BQ 3D HW Design: ••• BQ410 Modular • approval checklist

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REVISION HISTORY

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1 Aim of the document

The aim of the document is to check whether the BQ410 complies with all requirements needed to be met to be considered a single-module by FCC

2 Requirements

BQ410_FR01	The radio elements must have the radio frequency circuitry shielded. Physical components and tuning capacitor(s) may be located external to the shield, but must be on the module assembly
BQ410_FR02	The module must have buffered modulation/data inputs to ensure that the device will comply with Part 15 requirements with any type of input signal
BQ410_FR03	The module must contain power supply regulation on the module
BQ410_FR04	The module must contain a permanently attached antenna, or contain a unique antenna connector, and be marketed and operated only with specific antenna(s), per Sections 15.203, 15.204(b), 15.204(c), 15.212(a), 2.929(b)
BQ410_FR05	The module must demonstrate compliance in a stand-alone configuration
BQ410_FR06	The module must be labelled with its permanently affixed FCC ID label, or use an electronic display (See KDB Publication 784748 about labelling requirements)
BQ410_FR07	The module must comply with all specific rules applicable to the transmitter including all the conditions provided in the integration instructions by the grantee
BQ410_FR08	The module must comply with RF exposure requirements



3 Compliance justification

BQ410_CJ01 The board has two different shields:

- The main covers the memories, the main processor and the PMIC.
 - The secondary one cover the transceiver IC and its associated components o The matching components are outside this shield (top-right corner)

It is clearly seen in the following image:



BQ410_CJ02	The module ha	s got buffered r	modulatior	n/data inputs.		
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BQ410_CJ03 The board itself contains a Power Management IC which provides all voltages needed in the entire board from just a 3.7V rail input.

The part number is PM8916.

BQ410_CJ04 The antenna is "printed-in-circuit" so, it is permantly attached. (See following image)



BQ410_CJ05 As the board is an entire platform, it is fully functional with just giving it the correct power supply.

BQ410_CJ06 The FCC label will be printed in the PCB silkscreen so it couldn't be de-attached or corrupted.



BQ410_CJ07	Laboratory testing must be made to comply with this requirement
BQ410_CJ08	Laboratory testing must be made to comply with this requirement