



March 6, 2001

Federal Communications Commission  
Equipment Authorization Division,  
Application Processing Branch  
7435 Oakland Mills Road  
Columbia, MD 21046

RE: KDZLXE6526M  
Form 731: EA99590  
Correspondence Number: 18289

Dear Mr. Dichoso:

In response to your inquiry, I have prepared the following reply:

Item #1

The processing gain data reflects all available data rates. They include 1, 2, 5.5 and 11Mbps. This can be verified by looking at the top margin of the data pages. The data rate is given in that location.

Items #2

On the contrary, we wish to have the card approved independent of the terminals identified in the reports. The terminals were identified only to show the intended operating configuration of the radio so that the commission can make an assessment of RF exposure requirements. This information has been requested on past applications, so we included it with this application to keep delays to a minimum.

Compliance with the modular requirements is attested to below:

- 1) The radio card employs its only RF shielding. This can be verified in the photographs already submitted.
- 2) The modulation/data inputs are all buffered to prevent over-modulation and to ensure compliance with part 15 requirements.
- 3) The module is regulated at 5Vdc.
- 4) The module complies with 15.203 and 15.204(c). The radio module itself is equipped with and MMCX connector. All antennas identified in the report all use this connector or another connector considered unique. For reference the antennas are listed below with their connector type:
  - 155104-0001 0dBi Omni integrated antenna utilizing MMCX connector. One of 2 antennas used on LXE MX1 hand-held terminal.
  - 154591-0001 0dBi Patch integrated antenna utilizing MMCX connector. Second of 2 antennas used on LXE MX1 hand-held terminal.
  - 990004-0027 1.8 dBi Omni external antenna utilizing MMCX connector via cable from antenna to radio module. This antenna is used with the LXE model 2325 hand-held terminal.
  - Toko Model DAC2450CT1 2.15 Omni integrated antenna. This antenna is used with the LXE Model MX2 hand-held terminal and is soldered to the board.



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- 153180-0001 0dBi Omni external antenna equipped with R-TNC connector. This antenna is used on all models of LXE Vehicle Mount terminals. Models include the 1380 and 1390, VX1 and VX2, and the 1590.

In accordance with 15.204(c), no antennas other than the ones identified above will be used with the radio module.

- 5) The module was tested in the PCMCIA slot of a laptop PC independent of the terminals identified in the report. This configuration provided exact interconnect conditions between the radio and all host devices via the PCMCIA bus and was considered worst for emissions since the PCMCIA slot was left open whereas the host terminal devices will enclose the radio completely.
- 6) Both the radio and the host terminal are labeled with the FCC Identifier. Sample labels have been included with the original submittal.
- 7) The module complies with all of the requirements applicable to it as shown in the test report.
- 8) An extensive explanation was submitted with the original filing showing how the module complies with the RF safety requirements applicable to it.

The integration of this radio module is completely controlled by LXE. The radio card itself is not made available to customers except as direct replacements for damaged radios. These replacement radios are programmed with firmware specific to the terminals in which they are installed.


#### Item # 3

See item #2, bullet number 4 above.

#### Item #4

As a result of recent permissive change applications for FCC ID's: KDZ480628-4096, KDZ480824-3300 and KDZLXE4810P3S01US, all manuals are currently in revision to include new RF safety statements and are not yet available for review. The statements, however are as follows:

For portable devices intended for use in the hand only and not on any part of the rest of the body, the following statement is included:


|   |   |
|---|---|
| <p><b>Caution</b></p>  | <p><b><i>This device is intended to transmit RF energy. In accordance with FCC radio-frequency safety regulations, this device is certified for hand-held operation only. A minimum separation distance of at least 20cm from the users body and nearby persons should be maintained during transmission. Use of this device not consistent with these instructions can increase the risk of RF exposure.</i></b></p> |
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For mobile devices intended to be used greater than 20cm from the user, the following statement will appear in those installation manuals:

|   |  |
|---|--|
| <p><b>Caution</b></p>  | <p><i>This device is intended to transmit RF energy. For protection against RF exposure to humans and in accordance with FCC rules, this transmitter should be installed such that a minimum separation distance of at least 20cm is maintained between the antenna and the general population</i></p> |
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Item #5

A separate certification is being sought for this same radio module for use in a body worn application. Due to difficulties experienced on the previous filings mentioned above, separate certifications were deemed necessary to avoid having to justify mixed use of this radio module. We were advised by Kwok Chan that mixed use applications, although possible in some cases, run the risk of dismissal. Our schedule will not permit this, therefore it was decided to file separate certifications. Mr. Chan also advised that, hand-held only, portable devices could be included in mobile certifications due to higher SAR limits for the hands.

We trust we have satisfactorily addressed the issues you raised in this correspondence.

Sincerely,

A handwritten signature in black ink that reads 'R. Sam Wismer'.

R. Sam Wismer  
RF Approvals Engineer  
LXE, Inc.