OQO Model 02 – Ultra Mobile Personal Computer
The Model 02 UMPC from OQO is a complete XP & Vista computer, with 1.6 GHz CPU, 1 GB DRAM, up to 120 GB HDD, high-resolution graphics card, pen tablet input, and multiple means of wireless connectivity. When the Model 02 is configured with Bluetooth, WLAN, and EvDO RevA WWAN functionality - but without concurrent operation of the WLAN and WWAN transceivers - the OQO Regulatory Model Number is 2050. The 2050 consists of the following radio technologies:

Bluetooth
The Bluetooth circuit is implemented with a CSR BC41B143A Single Chip Bluetooth integrated circuit, which communicates via full speed USB 2.0 (12 MHz). The CSR Bluetooth IC's transmitter is constrained by its built-in firmware so that its modulated signal does not exceed the frequency range of 2400 to 2483.5 MHz. The Class 3 output supports D-QPSK (2 Mbps) and 8-DPSK (8 Mbps) modulation. The RF transmit signal is sent to a dedicated PIFA-style antenna for the 2.4 GHz band, contained in the unit's LCD display housing. The CSR BC41B143A is fully compliant with the Bluetooth Specification V2.0.

WLAN - 802.11a/b/g
The 802.11abg module is implemented using an Atheros AR5414 802.11a/b/g Single Chip Media Access Controller / Baseband / Radio chipset. Communication to this module is via PCI (33 MHz). The Atheros AR5414 chipset is fully compliant with the IEEE 802.11a/b/g specification. The chipset is calibrated on the assembly line so that its modulated signal does not exceed the frequency range of 2400 to 2483.5 MHz for 802.11 b/g operation; and does not exceed the frequency range of 5150-5350, 5475-5725 and 5725-5850 MHz for 802.11a operation. These calibration configuration settings are programmed into the EEprom of the chipset, and cannot be modified by the end-user. Moreover, the regionalization / World SKU setting of the chipset is programmed to additionally limit the transmitter to the above frequency bands (or a subset of these bands, depending on the Access Point's 802.11d beacon commands). The chipset also supports Dynamic Frequency Selection and Transmit Power Control. The supported modulation modes are OFDM with BPSK, QPSK, 16-QAM, 64-QAM; DBPSK, DQPSK, and CCK. The supported Forward Error Correction coding rates are ½, 1/3, and ¼, while the Media Access Technique is CSMA/CA. The transceiver connects to embedded antennas on both sides of the product. The module supports receive antenna diversity, and thus selects the antenna with the best signal for use by the 802.11a/b/g receiver.

WWAN - EvDO
The WWAN transceiver is implemented with a Novatel Mini-PCI Express module, model E725. This module has its own FCC grant, with FCC ID PKRNVWE725. Digital communication to this module is via an internal USB connection. The WWAN transceiver connects to a whip antenna on the right-hand side of the product, as well as an embedded antenna on the left-hand side of the product. The WWAN module supports receive antenna diversity.

Concurrent Transmission
The WWAN module and WLAN module are not able to transmitting simultaneously.