LANTRONIX®

Open-Q™ 865 Development Kit
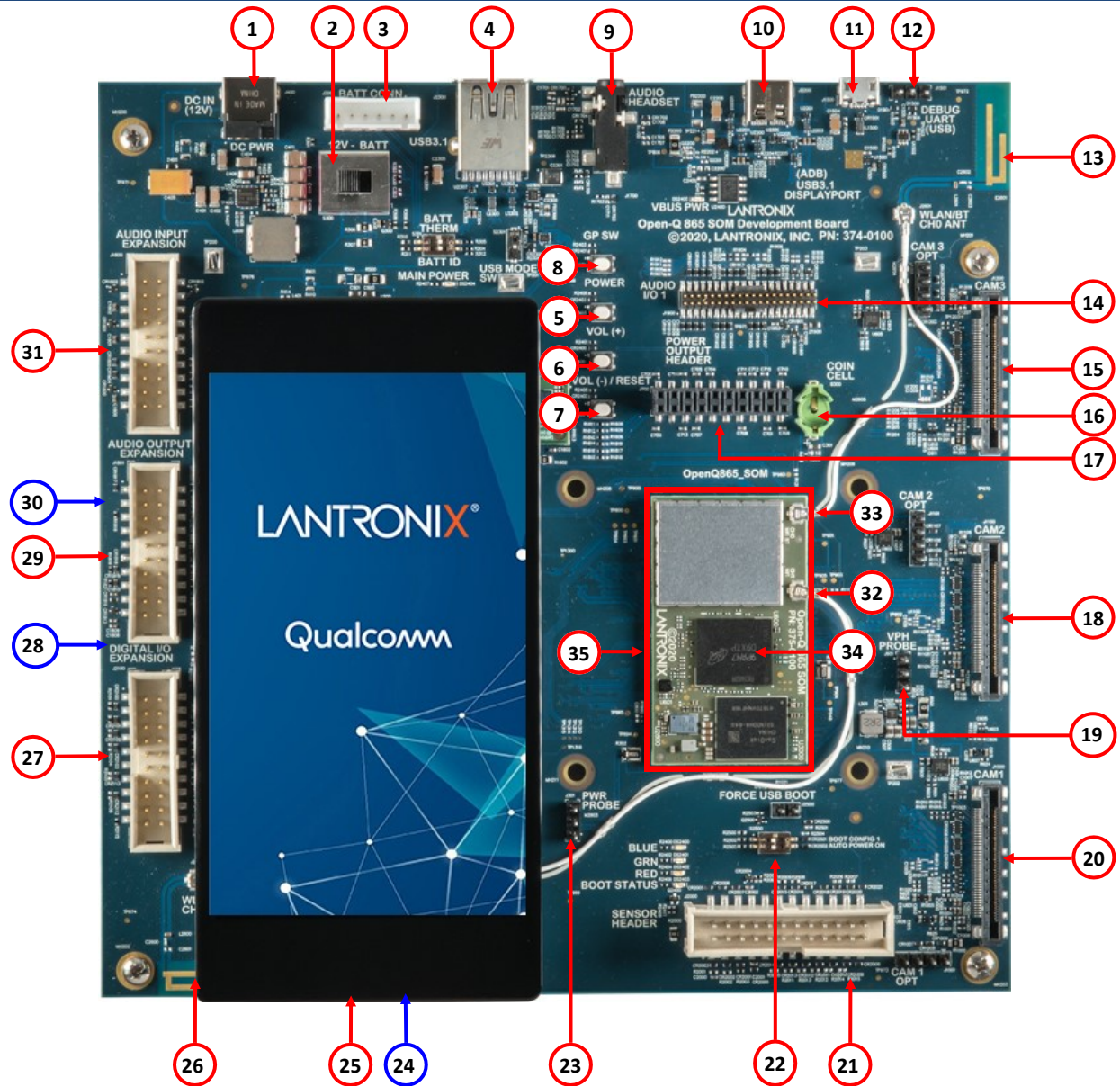# Quick Start Guide

Qualcomm

Package Contents

1. Open-Q 865 Carrier Board compatible with Open-Q 865 family of System-on-Modules (SOM)
2. AC Power Adapter (not shown)
3. CPU Heatsink (not shown)
4. ST Micro Sensor Board (not shown)

SOM SOLD SEPARATELY

1. 12V DC power jack
2. Power source switch (DC/Batt)
3. Battery connector
4. USB 3.0 Type-A Connector
5. Power button
6. Volume +
7. Volume - / Reset button
8. General Purpose Button
9. Audio Headset Jack
10. USB 3.0 Type-C connector
11. USB debug UART Micro B
12. Debug UART Header
13. WLAN/BT Channel 0 Antenna (PCB trace)
14. Audio I/O expansion header
15. MIPI Camera 3 Connector
16. Coin Cell Battery Holder
17. Power Header
18. MIPI Camera 2 Connector
19. VPH_PWR current sense header
20. MIPI Camera 1 Connector
21. Sensor expansion header
22. System configuration switches

23. SOM current sense header
24. Micro SD socket*
25. Open-Q LCD Touch Panel **(Sold Separately)**
26. WLAN Channel 1 Antenna (PCB trace)
27. Digital I/O connector
28. SIM Card connector*
29. Audio Output expansion header
30. M.2 PCIe Socket (B-key) *
31. Audio Input expansion header
32. WLAN Channel 1 U.FL Antenna Connector
33. WLAN/BT Channel 0 U.FL Antenna Connector
34. Qualcomm System-on-Chip (SoC) with PoP DDR memory on top
35. Open-Q System on Module **(Sold separately)**

* On Bottom side

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SOM Installation and Development Kit Setup

CAUTION: The SOM and Dev Kit are susceptible to damage from static discharge.

1. At a **static-safe workstation**, remove the development kit board and the SOM carefully from their antistatic bags. **Do not apply power** until after following the steps below to install the SOM, connect the antenna cables, and install the heatsink.

2. **SOM Installation:** To prevent damage, be gentle while inserting the SOM onto the carrier board. Ensure that the three board-to-board connectors are properly aligned between the SOM and carrier board before applying any force. Then apply vertical force only along both long edges of the SOM above the board-to-board connectors. Force should be applied on the indicated locations (see figure below) until the SOM is fully seated on the carrier board connectors. For further information and removal instructions refer to the Development Kit User Guide document.

3. **Antenna Connection:** After the SOM is installed onto the carrier board, connect the two WLAN/BT antenna cables (32/33) to the SOM as shown on page 1. Gently align the U.FL cable connectors over top of the corresponding SOM connectors and then apply gentle vertical pressure on top until you feel them click into place.

4. **Heatsink Installation:** A stick-on heatsink for the Qualcomm SoC is included with the development kit. It is safe to operate the SOM without the heatsink installed but the processor performance may be limited. For better thermal performance, install the heatsink on top of the SoC by removing the adhesive covering and sticking the heatsink on top of the SoC (34).

5. **Power Up:** Connect the AC Power Adapter to the 12V DC Jack (1), connect a PC with serial console program to the USB debug UART connector (11), and then press and hold the power button (5) until you see the boot indicator LED light (~3 seconds).

6. **Further Information:** Refer to the SW release notes and Development Kit User Guide for your specific SOM and SW package for more information about supported features, connecting peripherals, and how to log in.
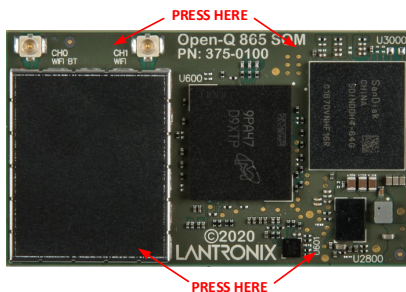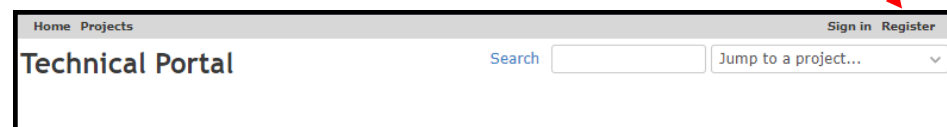
Development Kit Support

Documentation and software

To access the documentation (schematics, user guides, datasheets, programming guides, tech notes…), platform BSP software and much more, please register at:

http://tech.intrinsyc.com

Home Projects   Sign in Register
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Technical Support

Should you require more information or assistance, you can contact us at:

https://www.lantronix.com/support

Lantronix also provides technical information and videos on Qualcomm processors at:

https://www.lantronix.com/resources

Should you require additional technical support for your Development Kit you can easily purchase a technical support package from the Lantronix store:

http://lantronix.com/embedded-compute-support-packages

Thank you for purchasing an Open-Q 865 Development Kit

The Lantronix Team

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