

## Product Anomaly Notification (PAN)

<b>Device affected</b> (product name): nRF24LE1-F17Q24/Q32/Q48	<b>Device version(s) affected:</b> C
<b>Date (YYYY-MM-DD):</b> 2010-09-10	<b>PAN no.:</b> PAN-020
<b>Nordic Semiconductor reference:</b> Thomas Embla Bonnerud, Product Manager	<b>Document version:</b> 3.0

### Summary

**Anomalies:**

Wakeup from Register Retention power-down mode when pin is wakeup source fails under the conditions that XOSC16M is ON in power-down and XOSC16M is the only 16 MHz clock source

**Marking / tracing:**

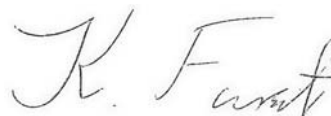
n	R	F		B	X
2	4	L	E	1	Z
Y	Y	W	W	L	L

Please refer to nRF24LE1 product specification for package marking details.  
 Any package type, year, week and lot number does have this anomaly.

**Authorization for Nordic Semiconductor**

Product Manager                      Date:                      Sign: For Thomas Bonnerud:

Thomas Embla Bonnerud              2010-09-10



### Detailed Description

**Symptoms:**

Code execution after wakeup from Register Retention will behave unpredictably

**Conditions:**

The following firmware settings for clock to the microcontroller system are made before entering power-down:

- CLKCTRL[7] = '1' (Keep XOSC16M on in Register Retention mode)
- CLKCTRL[5:4] = '10' (Start XOSC16M only)

**Consequences:**

The device will not wake up from Register Retention when using pin as wakeup source.

**Workaround:**

In nRF24LE1-O firmware, preset start of both 16 MHz oscillators before entering Register Retention:

CLKCTRL[5:4] = '00'

Clock will be sourced from RCOSC16M initially and automatically switched to XOSC16M.  
 At this point in time RCOSC16M will be stopped by hardware