Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

NXP Semiconductors
User's Guide

Document Number: QWKSEACSG
Rev 0, April, 2017

QWKS Ethernet Accessory Card, User's Guide

Contents

Chapter 1 Introduction.....3

Chapter 2 QWKS Ethernet Accessory Card Enablement..... 4

2.1 Section 1 – Ethernet Enablement.....4
2.2 Section 2 – LVDS Enablement 10

Chapter 1
Introduction

This document provides a brief overview on how to use the Ethernet Accessory card (QWKS-ETHACC) for the QWKS board. The Ethernet Accessory card provides Ethernet enablement as well as a converter for the LVDS panel (NXP MCIMX-LVDS1).

NOTE

QWKS Ethernet Accessory Card only works with QWKS board Rev C and later.

Chapter 2
QWKS Ethernet Accessory Card Enablement

2.1 Section 1 – Ethernet Enablement

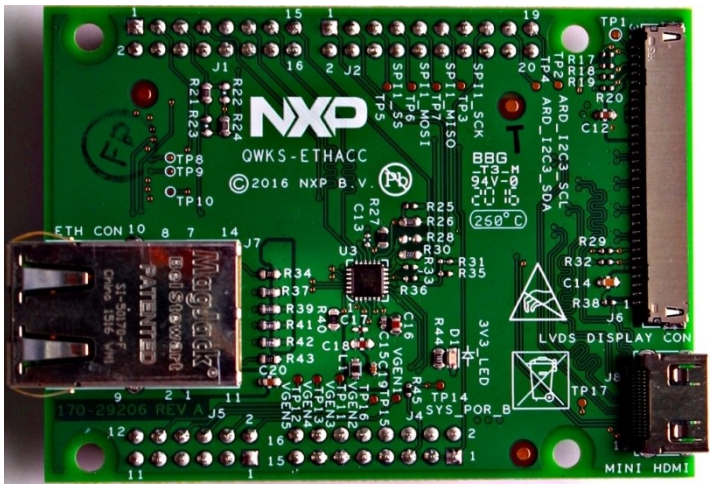

Figure 1. Front of the QWKS-ETHACC card

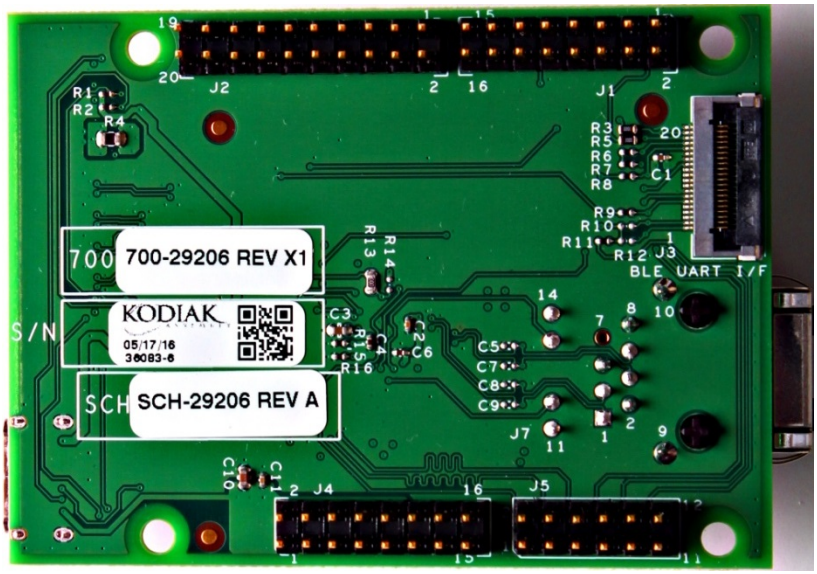

Figure 2. Back of the QWKS-ETHACC card

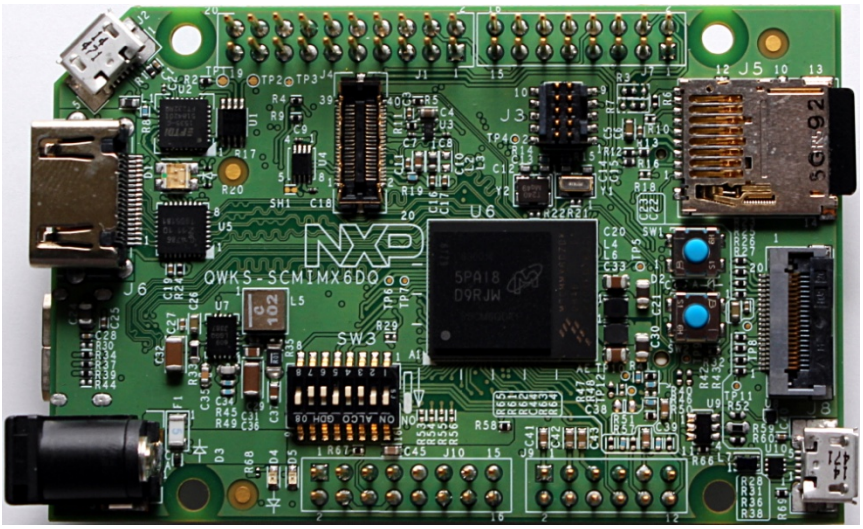

Figure 3. QWKS board Rev C for SCM-i.MX 6D/Q

First, make sure that your QWKS board is Rev C by looking at the back of the board and finding the “SCH –xxxxx RevXX” Rev Number.

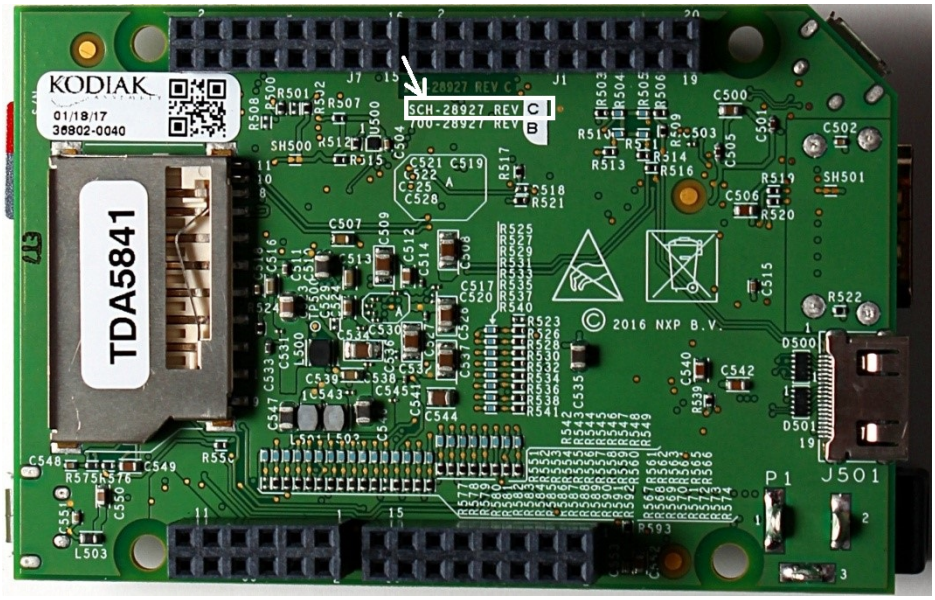

Figure 4. Back of the QWKS Board Rev C

Steps to enable the ethernet card:

1. Plug in the Ethernet card (on the left) into the back of the QWKS board (on the right)

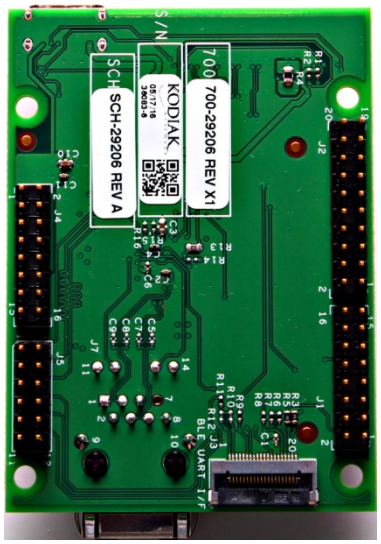

Figure 5. Back of the QWKS-ETHACC card

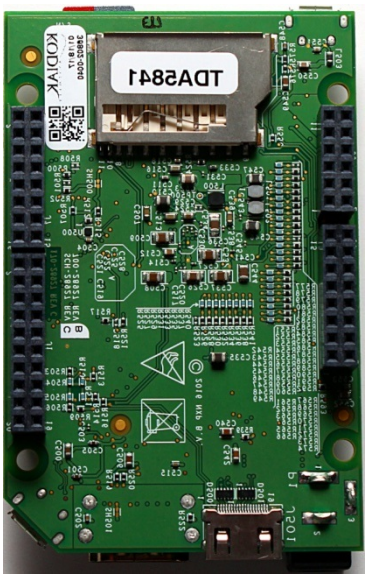

Figure 6. Back of the QWKS Board Rev C

2. Insert an Ethernet cable into the Ethernet port on the Ethernet card. Plug in the power cable and a USB cable for debug into the QWKS board.

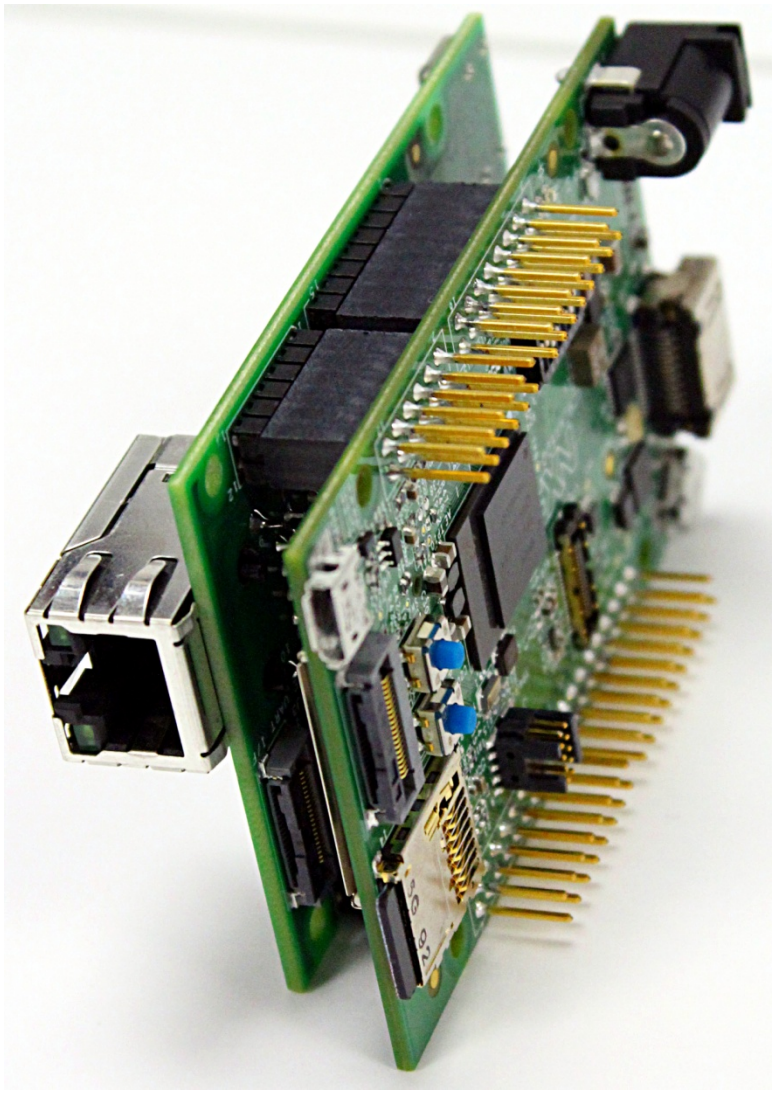

Figure 7. QWKS-ETHACC card plugged into the QWKS Board

3. In your serial console, type in “ifconfig” to get the inet address.

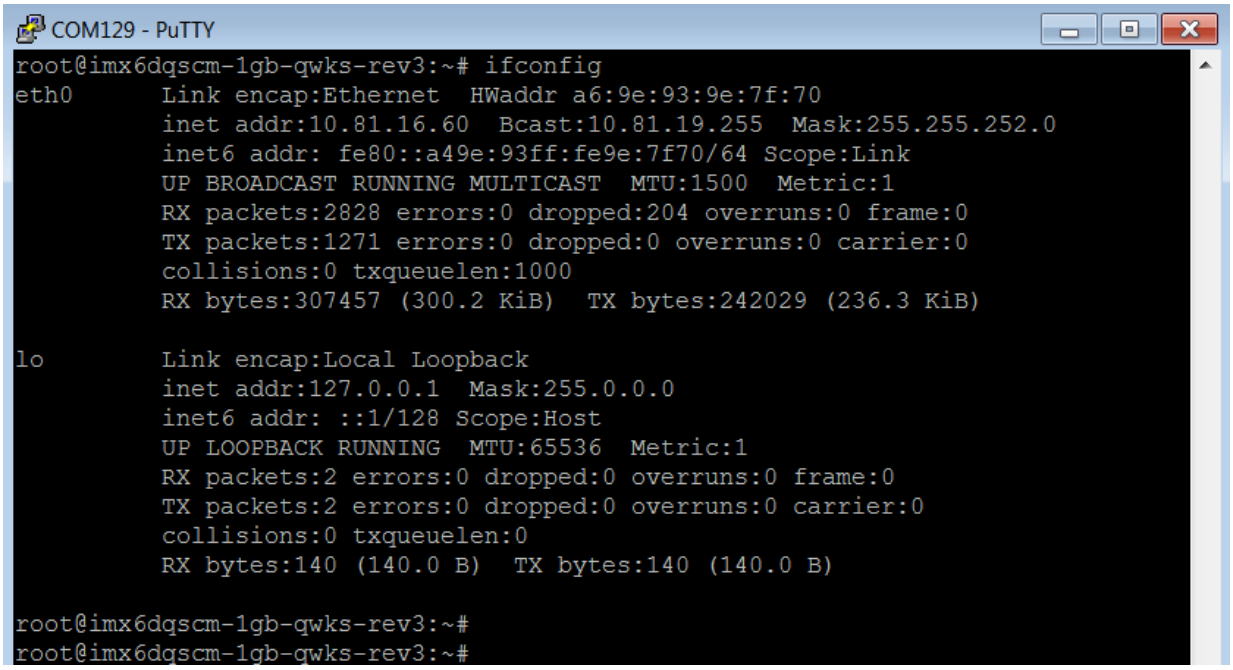

Figure 8. Screenshot of debug console

4. SSH into the device. Use “root” for username and password.

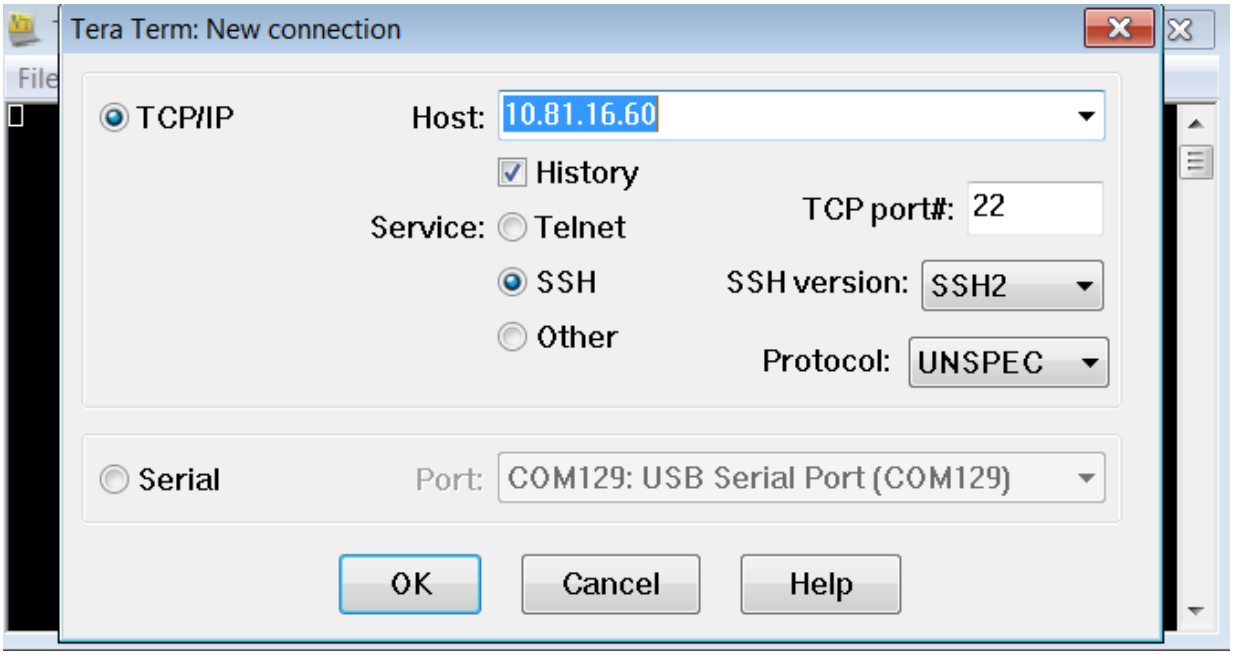

Figure 9. Screenshot of Tera Term

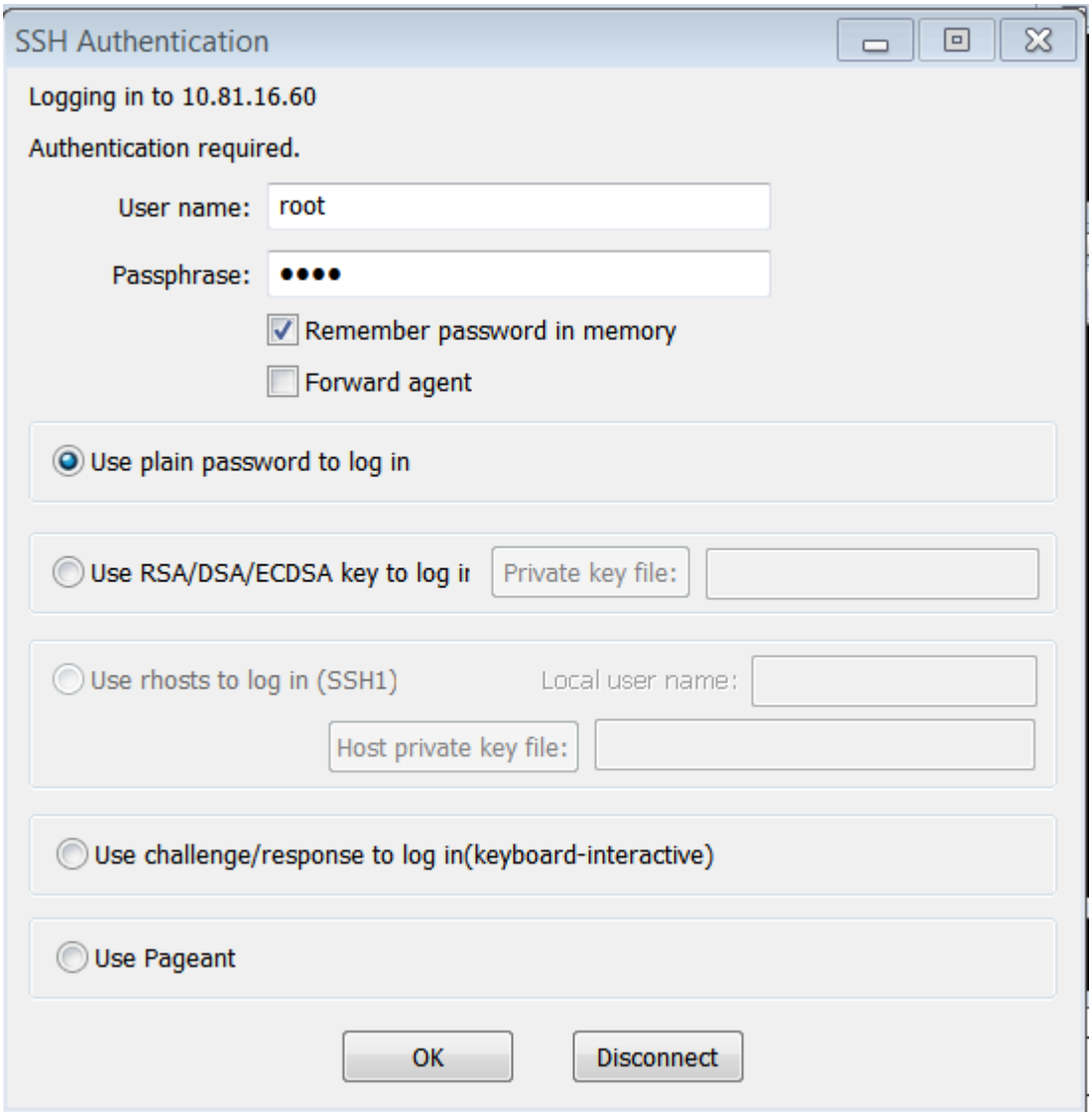

Figure 10. Screenshot of SSH Authentication

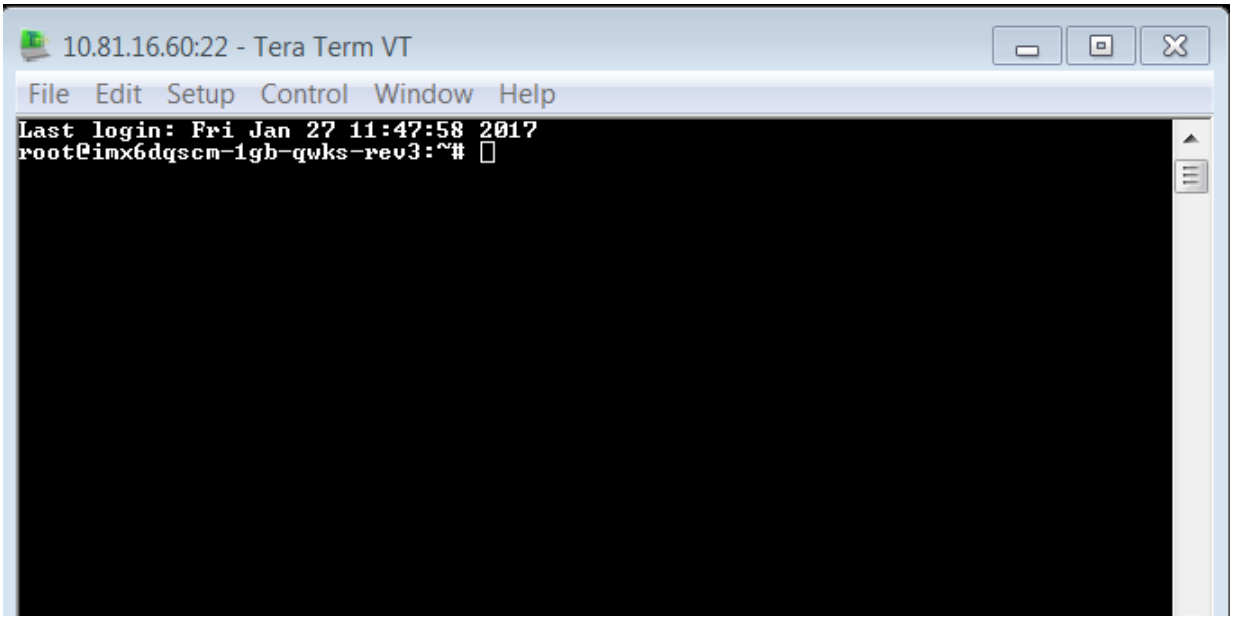

Figure 11. Screenshot of Tera Term once authenticated

2.2 Section 2 – LVDS Enablement

For the LVDS converter, plugging in the Ethernet card to the back of the QWKS board is not necessary.

1. Plug in the LVDS panel (NXP MCIMX-LVDS1) into the Ethernet accessory card. Next, use a mini-HDMI cable to connect the Ethernet accessory card to the QWKS board.

Figure 12. Setup of NXP MCIMX-LVDS1 with the QWKS board and QWKS-ETHACC card

2. The QWKS board by default uses HDMI as display. To use LVDS, change the parameters in uboot. Interrupt the auto-boot by pressing any key and enter the following command.
3. Change the parameters in uboot:

```
U-Boot > setenv mmcargs 'setenv bootargs console=${console},${baudrate} ${smp} root=${mmcroot} ${dmfc}
video=mxcfb0:dev=ldb,1024x768M@60,if=RGB666 ldb=sep0'
U-Boot > run bootcmd
```

How To Reach Us

Home Page:

nxp.com

Web Support:

nxp.com/support

Information in this document is provided solely to enable system and software implementers to use NXP products. There are no express or implied copyright licenses granted hereunder to design or fabricate any integrated circuits based on the information in this document. NXP reserves the right to make changes without further notice to any products herein.

NXP makes no warranty, representation, or guarantee regarding the suitability of its products for any particular purpose, nor does NXP assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation consequential or incidental damages. “Typical” parameters that may be provided in NXP data sheets and/or specifications can and do vary in different applications, and actual performance may vary over time. All operating parameters, including “typicals,” must be validated for each customer application by customer's technical experts. NXP does not convey any license under its patent rights nor the rights of others. NXP sells products pursuant to standard terms and conditions of sale, which can be found at the following address: nxp.com/SalesTermsandConditions.

NXP, the NXP logo, NXP SECURE CONNECTIONS FOR A SMARTER WORLD, Freescale, the Freescale logo, trademarks of NXP B.V. All other product or service names are the property of their respective owners. ARM, AMBA, ARM Powered are registered trademarks of ARM Limited (or its subsidiaries) in the EU and/or elsewhere. . All rights reserved.

© 2017 NXP B.V.