

Directly accessing an alias region

Writing to a word in the alias region updates a single bit in the bit-band region.

Bit[0] of the value written to a word in the alias region determines the value written to the targeted bit in the bit-band region. Writing a value with bit[0] set to 1 writes a 1 to the bit-band bit, and writing a value with bit[0] set to 0 writes a 0 to the bit-band bit.

Bits[31:1] of the alias word have no effect on the bit-band bit. Writing 0x01 has the same effect as writing 0xFF. Writing 0x00 has the same effect as writing 0x0E.

Reading a word in the alias region:

- 0x00000000 indicates that the targeted bit in the bit-band region is set to zero
- 0x00000001 indicates that the targeted bit in the bit-band region is set to 1

Directly accessing a bit-band region

*Behavior of memory accesses on page 26* describes the behavior of direct byte, halfword, or word accesses to the bit-band regions.

### 2.2.6 Memory endianness

The processor views memory as a linear collection of bytes numbered in ascending order from zero. For example, bytes 0-3 hold the first stored word, and bytes 4-7 hold the second stored word.

#### Little-endian format

In little-endian format, the processor stores the least significant byte of a word at the lowest-numbered byte, and the most significant byte at the highest-numbered byte. See *Figure 11* for an example.

**Figure 11. Little-endian example**

