

FEATURES

The following features are available with the Quick Start Board for SCM:

- SCM-i.MX 6Quad*
 - i.MX 6Quad
 - PMIC MMPF0100
 - 16 MB SPI NOR flash
 - >100 passive components
 - 1 GB LPDDR2 via PoP assembly
- HDMI connector
- LCD touch display connector
- SD card socket for data storage/expansion or connectivity
- MicroSD card socket for code storage

- USB OTG connector
- MIPI CSI camera connector
- Arduino R-3 compatible headers—with the exception of no ADC inputs
- JTAG connector
- USB-to-serial UART connector
- Board dimensions: 80 mm x 52 mm
- Linux® BSPs and programming tools, available at www.nxp.com/qwks-scm-imx6dq
- Refer to www.nxp.com/qwks-scm-imx6dq for information on recommended accessory boards.

*Superset device. Can be used to evaluate SCM-i.MX 6Dual.

GET TO KNOW THE QUICK START BOARD FOR SCM-I.MX 6D/6Q

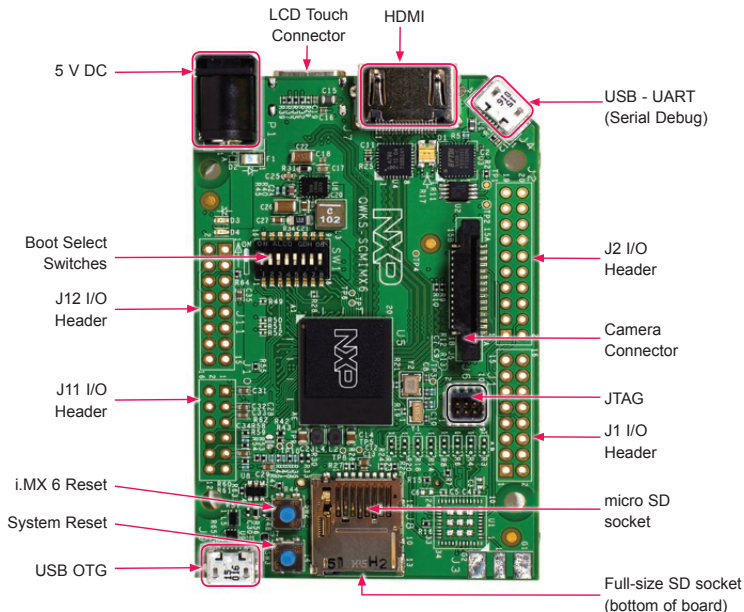


Figure 1: Front side of Quick Start Board (top)

DIP SWITCH CONFIGURATION AND RESET BUTTONS

Table 1 shows the jumper configuration to boot the Quick Start board from the microSD slot.

SW1								
DIP#	8	7	6	5	4	3	2	1
	BOOT_ CFG1_ [6]	BOOT_ CFG1_ [5]	BOOT_ CFG1_ [4]	BOOT_ CFG2_ [4]	BOOT_ CFG2_ [3]	BOOT_ CFG3_ [5]	BOOT_ CFG3_ [4]	BOOT_ MODE1
SPI NOR	0	1	1	x	x	DDR Memory Map default config		0 = Boot from Fuses
SD/ESD	1	0	x	0 = SD2	1 = SD2	'00' – Single DDR Channel		
				1 = SD3	0 = SD3	'01' – Fixed 2 x 32 map		
						'10' – 4 KB Interleaving Enabled		
						'11' – Illegal		
DEFAULT	1	0	0	1	0	1	0	1

Table 1: Boot Configuration DIP Switch Settings

STEP-BY-STEP INSTRUCTIONS

Getting Started

This section describes how to use the Quick Start Board and the components in the kit. This section also describes the PC requirements to develop applications using the Quick Start Board.

1 Unpacking the Kit

The Quick Start Board is shipped with the items listed in Table 2.

ITEM	DESCRIPTION
Board	Quick Start Board for SCM-i.MX 6Dual/6Quad
Cable	USB cable (micro-B to standard-A)
Power Supply and Universal Adapter	5 V/5 A universal power supply
Documentation	Quick Start Guide (this document)
8 GB Micro SD Card	Bootable demonstration code

Table 2: Quick Start Board Kit Contents

Quick Start Guide

STEP-BY-STEP INSTRUCTIONS CONTINUED

2 Download Software



Download installation software and documentation at nxp.com/qwks-scm-imx6dq.

Table 3 lists the documents available on the kit website.

ITEM	DESCRIPTION
Quick Start Board documentation	Design files, including hardware schematics, Gerbers, OrCAD files, and QWKS-SCMIMX6DQ User's Guide. Quick Start Guide (this document) Linux Patch Release Notes and User Guide
Software development tools	A tar.gz file containing software for SCM Linux enablement
Quick Start board demo image	Copy of the Linux image provided on the microSD card

Table 3: Available Software and Hardware Design Collateral

SETTING UP THE SYSTEM

1 Insert microSD Card

Insert the supplied microSD card into the microSD card socket J8.

2 Connect USB Debug Cable (Optional)

Connect the micro-B end of the supplied USB cable into debug port J4. Connect the other end of the cable to a PC acting as a host terminal. If needed, the serial-to-USB drivers can be found at www.ftdichip.com/FTDrivers.htm.

Terminal window configuration: 115.2 kbaud, 8 data bits, 1 stop bit, no parity

3 Connect HDMI Cable

Connect an HDMI cable to the HDMI connector J7. Connect the other end to an HDMI capable monitor.

4 Connect Power Supply

Connect the 5 V power supply cable to the 5 V DC power jack P1. When power is connected to the device, it will automatically begin the boot sequence.

When the boot process is complete, the Yocto Project operating system will be displayed on the HDMI monitor.

Note: During the boot process, there will be operating system status information scrolling on the terminal window of the PC (if connected). To work from the terminal window on the host PC, press enter at the terminal window to get the command prompt. Log in as root.

SUPPORT

Visit www.nxp.com/support for a list of phone numbers within your region.

WARRANTY

Visit www.nxp.com/warranty for complete warranty information.



Get Started

Download installation software and documentation at nxp.com/qwks-scm-imx6dq.

www.nxp.com and imxcommunity.org

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