# DragonBoard™ 410c



### Overview

This DragonBoard™ 410c based on 96Boards™ specification features the Qualcomm® Snapdragon™ 410 processor, a Quad-core ARM® Cortex™ A53 at up to 1.2GHz clock speed per core, capable of 32-bit and 64-bit operation.

96Boards (<a href="http://www.96Boards.org">http://www.96Boards.org</a>) is a 32-bit and 64-bit ARM<sup>®</sup> Open Platform hosted by Linaro™ with the intension to serve the software/maker and embedded OEM communities.

DragonBoard 410c supports Android 5.1 and Linux based on Ubuntu at launch with planned support for Windows 10 and offers advanced processing power, WLAN, Bluetooth, and GPS, all packed into a board the size of a credit card. It is designed to support feature-rich functionality, including multimedia, with the Qualcomm<sup>®</sup> Adreno™ 306 GPU, integrated ISP with up to 13 MP camera support, and 1080p HD video playback and capture with H.264 (AVC).

## **Specifications**

Processor	Qualcomm Snapdragon 410
	Quad-core ARM® Cortex® A53 at up to 1.2 GHz per core
	64-Bit capable
	Qualcomm Adreno 306 400MHz GPU for PC-class graphics with support for advanced APIs, including OpenGL ES 3.0, OpenCL, DirectX, and content security
Memory/Storage	1GB LPDDR3 533MHz
	8GB e.MMC 4.51
	SD 3.0 (UHS-I)
Video	1080p@30fps HD video playback and capture with H.264 (AVC), and 720p playback with H.265 (HEVC)

Camera Support	Integrated ISP with support for image sensors up to 13MP
Audio	PCM/AAC+/MP3/WMA, ECNS, Audio+ post-processing (optional)
Connectivity	WLAN 802.11 b/g/n 2.4GHz
	Bluetooth 4.1
	One USB 2.0 micro B (device mode only)
	Two USB 2.0 (host mode only)
	GPS
	On-board GPS antenna
	On-board BT and WLAN antenna
I/O Interfaces	One 40-pin Low Speed (LS) expansion connector  • UART, SPI, I2S, I2C x2, GPIO x12, DC power
	One 60-pin High Speed (HS) expansion connector • 4L-MIPI DSI, USB, I2C x2, 2L+4LMIPI CSI
	Footprint for one optional 16-pin analog expansion connector for stereo headset/line-out, speaker and analog line-in
	The board can be made compatible with Arduino using an add-on mezzanine board
External Storage	Micro SD card slot
User Interface	Power/Reset
	Volume Up/down
	<ul><li>6 LED indicators</li><li>4 - user controllable</li><li>2 - for radios (BT and WLAN activity)</li></ul>
OS-support	Android 5.1
	Linux based on Debian
	Windows 10 IoT core
Power, Mechanical and Environmental	Power: +6.5V to +18V
	Dimensions: 54mm by 85mm meeting 96Boards™ Consumer Edition standard dimensions specifications.
	Operating Temp: 0°C to +70°C
	RoHS and Reach compliant

#### **FCC Label Warning**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil se conforme aux principes de licence –exempts RSS de l'Industrie de Canada. Gestion dépende des conditions suivantes :

- l'appareil ne doit pas produire de l'interférence, et
- l'appareil doit accepter toutes sortes d'interférences, cela incluet l'interférence qui va peut---être causer les résultats indésirables de l'appareil.

This device generates and uses radio waves and if not used properly may cause interference to radio and TV reception. It has been tested and found to comply with the limits set by the FCC which are designed to provide reasonable protection against such interference.

#### **CAUTION**

Arrow Electronics, Inc. ("Arrow") is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Changes or modifications not expressly approved Arrow could void the user's authority to operate the equipment.

#### **FCC Warning Statement**

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/television technician for help.

#### CAN ICES-3 (B) / NMB-3 (B)

This equipment complies with radiation exposure limits set forth for uncontrolled environment. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

Cet appareil se conforme aux limites d'exposition aux rayonnements pour un environnement non contrôlé. L'antenne (s) qui est utilize pour cet émetteur doit être installé pour produire une distance de separation d'au moins 20 cm de toutes personnes et ne doit pas être installé à proximité ou utilize en conjunction avec une autre antenne ou émetteur.