

To: Monica Roos ITS/ES-Sto
Cc: Danielle Gravelle ITS/ES-Box
Subject: National Semiconductor applications FCC ID: OXTLSE039R2 and OXTLSE041R2
Dear Monica:

Technical review of both applications is complete, and I note the following:

1) Both applications: the prior versions of these products, OXTLSE039 and OXTLSE041, were certified as modules. This is appropriate, as both devices require external power and can be used in a variety of applications. The "Application Notes LSE039R2/LSE041R2.pdf" from Mikael Ohlsson indicates that the new applications should also have modular approval. Unfortunately, modular approval requires that the modules be tested for radiated emissions outside of any host device. The prior versions were both tested in a Bluetooth test jig, which is open.

The new test reports do not contain any evidence that these devices were tested for radiated emissions outside of the host laptop. The test setup photos all show laptop hosts. For reference, please review the test setup photos for the prior versions of these products.

Please provide test setup photos showing the EUTs in an open Bluetooth test jig. Also, we need test setup photos for the conducted emissions tests (preferably using the Bluetooth jig as well).

2) OXTLSE039R2

a) The test report shows the EUT rated both at 0 dBm (p.3), and 1 dBm (pages 15, 16, 17, etc.). The average measured output power is 1.11 mW or 0.45 dBm. I recommend that the report be corrected to show a 0 dBm output rating, which agrees with the Ericsson BT module specification.

b) The application information states that this device could be used in cell phones. This is a co-location of transmitters, to which the FCC is sensitive for reasons of RF exposure. We are aware that the FCC thinks it is OK to co-locate a 1 mW BT transmitter and a cell phone, but I will need to contact the FCC to confirm it is OK for us to certify, and for the right wording on the Grant of Authorization.

3) OXTLSE041R2: The block diagram does not show the frequencies of any oscillators, in the relevant blocks. Please amend the diagram to show all oscillator frequencies, and re-submit. The diagram for OXTLSE039R2 is a good example.

Thank you,
Roland