architect of the component. Bits [31:28] are the JEP106 continuation code (JEP106 bank ID, minus 1) and bits [27:21] are the JEP106 ID code.

ARCHITECT	Meaning
0b01000111011	JEP106 continuation code 0x4, ID code 0x3B. Arm Limited.

Access to this field is **RO**.

PRESENT, bit [20]

DEVARCH present. Defines that ERRDEVARCH register is present. Defined values are:

PRESENT	Meaning
0b0	Device Architecture information not present.
0b1	Device Architecture information present.

This field reads as 1.

REVISION, bits [19:16]

When UInt(ERRDEVARCH.ARCHPART) == 0xA00 and ERRDEVARCH.ARCHVER == 0b0000:

Revision. Defines the architecture revision of the component.
Defined values are:

REVISION	Meaning
0b0000	RAS System Architecture, error record group v1.0.
0b0001	RAS System Architecture, error record group v1.1. As 0b0000 and also: <ul style="list-style-type: none">• Simplifies ERR<n>STATUS.• Adds support for additional ERR<n>MISC<m> registers.• Adds support for the optional RAS Timestamp Extension.• Adds support for the optional Common Fault Injection Model Extension.

All other values are reserved.

When UInt(ERRDEVARCH.ARCHPART) == 0xA00 and ERRDEVARCH.ARCHVER == 0b0001:

Revision. Defines the architecture revision of the component.

REVISION	Meaning
0b0000	RAS System Architecture, error record group v2.0.

All other values are reserved.

Access to this field is **RO**.

When UInt(ERRDEVARCH.ARCHPART) == 0xA08 and ERRDEVARCH.ARCHVER == 0b0000:

Revision. Defines the architecture revision of the component.

REVISION	Meaning
0b0000	RAS System Architecture, fault injection group v1.0.

All other values are reserved.

Access to this field is **RO**.

Otherwise:

Reserved, res0.

ARCHVER, bits [15:12]

When `UInt(ERRDEVARCH.ARCHPART) == 0xA00`:

Architecture Version. Defines the architecture version of the component. Defined values are:

ARCHVER	Meaning
0b0000	RAS System Architecture, error record group v1.
0b0001	RAS System Architecture, error record group v2. As 0b0000 and also defines fields in ERRDEVID that describe additional properties of this error record group.

All other values are reserved.

ERRDEVARCH.ARCHVER and ERRDEVARCH.ARCHPART are also defined as a single field, ERRDEVARCH.ARCHID, so that ERRDEVARCH.ARCHVER is ERRDEVARCH.ARCHID[15:12].

When `UInt(ERRDEVARCH.ARCHPART) == 0xA08`:

Architecture Version. Defines the architecture version of the component.

ARCHVER	Meaning
0b0000	RAS System Architecture, fault injection group v1.

All other values are reserved.

ERRDEVARCH.ARCHVER and ERRDEVARCH.ARCHPART are also defined as a single field, ERRDEVARCH.ARCHID, so that ERRDEVARCH.ARCHVER is ERRDEVARCH.ARCHID[15:12].

Access to this field is **RO**.

Otherwise:

Reserved, res0.

ARCHPART, bits [11:0]

Architecture Part. Defines the architecture of the component.
Defined values are:

ARCHPART	Meaning
0xA00	RAS System Architecture, error record group.
0xA08	RAS System Architecture, fault injection group.

ERRDEVARCH.ARCHVER and ERRDEVARCH.ARCHPART are also defined as a single field, ERRDEVARCH.ARCHID, so that ERRDEVARCH.ARCHPART is ERRDEVARCH.ARCHID[11:0].

Accessing ERRDEVARCH

ERRDEVARCH can be accessed through the memory-mapped interfaces:

Component	Offset	Instance
RAS	0xFBC	ERRDEVARCH

Accesses on this interface are **RO**.

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