



MMB Research Inc.

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Federal Communications Commission
Authorization and Evaluation Division

RE: Request for Class II Permissive Change to Zigbee Module, FCC ID:XFFZ357PA20

Applicant: MMB Research Inc

MMB Research has employ more I/O on the original Zigbee chip and switched to a hardware antenna select. MMB wishes to use theses existing I/Os for additional control of the Zigbee chip. A test report with highest gain antenna is attached.

Concurrently, MMB wishes to add 5 additional Dipole antennas to the original Grant. All the new antennas have lower gain than the originally approved 5 dBi Dipole antenna. The new antennas are listed below and the data sheets are submitted as part of the filling.

Manufacturer/Model	Antenna Type	Gain (dBi)
Pulse / W5001,W5010, W5011	Dipole	1.5 dBi
Delock /88395	Dipole	1.5 dBi
Taoglas/GW.40.2153	Dipole	3.7 dBi
Linx/ANT-2.4-CW-HW	Dipole	3.2 dBi
Walsin/ RFDPA870900SBLB8G1	Dipole	2 dBi

Sincerely,

Mark Borins, CTO