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 B B B A A A A A A A A A A A A A A
Reset 0x43401040	0 1 0 0 0 0 1 1 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0

ID	R/W	Field	Value ID	Value	Description
A	RW	STARTUPTHRESHOLD			Start-up test threshold.
B	RW	ONLINETHRESHOLD			Online threshold.

7.8.1.7.38 RNGCONTROL.AIS31CONF1

Address offset: 0x104C

AIS31 configuration register 1.

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 B B B B A A A A A A A A A A A A A A
Reset 0x03C00680	0 0 0 0 0 0 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 1 1 0 1 0 0 0 0 0 0 0

ID	R/W	Field	Value ID	Value	Description
A	RW	ONLINEREPTHRESHOLD			Online repeat threshold.
B	RW	HEXPECTEDVALUE			Expected history value.

7.8.1.7.39 RNGCONTROL.AIS31CONF2

Address offset: 0x1050

AIS31 configuration register 2.

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 B B B B A A A A A A A A A A A A A A
Reset 0x04400340	0 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0 1 0 0 0 0 0 0

ID	R/W	Field	Value ID	Value	Description
A	RW	HMIN			Minimum allowed history value.
B	RW	HMAX			Maximum allowed history value.

7.8.1.7.40 RNGCONTROL.AIS31STATUS

Address offset: 0x1054

AIS31 status register.

This register is used to obtain diagnostic information about the AIS31 start-up and online tests. Writing to this register clears the NUMPRELIMALARMS value. The PRELIMNOISEALARMREP and PRELIMNOISEALARMRNG flags are cleared by clearing the PREINT flag in the 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	C B A A A A A A A A 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

ID	R/W	Field	Value ID	Value	Description
A	RW	NUMPRELIMALARMS			Number of preliminary noise alarms since counter was last cleared.
B	RW	PRELIMNOISEALARMRNG			Last preliminary noise alarm occurred due to history value out of range.
C	RW	PRELIMNOISEALARMREP			Last preliminary noise alarm occurred due to consecutive high $X^{**}2$.

7.8.1.7.41 RNGCONTROL.HWCONFIG

Address offset: 0x1058

Hardware configuration register.

NORDIC
SEMICONDUCTOR