

phyBOARD-Subra-i.MX6

1) QuickStart Guide

Get your phyBOARD-Subra powered up and connected in just a few steps.

1. Check the kit contents (see overview on the right hand side)
2. Have your connection cables at hand: You need an RS232 cable (one-to-one) and an Ethernet cross-over cable. Phytec offers an accessory kit which includes these cables.
3. Power-up phyBOARD-Subra. Connect the 2-pin-Phoenix-connector (part of the kit delivery) to a 24V (+-10%) DC power supply. Mind the polarity (see picture A)! If you have bought the optional power supply with your Kit, it comes already with the 2-pin-connector wired.
4. Turn your power supply on: Plug the 2-pin-Phoenix connector into the green jack of your Kit. The Power LED's (D13 and D14) will light up.

Kit Contents

phyBOARD-Subra-i.MX6

2-pin-Phoenix

Live-DVD



RS-232 and CAN Adapter



Optional Equipment

Wall Adapter 24V

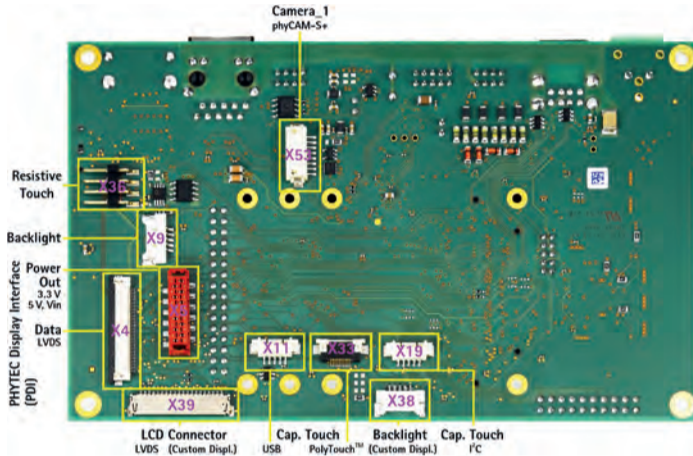
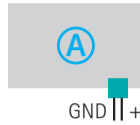
Additional Equipment required

RS-232 Cable

Ethernet Cable



24V power supply polarity



Expansion Con.
serial (TTL level), I²C, SPI, SD

JTAG

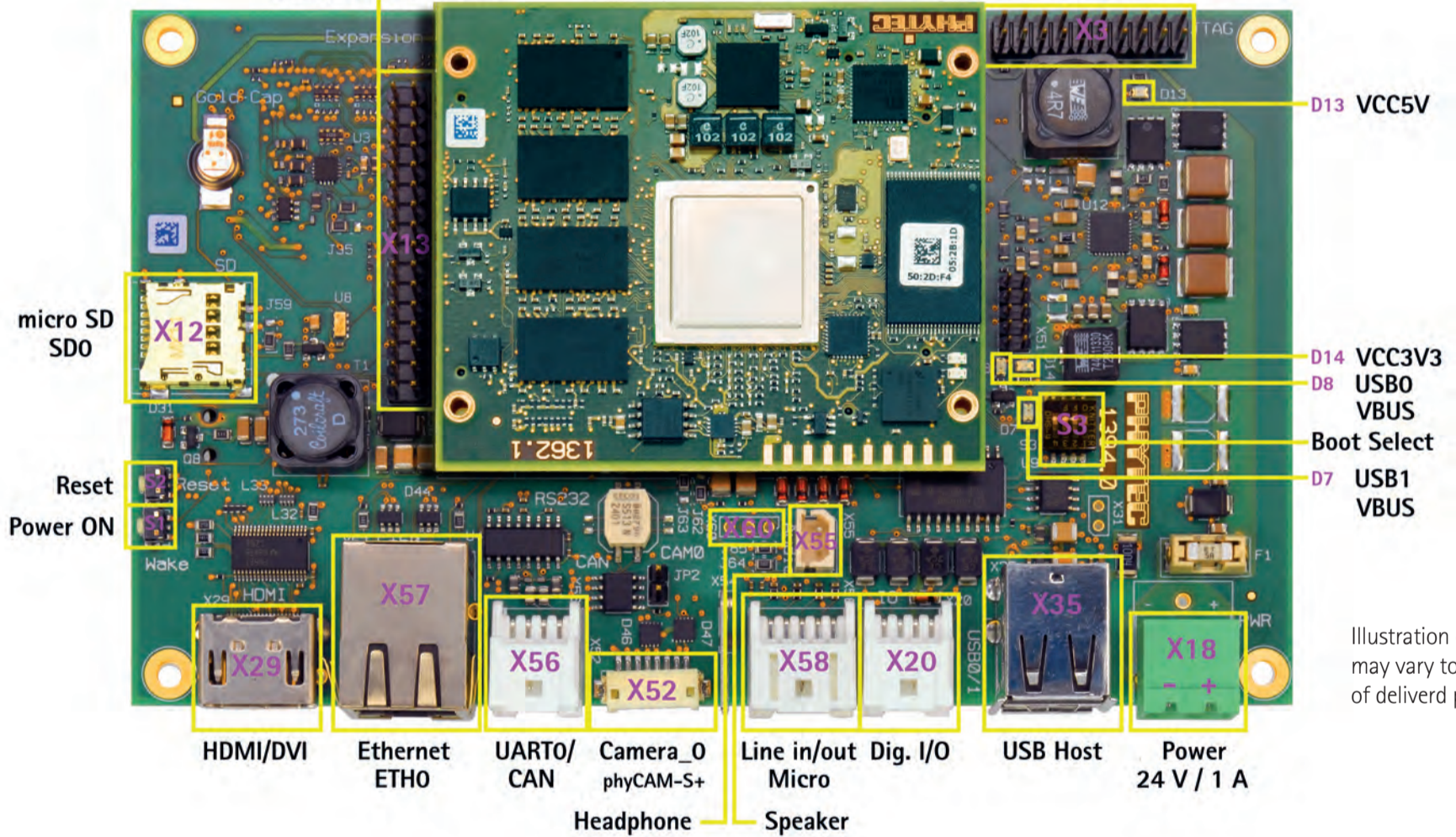


Illustration of interfaces may vary to actual population of delivered product.

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Quick Start Guide

2) Starting the Live DVD

1. Verify the boot priorities of your PC-system to support booting from DVD.
2. Insert the Live DVD (part of the kit delivery) and restart your PC-system. The install / welcome-screen, shown on the right hand side, appears (A)
3. Choose your desired language
4. Click on **Try PHYLiveDVD**. The desktop from Ubuntu appears. (B)

Now you are ready to connect your PC with the phyBOARD-Subra.

3) Getting Connected

Serial connection

1. Connect the RS232/Can adapter cable which comes with the phyBOARD-Subra to X56.
2. Connect one end of a standard male/male serial cable to the female DB9 connector of the RS232/CAN adapter cable.
3. Connect the other end to the first serial interface of your PC (or to an USB-to-DB9-dongle, connected to your host).
4. Click the **Microcom_ttyS0 icon (C)** on the Ubuntu desktop (for direct serial interface connection) or click the **Microcom_ttyUSB0** if you are using an USB-to-DB9-dongle.
5. Push the reset button (S2) on the phyBOARD-Subra (or cycle it's power).

A serial console has been started from your LiveDVD. You should see a boot message and the login-prompt on this console. Congratulations! (D)

6. Use "root" as the log-in-name on the serial console (and press enter).
7. As a good example (and helpful for understanding the next step) you might enter the command ifconfig. This shows you especially the configuration of the two Ethernet interfaces of the phyBOARD-Subra. (E)

Ethernet connection

We recommend disconnecting your host-PC from any other network, because a peer-to-peer connection from your PC to the phyBOARD-Subra module will be established.

1. Connect your preferred Ethernet-interface on your PC with **ETH0 (X57)** on the phyBOARD-Subra using the Ethernet-cross-over cable.
2. Configure the IP-settings on your host platform in Ubuntu:
 - In the **Unity-panel** (left side of your desktop) click on the **Dash Home icon (F)**.
 - A new window will open; enter **System Settings** in the search field (you will see the corresponding icon showing up while typing the search string).
 - Open **System Settings (G)** and Click on the **Network icon**.
 - Select the physical interface to which you have connected the Ethernet (H) cable (if you have more than one network in the list) and click on **Options**.
 - Select the **IPv4Settings tab (I)** and choose **Manual (K)** in the **Method** drop down box.
 - Click **Add (L)** and enter the IP address **192.168.3.10**, **255.255.255.0** as subnet mask and **192.168.3.10** as Gateway.
 - Last, click on **Save (M)** to save this connection settings and close the windows.

You are now ready to test the Ethernet network connection.

3. Click on the **Telnet for Target icon (N)** on your desktop. A console window will open up and a login prompt will be shown (Remember: login-name is "root"). (O) Congratulations.

HDMI Display connection

1. Connect a standard HDMI Cable with your preferred Monitor and the HDMI Connector (X29) of the phyBOARD-Subra (The default resolution will be 1280x1024 @ 60Hz. Please note that some monitors might not be compatible with this resolution. To change the resolution, please refer to the HDMI chapter of the Applicationguide located on your DVD)
2. Optionally you may also connect a standard PC USB mouse and keyboard with the USB Host interfaces (X35) of the phyBOARD-Subra.
3. After all connections are made, please reboot the phyBOARD-Subra by pressing the reset Button (S2).

After a short booting period the Fluidlauncher QT Demo will show a gallery of QT examples. You may navigate through the gallery and select your desired demo using the mouse and keyboard.

Your possible next steps

- Read our in-depth documentation provided on the DVD
- Check out the FAQ pages on the PHYTEC web (www.phytec.de/de/support/faq/faq-phyboard-wega)
- Contact our support team if you have any questions getting Wega up and running

Enjoy!

