July 12, 2013

Federal Communications Commission
Authorization and Evaluation Division

Re1) 15.407c requirement information and 2) Chanel 12 and 13 Justification

FCC ID.: Q2GWG7550

To whom it may concern,

We have declared below featured for FCC equipment authorization,
Device FCC ID: Q2GWG7550

1.   15.407c requirement information

TI Wifi supplicant code is based on the open source wpa_supplicant org:
http://en.wikipedia.org/wiki/Wpa_supplicant; we have the handler to deal with those events:
Client Reason Code...Description...Meaning
0...noReasonCode...Normal operation.
1...unspecifiedReason...Client associated but no longer authorized.
2...previousAuthNotValid...Client associated but not authorized.
3...deauthenticationLeaving...The access point went offline, deauthenticating the client.
4...disassociationDueToInactivity...Client session timeout exceeded.
5...disassociationAPBusy...The access point is busy, performing load balancing, for example.
6...class2FrameFromNonAuthStation...Client attempted to transfer data before it was authenticated.
7...class2FrameFromNonAssStation...Client attempted to transfer data before it was associated.
8...disassociationStaHasLeft...Operating System moved the client to another access point using non-aggressive load balancing.
9...staReqAssociationWithoutAuth...Client not authorized yet, still attempting to associate with an access point.
99...missingReasonCode...Client momentarily in an unknown state.

As long as the wifi chip has the disconnection (no matter the STA/AP/P2P role TI played), the wifi hip won't
continue to transmission the signal unless the system is configured as triggering background scan another
AP / reconnection scenario / roaming.

2. 2.4 GHz channel 12 and 13

We have 2 ways for closing the Channel 12/13, one is through the regulatory config, another is through the TQS ini; see the parameter in the ini file: FEM1_TxPerChannelPowerLimits_2_4G_11b and the FEM1_TxPerChannelPowerLimits_2_4G_OFDM.
Default config is:

FEM1_TxPerChannelPowerLimits_2_4G_11b = 50 50 50 50 50 50 50 50 50 50 50 50 50 50
FEM1_TxPerChannelPowerLimits_2_4G_OFDM = 50 50 50 50 50 50 50 50 50 50 50 50 50 50
By using the following config, the Channel 12/13 will be closed.
FEM1_TxPerChannelPowerLimits_2_4G_11b = 50 50 50 50 50 50 50 50 50 50 50 0 0 50
FEM1_TxPerChannelPowerLimits_2_4G_OFDM = 50 50 50 50 50 50 50 50 50 50 50 0 0 50
We will use the configuration where channel 12 and 13 will be closed (not transmit).

Sincerely,

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