



Cover Letter

SGS North America Inc.
620 Old Peachtree Road, SUITE 100
Suwanee, Georgia, United States

Attn: To Whom it May Concern / Application Examiner / Review Engineer / Officer in Charge
Re: Cover letter regarding the application for FCC ID: QQQWFM200

Dear Madam or Sir,

We, Silicon Laboratories Finland Oy, a corporation validly organized and existing under the laws of Finland, having its principal place of business at Alberga Business Park, Bertel Jungin aukio 3, 02600 Espoo, Finland,

hereby **state** that we would like to **apply** for the full modular grant of our Wi-Fi modules having model names of WFM200SA and WFM200SN. The same grant, under the same FCC ID, should cover both models as a family, where the only difference between the models is described at the end of the next paragraph.

Our devices are low-power Wi-Fi 802.11bgn SiP transceiver radio modules, operating at a bandwidth up to 20MHz, targeted to, but not limited to, function within Linux-based host systems as IoT network co-processors for connectivity to WLANs, enabling wireless communication of data and audio for the end-products they are going to be embedded in.

The wireless chipset within each module comes with two RF ports which are routed to two corresponding module's RF pins. An end-product manufacturer can decide to connect external antenna to RF1 and/or RF2 via the exposed RF pins. An unused RF port should be 50Ω terminated. Reason for connecting both external antennas would be to implement the supported switched diversity. However, there is no MIMO functionality, and there is never simultaneous transmission out of the antennas, since an internal switch redirects the RF signal to either RF1 or RF2, where RF2 has ~1dB less TX power compared to RF1.

Only the A-variant, WFM200SA, has an embedded antenna assembled, so a customer might want to use it, instead of an external antenna, by shorting the RF1 pin with the adjacent ANT_IN pin using a 0Ω resistor; the embedded antenna being or not being assembled is in fact the only difference between the models WFM200SA and WFM200SN, and the more complete variant (the A-variant) has been under compliance testing since it covers all possible test cases and scenarios.

Should there be any query regarding this request, please do not hesitate to contact the undersigned. Thank you for your attention to this matter.

Place and date of issue (of this letter):
Espoo, September 25, 2019

A handwritten signature in blue ink, appearing to be 'Pasi Rahikkala', written over a horizontal line.

Senior Contact: Pasi Rahikkala
Job Title: Staff Hardware Engineer, IoT Wireless Modules
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