

Chris Harvey

From: Tom Cokenias [tom@tncokenias.org]
Sent: Wednesday, October 19, 2005 1:08 PM
To: Chris Harvey
Cc: Barbara Judge
Subject: RE: Airgo Networks, FCC ID: SA3-AGN3023MX0100, Assessment NO.: AN05T5198, Notice#1

Hi Chris, Barbara,

Barbara the issues we had with these projects have been closed with the addition of the channel bonding data in the revised reports plus expanded theory of operations to include description of channel bonding modes.

The FCC applications have been updated for both the APx card you asked about in AN05T5198 and for the cardbus product AN05T5207. The reports were uploaded to their respective files.

I also uploaded revised theory of operation to AN05T5207 similar to what I attached with my email to you re your questions on AN05T5198.

Yesterday I heard that IC reports had been uploaded as well.

I would like to proceed at Chris's earliest opportunity with the FCC reviews, this is the hottest button right now.

Any questions I'm in the office today, except for short breaks when I have cell phone. Cell phone has marginal operation at the office...

best regards

Tom

office 650 726 1263
cell 650 302 0887

>Tom, as I start to get into this project again, I need to know if the
>other TCB application and the 2 IC applications have also been updated.
>I have these all assigned to me and put them all on hold at Barbara's
>request last week.

>

>Thanks,

>Chris

>

>Chris Harvey

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>

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>-----Original Message-----

>From: Tom Cokenias [mailto:tom@tncokenias.org]

>Sent: Wednesday, October 19, 2005 1:38 AM

>To: Compliance Certification Services

>Subject: Re: Airgo Networks, FCC ID: SA3-AGN3023MX0100, Assessment NO.:

>AN05T5198, Notice#1

>

>Dear Chris,

>

>Answers follow questions. Note also that revised test reports have
>been uploaded to website. These reports include data for operational
>modes not reported on in the original reports.

>

>>Dear Tom,

>>

>>I have reviewed the above referenced TCB application and have the
>>following items that need to be addressed before the review can be
>>completed.

>>

>>1. The installation manual states that a label on the outside of the
>>Mobile host must state: "This product contains FCC ID:
>>SA3-AGN3023MX0100 modules." However this must not be plural or this
>>becomes a collocation issue which has not been addressed in this
>>application. Please correct the typo to use the singular word
>>"module".

>

>ANS 1 See corrected guide, attached

>

>>

>>2. The Theory of Operation document does not explain in detail the
>>operation of this 3x2 MIMO device and how it transmits the multiple
>>signals. Please provide more detail in the description and confirm if
>>this device uses Spatial Multiplexing (without Phased Array) operating
>>as a Point-to-multipoint system as defined by the FCC. Does this
>>system drive each chain incoherently at each frequency? Please
>>describe if the relative antenna positioning is critical for this
>>device.

>

>ANS 2 The Airgo products do not use phased array techniques, pattern is
>omni-directional. Each chain is driven incoherently. Please refer to
>attached document called "MIMO Regulator Consideration", attached.
>Please keep this document confidential.

>>

>>3. The Operational Description and Users Manual state that this device
>>can operate on any of 14 channels available from 2412 to 2484MHz (with
>>a note: 1 Frequency/channel use may be restricted by local regulatory
>>limitations. The AGN3023MX-01 will be frequency/channel restricted
>>based on country code programmed in adapter EEPROM). Please explain
>>the method of ensuring that this device will only operate from 2412 ñ
>>2462 MHz (up to channel 11) without the ability for the users to use
>>channels 12 ñ 14 in the US territories by changing the country code.

>

>ANS 3 Please refer to attached document entitled "Channel limits FCC IC
>Regdom" for an explanation of how channel selection is limited to those
>allowed by FCC

>

>>

>>4. The documentation indicates that Data rates up to 126 Mbps in the
>>2.4GHz band within a single 20 MHz channel and up to 240 Mbps in an
>>expanded 40MHz channel are available in this device. The test
> >report indicates that the worst case mode was 6MHz data rate based
>>on previous experience. Please explain the method of determining the
>>worst case data rate in this device.

>

>ANS 4 Preliminary testing was performed at all legacy 802.11b/g rates,
>and the highest measured output power was for 6 Mbps for legacy g
>rates. Proprietary 20 MHz MIMO, 20 MHz MIMO and 40 MHz proprietary
>have maximum power levels lower than that for 6 Mbps.

>

>>

>>5. The Peak Power Spectral Density has been documented in the test
>>report for each of the 2 Tx outputs individually. Please provide
>>documentation for the aggregate PPSD (in linear units) across all the

>>outputs operating at the same frequency.
>
>ANS 5 Revised reports were submitted to the website earlier today, with
>the change you requested as well as data for 20 MHz and 40 MHz channel
>bonding modes data
>
>>
>>6. Please confirm that the Radiated Spurious Emissions were performed
>>with both a single transmit path and multiple transmit path to
>>determine worst case operating mode.
>
>ANS 6 All radiated tests were performed with both chains transmitting.
>Single chain operation is possible only with test software, never
>possible under normal operation in products shipped to customers.
>
>>
>>Best regards,
>>Chris Harvey
>>charvey-tcb@ccsemc.com
>>
>>The items indicated above must be submitted before processing can
>>continue on the above referenced application. Failure to provide the
>>requested information within 30 days of the original e-mail date may
>>result in application dismissal and forfeiture of the filing fee.
>>Also, please note that partial responses increase processing time and
>>should not be submitted. Any questions about the content of this
>>correspondence should be directed to the e-mail address listed below
>>the name of the sender.