Module approval request letter supplement (FCC)

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Date 16 Dec 2010

Sir,

Re: Frontier Silicon Venice 8 WiFi, DAB and FM module. FCC ID: YYX-HA-FS2028-F

I hereby request your authorisation for single modular transmitter approval of the above mentioned device comprising:
Venice 8 FS2028 module and customer variants using hardware built with Revision 5 and Revision 7 PCB's.

This letter now explains the coding and structure of this product in relation to the key elements of hardware and makes a justification for the approval of revision 5 and 7 PCB's.

The part number structure for customer variants is as follows:

1) The generic module part number is HA-FS2028-Fxxxxx
2) The "F" in "Fxxxxx" represents FCC Part15 compliant module and will have the FCC ID: YYX-HA-FS2028-F.
3) The "xxxxx" defines future customer variants.
4) The test sample hardware code is "HA-FS2028-F00006". This hardware code supports **all** hardware functionality on the Venice 8 FS2028 module i.e. 64Mbits Flash, 32MBytes SDRAM, FM, DAB & WiFi with integral PIFA antenna.
5) Modules shipped with FCC ID: YYX-HA-FS2028 label will be programmed with software that supports functionality compliant to FCC Part15B and Part15C.
6) The new Venice 8 module variants may have different size of Memory Devices and may have depopulated subassemblies as listed in the Bill of Materials (BOM) submitted. Sub assemblies are:
    a. HB-FS2028-000001, Venice8 Band2/3 Components
    b. HB-FS2028-000002, Venice8 Ethernet Components
    c. HB-FS2028-000004 Venice8 Base Components
7) No new customer variants shall have any modification to the WiFi Transmitter and Receiver parts. The WiFi transmit and receive block is identified in the block diagram, schematic and Bill of Material (BOM) submitted with this application.

The reasons for revising the PCB, and differences between revision 5 and 7 PCB's are as follows:

1) A modification is required to the PCB to add new logical functionality to address new market requirements and increase sales of the module.
2) In terms of manufacturing introduction, the current Revision 5 PCB will no longer be procured and be replaced by revision 7 PCB and production will and migrate to revision 7 PCB. The change will be controlled using a formal Engineering Change Control procedure.
3) In brief the changes involve breaking digital signal connection paths and the addition of one surface mount resistor. The purpose and detail of changes on Revision 7 PCB are illustrated on the submitted document, "Venice 8 Revision 5 and Revision 7 PCB Differences.pdf". These changes in the baseband section do not affect any transmitter or receiver parameter as they are in a shielded compartment separated from the WiFi radio section.
4) The FCC ID: YYX-HA-FS2028-F will be used on Venice 8 modules manufactured with Revision 7 PCB.

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Company: **Frontier Silicon Ltd.**

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Signature: