

American TCB

4/13/2005

In response to your comments regarding the applications for FCC ID SK6XS37008 and FCC ID SK6XS390016 please find our responses below:

1) The marketing literature makes mention of "rip and replacement" design functionality and modular nature. I believe in our previous discussions it was decided this would not be possible. Please review, correct, and/or call to discuss if necessary.

The advertising literature is indicating that, because Xirrus have separated the radio boards from the processor board future upgrades could be achieved by swapping out the radios to get added/different/upgraded functionality.

Xirrus realize that they need to have whatever combination is put together have an FCC approval, and may well pursue a modular approval for subsequent cards.

The user's guide has been updated to remove the appendix "Servicing the WLAN Array".

2) Careful review of the internal antennas appears to show 2 versions. Please provide photographs of both versions.

There is only one version - the antenna in the original picture was modified during testing to evaluate a method of reducing second harmonic signal levels. This was an experiment only and performed on only one antenna. The internal pictures for the 16-port device have been re-taken with the modified card/antenna replaced. Note that all test data supporting this application was taken on unmodified devices.

3) Section 15.15(b) prohibits adjustments of any control by the user that will cause operation of a device in violation of the regulations. Accordingly, any proposal to allow the end user to choose extended channels on frequencies outside of an allowable frequency band in the USA is not acceptable. For example, a WLAN device operating according to Section 15.247 on channels 1-11 between 2.4 - 2.483.5 GHz must not have any user controls or software to allow the device to operate on channels 12 and 13 which are outside of the allowed USA band. Please explain how this device is compliant to this requirement for both DTS and UNII bands of operation.

The North America SKU for the systems will not permit access to channels outside of the FCC allocations, and will set the maximum output power within each band to the levels stated in the test report.

Screen shots of the GUI showing the channels available to be selected have been uploaded as a “user’s manual”.

4) Some of the internal photographs appear to still be for the incorrect model. Please correct.

There were not enough of the 2-transceiver cards to fully stuff the device at the time of test. An internal shot showing one of the cards installed into the system, plus 3 4-transceiver cards filling the remaining slots, has been uploaded with comments on the photographs explaining that production systems are configured with either 4 4-port or 4 2-port cards.

5) The advertising literature mentions that the device may have 3 external antennas, however the internal photographs show 4 external antennas. Please explain.

Please refer to the external shot that shows access to only 3 of the four external connectors. Providing access to the rf connector on the fourth card would require a major redesign in the enclosure as the area above the connector is occupied by the power supply and associated cabling.

Xirrus fully understand that any changes in enclosure design to provide access to the fourth external antenna connector would require a permissive change as the use of higher gain external antennas in the upper 5GHz band would affect MPE calculations.

6) Information in block diagrams and operational description show all radios to be identical. If this is true, please explain why only 4 of the 8 can TX at 2.4 GHz and not all 8 Tx.

There are 2 types of radios on each radio board. One radio on each board has an additional PA to allow usage in the 2.4GHz band. The block diagrams have been updated and uploaded.

7) Please provide information regarding the gain of the internal antenna for both 2.4 and 5 GHz. Only one value appears to be reported.

The internal antennas have 6dBi gain in each band (one has 6dBi gain in the 2.4GHz, the other has 6dBi gain in the 5 GHz band)

8) Are test configuration photographs for radiated emissions with external photographs available.

Unfortunately not, the media card for those shots was corrupted (we have since replaced all our digital cameras). For the tests with external antennas the omni antenna were mounted such that the antenna was vertical. For the panel antennas the antennas were mounted so that the panel was facing the measurement antenna.

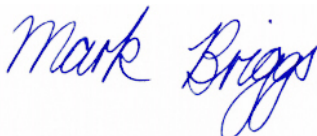
The following documents have been uploaded to the ATCB website to support the responses above for FCC ID: SK6XS390016 (16-port)

- xs_userguide_c April 12 05.pdf (User's guide)
- GUI for channel selection.pdf (User's guide)
- Internal Photos (16-Trx) revision 2.pdf
- XS3900 Block Diagram rev 2.pdf

The following documents have been uploaded to the ATCB website to support the responses above for FCC ID: SK6XS37008 (8-port)

- xs_userguide_c April 12 05.pdf (User's guide)
- GUI for channel selection.pdf (User's guide)
- XS3700 Block Diagram revision 2.pdf
- Internal Photos - revision 2.pdf

Regards,



Mark Briggs
Principal Engineer