

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				L K J I H G F E E E D C C C C C C C C C C B A A A A A A A																															
Reset 0x0000000F				0 1 1 1																															
ID	R/W	Field	Value ID	Value	Description																														
C	RW	OPBYTESM1			<p>This field defines the size (= number of bytes minus one) of the operands for the current operation.</p> <p>Possible values are limited by the maximum supported operand size.</p> <p>Examples: - 0x014 - ECC on curve K-163 - 0x01F - ECC on curve P-256 - 0x02F - ECC on curve P-384 - 0x033 - ECC on curve K-409 - 0x041 - ECC on curve P-521 - 0x07F - 1024-bit RSA - 0x09F - 1280-bit RSA - 0x1FF - 4096-bit RSA - 0x3FF - 8192-bit RSA</p>																														
D	RW	RANDMOD			Enable randomization of modulus (counter-measure).																														
E	RW	SELCURVE			<p>Enable accelerator for specific curve modulus:</p> <p>This field has no effect when the optional acceleration hardware is not included.</p> <table><tr><td>NOACCEL</td><td>0x0</td><td>No acceleration (default)</td></tr><tr><td>P256</td><td>0x1</td><td>P256</td></tr><tr><td>P384</td><td>0x2</td><td>P384</td></tr><tr><td>P521</td><td>0x3</td><td>P521</td></tr><tr><td>P192</td><td>0x4</td><td>P192</td></tr><tr><td>CURVE25519</td><td>0x5</td><td>Curve25519</td></tr><tr><td>ED25519</td><td>0x6</td><td>Ed25519.</td></tr></table>	NOACCEL	0x0	No acceleration (default)	P256	0x1	P256	P384	0x2	P384	P521	0x3	P521	P192	0x4	P192	CURVE25519	0x5	Curve25519	ED25519	0x6	Ed25519.									
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ED25519	0x6	Ed25519.																																	
F	RW	RANDKE			Enable randomization of exponent/scalar (counter-measure).																														
G	RW	RANDPROJ			Enable randomization of projective coordinates (counter-measure).																														
H	RW	EDWARDS			Enable Edwards curve.																														
I	RW	SWAPBYTES			<p>Swap the bytes on AHB interface:</p> <p>This bit must be programmed before writing/reading any data in data memory.</p> <table><tr><td>NATIVE</td><td>0</td><td>Native format (little endian).</td></tr><tr><td>SWAPPED</td><td>1</td><td>Byte swapped (big endian).</td></tr></table>	NATIVE	0	Native format (little endian).	SWAPPED	1	Byte swapped (big endian).																								
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J	RW	FLAGA			Flag A.																														
K	RW	FLAGB			Flag B.																														
L	RW	CALCR2			<p>This bit indicates if the IP has to calculate $R^2 \bmod N$ for the next operation.</p> <p>This bit must be set to 1 when a new prime number has been programmed.</p> <p>This bit is used for primitive operations and ignored for the other operations.</p> <table><tr><td>NRECALCULATE</td><td>0</td><td>don't recalculate $R^2 \bmod N$</td></tr><tr><td>RECALCULATE</td><td>1</td><td>re-calculate $R^2 \bmod N$</td></tr></table>	NRECALCULATE	0	don't recalculate $R^2 \bmod N$	RECALCULATE	1	re-calculate $R^2 \bmod N$																								
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7.8.1.7.45 PK.CONTROL

Address offset: 0x2008

Command register.

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	A				
Reset 0x00000000										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ID	R/W	Field	Value ID	Value	Description																																								
A	W	START			Writing a 1 starts the processing.																																								
B	W	CLEARIRQ			Writing a 1 clears the IRQ output.																																								