

7.8.1.7.46 PK.STATUS

Address offset: 0x200C

Status 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 | | | | D D D D D | | | | | | | | C B A A A A A A A A A A A A A A A A A A | | | | | | | | | | | | | | | | | | | | | | | |
| Reset 0x00000000 | | | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ID | R/W | Field | Value ID | Value | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A | R | ERRORFLAGS | | | These bits indicate an error condition. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | They are updated at the end of the operation. They are cleared when starting a new operation. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | R | PKBUSY | | | This bit reflects the BUSY output value. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | It is set when the operation starts and it is cleared when the operation is finished. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | R | INTRPTSTATUS | | | This bit reflects the IRQ output value. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | It is set when the operation is finished. It is cleared when the CPU writes the bit 1 of Control Register. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | R | FAILPTR | | | These bits indicate which data location generated the error flag. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | They are not available for all error flags. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

7.8.1.7.47 PK.TIMER

Address offset: 0x2014

Timer 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 | | | | A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reset 0x00000000 | | | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ID | R/W | Field | Value ID | Value | | | | | | | | | | | | | | | | Description | | | | | | | | | | | | | | | |
| A | RW | TIMER | | | | | | | | | | | | | | | | | | Number of core clock cycles. | | | | | | | | | | | | | | | |

7.8.1.7.48 PK.HWCONFIG

Address offset: 0x2018

Hardware configuration 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 | | | | N M L | | | | | | K J I | | | H G F | | | | | | E D C | | | B B B | | | B B B | | | A A A | | | A A A | | | A A A | | | A A A | | |
| Reset 0x01F72200 | | | | 0 0 0 0 0 0 0 0 1 1 1 1 0 1 1 1 0 0 1 0 0 0 1 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 | R | MAXOPSIZE | | | | Maximum operand size (number of bytes). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | R | NBMULT | | | | Number of multipliers: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | MULT1 | 0 | 1 multiplier | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | MULT4 | 1 | 4 multipliers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | MULT16 | 2 | 16 multipliers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | MULT64 | 4 | 64 multipliers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | MULT256 | 8 | 256 multipliers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | R | PRIMEFIELD | | | | Support prime field. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | R | BINARYFIELD | | | | Support binary field. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E | R | ECC | | | | Support error correction. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |