Bit number	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
ID							B	B	B	B	B	B	B	B	B	B								A	A	A	A	A	A	A	A	A
Reset 0xFFFFFFFF	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**

ID	R/W	Field	Value ID	Value	Description
A	R	SLOPE			Slope trim factor on twos complement form
B	R	OFFSET			Offset trim factor on integer form

4.2.5 MEMCONF — Memory configuration

MEMCONF provides power control for RAM blocks.

Each RAM block can independently power up or power-down in System ON and System OFF mode. RAM blocks can contain multiple RAM sections. For more information about System ON and System OFF modes, see Power and clock management on page 67. For an overview of available RAM blocks and RAM sections, see Memory on page 13.

MEMCONF registers are used for configuring the following:

- RAM sections to be retained during System OFF mode
- RAM sections to be retained and accessible during System ON mode

In System OFF mode, a RAM section is retained by configuring the corresponding MEM[i] field of registers RET and RET2. The RET and RET2 registers control retention on half the address space within the memory block.

In System ON mode, retention and accessibility for a RAM section is configured in the corresponding MEM[i] field of register POWER[n].CONTROL (n=0..1) on page 46.

The following table contains the complete list of blocks (RET.MEM[i], RET2.MEM[i].

Block number (index i in MEMCONF.POWER)	RAM section	RET reset value	RET2 reset value	CONTROL reset value
0	RAM00 section 0	1	x	1
1	RAM00 section 1	1	x	1
2	RAM00 section 2	1	x	1
3	RAM00 section 3	1	x	1
4	RAM01 section 0	1	x	1
5	RAM01 section 1	1	x	1
6	RAM01 section 2	1	x	1
7	RAM01 section 3	1	1	1
33	ICACHE tag + data 1:0	1	x	1
34	CRACEN PKEcode	1	x	1
35	CRACEN KeyRAM	1	x	1

Table 16: Memory block overview with MEMCONF.POWER configuration

A list of features that are retained using MEMCONF are found in the following table.