

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|---------------------------------------------------------------------------------------|----------|----------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 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 A A A A A A A A A A A A A A A A A A A A A A A A A A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reset 0x20000000 | 0 0 1 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 | RW | EDCNT | | | IEEE 802.15.4 energy detect loop count | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | Number of iterations to perform an ED scan. If set to 0 one scan is performed, otherwise the specified number + 1 of ED scans will be performed and the max ED value tracked in EDSAMPLE. | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | RW | EDPERIOD | | | IEEE 802.15.4 energy detect period, 4us resolution, no averaging except the IEEE 802.15.4 ED range 128us (32) | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | Default | 32 | EDPERIOD value other than Default is not supported. | | | | | | | | | | | | | | | | | | | | | | | | | |

8.17.14.102 EDSAMPLE

Address offset: 0x534

IEEE 802.15.4 energy detect level

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|-----|-------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 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 A A A A A A 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ID | R/W | Field | Value ID | Value | | | | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A | R | EDLVL | | [0..127] | | | | IEEE 802.15.4 energy detect level | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Register value must be converted to IEEE 802.15.4 range by an 8-bit saturating multiplication by factor ED_RSSISCALE, as shown in the code example for ED sampling | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

8.17.14.103 CCACTRL

Address offset: 0x538

IEEE 802.15.4 clear channel assessment control