

Lucy Tsai

From: Chung, Mark (Taipei) <Mark.Chung@sgs.com>
Sent: 2011年8月2日星期二 上午 6:45
To: Lucy Tsai; Chou, Celine (Taipei)
Cc: Hsieh, Alex (Taipei); Hung, Sunny (Taipei)
Subject: RE: Compal Electronics, Inc., //GKR-TP00028AA //AN11T0519

Hi Lucy,

Q#1: According to the operational description, WLAN and BT are sharing the same antennas (antenna 1 and antenna 2) but in the internal photos, it indicated that only main antenna is for WLAN/BT, aux antenna is for WLAN only. Please clarify.

[SGS Reply] about this issue, WLAN and BT are sharing Aux Antenna, Main antenna for WLAN only, when use WLAN and BT function at the same time, the WLAN function will automatic switch to main antenna.

Also, please clarify if this device has supported FM transmitter since there has no antenna connected in the 3rd port.

[SGS Reply] this device doesn't has supported FM transmitter, our client had removed the FM transmitter description in the operation description, please refer to attach file.

Besides, please clarify if both WLAN and BT can transmit simultaneously.

[SGS Reply] about this issue, WLAN and BT are sharing Main Antenna, aux antenna for WLAN only, when use WLAN and BT function at the same time, the WLAN function will automatic switch to aux antenna.

[Lucy] based on your answer, WLAN and BT are sharing the same antenna and can transmit simultaneously, per 2005 TCB workshop material, EMC co-location mode shall be investigated and reported.

Please address.

[Mark] after confirmation from modular vendor, WLAN and BT shares Aux Antenna. However, they cannot transmit simultaneously. While BT is transmitting, WLAN is switched to Main. On Main, only WLAN functions.

Q#2: Please provide WLAN/BT schematics.

[SGS Reply] we had informed our client to provide schematic for WLAN/BT modular, still waiting for my client response, we will send it immediately if our client provide to me.

[Mark] Please see the attached. WLAN/BT schematics is attached as shown above.

Q#3: According to the internal photos, user manual and schematics and block diagram, except WLAN/BT combo module, this device also supports WWAN with two antennas installed and also a proximity sensor is equipped with but there has nothing documented inside the operational description. Please address.

[SGS Reply] we had informed our client to provide internal photos, user manual and schematics and block diagram without WWAN function, still waiting for my client response, we will send it immediately if our client provide to me.

[Mark] all functions implying WWAN are removed. Please see the revised attachment. The submittal user's manual serves the multi-purpose encompassing WWAN + WLAN model and WLAN only model. The attestation letter has been addressed that only WLAN compliance for WLAN only model is pursued at this time.

Q#4: BT specification mentioned in the operational description is 3.0 which does not agree with 2.0 as mentioned in the user manual. Please clarify.

[SGS Reply] this device doesn't has supported Bluetooth 3.0, our client had removed the Bluetooth 3.0 in the operation description, please refer to attach file.

Q#5: User manual-2 mentioned that at least 2.5cm separation distance should be maintained from the antenna to the user. Please explain how this will be achieved.

[SGS Reply] we had informed our client to delete this statement in user manual, still waiting for my client response, we will send it immediately if our client provide to me.

[Mark] 2.5cm separation has been removed from the compliance sentences of RF exposure. Please verify it.

DSS report


Q#6: Again, the BT specification indicated in the test report are different from the operational description. Please confirm again if it does support BT3.0+HS. According to BT specification, HS mode is capable of transmitting high speed data via WiFi Network and output power may be up to 20dBm. If HS mode is supported, additional test of HS mode should be investigated.

[SGS Reply] this device doesn't has supported Bluetooth 3.0, my client had removed the Bluetooth 3.0 in the operation description, please refer to attach file.

Moreover, the maximum output power declared in the operational description is 9dBm which is about 1.5dB lower than the test report. Please explain.

[SGS Reply] our client had revised the maximum output power declared in the operational description, please refer to attach file.

Q#7: Page 10 of test report mentioned EUT was set at highest data rate with EDR mode during the test. Which data rate was set? And according to BT specification, there are 3 modulations covered by EDR:

GFSK, /4DQPSK, 8DPSK. Be noted that they are not combined. Which modulation was set for final test??

[SGS Reply] We had revised page 10 of test report (add data rate and modulation type), please refer to the attach files.

Q#8: In page 16 of output power test, two set of data are provided, but what's their modulation? Please clearly document them into the report.

Same issues also apply to other tests.

[SGS Reply] We had revised test report (add modulation type in to all test items), please refer to the attach files.

Regarding DSS report, please clarify Q#6-8 with an updated report in order to continue the review.

Following are additional issues regarding DSS report needs your address.

Q#9: Regarding the restricted band test, per your procedure and test plots, it looks you only investigated two frequencies: 2390MHz and 2483.5MHz. According to 15.205, the restricted band in 2.4GHz are 2310-2390MHz and 2483.5MHz-2500MHz, however, your test didn't cover them all. Please re-do the test again.

[Mark] On page 38 of the attached test report, this concern has been addressed on the point 5 of the section of test procedure.

BR,
Mark

From: Lucy Tsai [mailto:lucy.tsai@ccsemc.com]

Sent: Tuesday, July 19, 2011 3:30 PM

To: Chou, Celine (Taipei)

Cc: Lucy Tsai

Subject: Compal Electronics, Inc., //GKR-TP00028AA //AN11T0519

Hi, Celine,

Please address following issues.

Q#1: According to the operational description, WLAN and BT are sharing the same antennas (antenna 1 and antenna 2) but in the internal photos, it indicated that only main antenna is for WLAN/BT, aux antenna is for WLAN only. Please clarify.

Also, please clarify if this device has supported FM transmitter since there has no antenna connected in the 3rd port.

Besides, please clarify if both WLAN and BT can transmit simultaneously.

Q#2: Please provide WLAN/BT schematics.

Q#3: According to the internal photos, user manual and schematics and block diagram, except WLAN/BT combo module, this device also supports WWAN with two antennas installed and also a proximity sensor is equipped with but there has nothing documented inside the operational description. Please address.

Q#4: BT specification mentioned in the operational description is 3.0 which does not agree with 2.0 as mentioned in the user manual. Please clarify.

Q#5: User manual-2 mentioned that at least 2.5cm separation distance should be maintained from the antenna to the user. Please explain how this will be achieved.

DSS report

Q#6: Again, the BT specification indicated in the test report are different from the operational description. Please confirm again if it does support BT3.0+HS. According to BT specification, HS mode is capable of transmitting high speed data via WiFi Network and output power may be up to 20dBm. If HS mode is supported, additional test of HS mode should be investigated.

Moreover, the maximum output power declared in the operational description is 9dBm which is about 1.5dB lower than the test report. Please explain.

Q#7: Page 10 of test report mentioned EUT was set at highest data rate with EDR mode during the test.

Which data rate was set? And according to BT specification, there are 3 modulations covered by EDR: GFSK, $\pi/4$ DQPSK, 8DPSK. Be noted that they are not combined. Which modulation was set for final test??

Q#8: In page 16 of output power test, two set of data are provided, but what's their modulation? Please clearly document them into the report.

Same issues also apply to other tests.

Regarding DSS report, please clarify Q#6-8 with an updated report in order to continue the review.

Following are additional issues regarding DSS report needs your address.

Q#9: Regarding the restricted band test, per your procedure and test plots, it looks you only investigated two frequencies: 2390MHz and 2483.5MHz. According to 15.205, the restricted band in 2.4GHz are 2310-2390MHz and 2483.5MHz-2500MHz, however, your test didn't cover them all. Please re-do the test again.

Best Regards,

Lucy Tsai/UL CCS

Information in this email and any attachments is confidential and intended solely for the use of the individual(s) to whom it is addressed or otherwise directed. Please note that any views or opinions presented in this email are solely those of the author and do not necessarily represent those of the Company. Finally, the recipient should check this email and any attachments for the presence of viruses. The Company accepts no liability for any damage caused by any virus transmitted by this email. All SGS services are rendered in accordance with the applicable SGS conditions of service available on request and accessible at http://www.sgs.com/terms_and_conditions.htm

Information in this email and any attachments is confidential and intended solely for the use of the individual(s) to whom it is addressed or otherwise directed. Please note that any views or opinions presented in this email are solely those of the author and do not necessarily represent those of the Company. Finally, the recipient should check this email and any attachments for the presence of viruses. The Company accepts no liability for any damage caused by any virus transmitted by this email. All SGS services are rendered in accordance with the applicable SGS conditions of service available on request and accessible at http://www.sgs.com/terms_and_conditions.htm