The NXQ1TXH5 is designed to be applied in a Qi A11 appliction:

1. General description

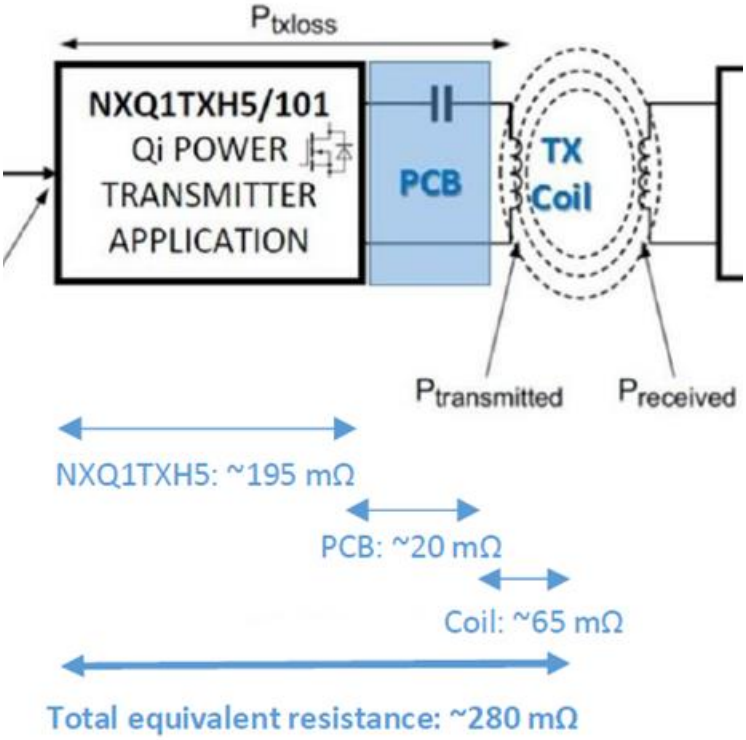
The NXQ1TXH5 is a controller and driver IC for a 5 V Qi-certified/compliant low-power wireless charger. It offers a fully integrated solution that includes a 5 V full-bridge power stage, as defined in Wireless Power Consortium (WPC) 5 V Qi standards A5, A11, A12 and A16.

If customers want to deviate from that, then it is at their own risk.

The charger is not a standalone circuit with just a coil + capacitor: at the moment a receiver is placed the charger coil is the primary winding of a resonant converter. So also the number of turns from the charger coil is important as well as the size of the coil and coupling beween charger coil and receiver coil. So far the generic story.

Whether the analog ping is followed by a digital ping is determined by the damping of the oscillation after the analog ping. See the picture further down in this mailthread.
This damping is determined by the R/L of the circuit.

In our demoboard the R/L ratio is: 280E-3 / 6.3E-6 = 44444



The customer uses a coil with an inductance of 3uH and a resistance of 30mOhm resulting in:
245E-3 / 3E-6 = 81667

So the damping with the customers coil is almost twice as high as in the original A11 application which

might be the explanation why the analog ping is always followed by a digital ping.

This cannot be changed by external resistors because the microcontroller is not active during the analog ping.

So choosing a 3uH inductor and then "compensating" this with a 760nF capacitor does not make this the same charger
as our demoboard.
If the problem with the analog ping is solved (or accepted as is) then there will soon be another problem popping up.