

## Quick Start Board for SCM-i.MX 6Dual/6Quad

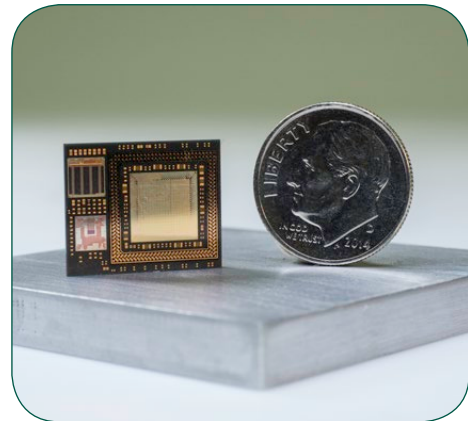
The NXP Quick Start Board is a small and sophisticated design that proves the design simplification and size reduction that can be achieved through the use of Single Chip System Modules.

### QUICK START BOARD KIT CONTENTS

- ▶ SCM-i.MX 6Quad Quick Start Board
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The NXP Quick Start Board development platform for SCM-i.MX 6Dual/6Quad is a set of software and hardware tools for product evaluation and application development. It was created to simplify product design and serves as an example for designers to quickly get started with the SCM product.

The QWKS-SCMIMX6DQ hardware is form-factor compatible with the Arduino™ R3 pin layout, providing a broad range of expansion board options. The on-board interfaces include HDMI output, LVDS touch display interface, USB OTG, 2 SD card slots and a MIPI CSI camera connector. NXP provides reference hardware design files and a board support package (BSP) for Linux®.



The SCM-i.MX 6Dual/6Quad in comparison to a standard US dime.

The SCM-i.MX 6Dual/6Quad is a single-chip system module which contains an i.MX 6Dual or i.MX 6Quad applications processor running at 800 MHz, an integrated MMPF0100 power management IC (PMIC), and 16 MB of SPI-NOR Flash memory, and over 100 discrete passive components.



## SCM-i.MX 6DUAL/6QUAD QUICK START BOARD FEATURES

Features	Benefits
Single Chip System Module (SCM)	<ul style="list-style-type: none"> <li>NXP SCM-i.MX 6Quad</li> </ul>
Development for	<ul style="list-style-type: none"> <li>NXP SCM-i.MX 6Dual or SCM-i.MX 6Quad</li> </ul>
Processor	<ul style="list-style-type: none"> <li>NXP i.MX 6Dual or i.MX 6Quad 800 MHz processor based on the ARM® Cortex®-A9 core</li> </ul>
Memory/storage	<ul style="list-style-type: none"> <li>1 GB LPDDR2 up to 400 MHz (800 MT/PS) memory (on top of the SCM-i.MX 6Quad via Package-on-Package)</li> </ul>
Power management	<ul style="list-style-type: none"> <li>NXP MMPF0100 (inside of the SCM-i.MX 6Quad)</li> </ul>
Power supply	<ul style="list-style-type: none"> <li>5V / 2A plus universal adapter</li> </ul>
Display	<ul style="list-style-type: none"> <li>1 x mini-HDMI connector (for LCD touch display)</li> <li>1 x HDMI connector</li> </ul>
Camera	<ul style="list-style-type: none"> <li>1 x MIPI camera connector</li> </ul>
User interface	<ul style="list-style-type: none"> <li>Reset buttons</li> </ul>
Connectivity	<ul style="list-style-type: none"> <li>1 x Micro SD/MMC card slot</li> <li>1 x Full-Size SD/MMC card slot</li> <li>1 x USB 2.0 OTG port (micro USB)</li> </ul>
Audio	<ul style="list-style-type: none"> <li>Available via expansion connector</li> </ul>
Expansion connector	<ul style="list-style-type: none"> <li>10/100 Ethernet port (muxed with Arduino™ pins)</li> <li>AUDMUX and SPDIF (muxed with Arduino™ pins)</li> <li>I<sup>2</sup>C, UART, SPI signals</li> </ul>
Debug	<ul style="list-style-type: none"> <li>JTAG connector (10-pin)</li> <li>1 x Serial-to-USB connector (for UART Debug)</li> </ul>
OS support Tools support	<ul style="list-style-type: none"> <li>Linux® (NXP)</li> <li>Manufacturing tool (NXP)</li> <li>IOMUX tool (NXP)</li> </ul>
Additional features	<ul style="list-style-type: none"> <li>Matches Arduino™ R3 pinout with the exception of the ADC pins</li> </ul>

## ORDERING INFORMATION

Part Number	Description	MSR (USD)
QWKS-SCMIMX6DQ	Quick Start Board for SCM-i.MX 6Dual/6Quad	249

There are a number of accessory boards that work with the Quick Start board to provide additional capabilities such as multi-touch display and Wi-Fi® connectivity.

### ELEMENT14 LCD8000-97C 9.7" LCD MODULE

The LCD8000-97C is a 9.7" capacitive touchscreen. The LCD8000-97C has an LVDS interface and supports a resolution of up to 1024x768 and 260,000 colours. Its multi-touch screen brings an enhanced experience to the users of the Quick Start Board. Available from [www.newark.com](http://www.newark.com).

### MURATA WI-FI 802.11 MODULE

Murata has partnered with NXP Semiconductor and Broadcom Corporation to offer a complete Wi-Fi and Bluetooth connectivity environment for building world class Internet-connected products on NXP i.MX 6 series platforms. For more information go to <http://wireless.murata.com/eng/products/rf-modules-1/wi-fi-bluetooth-for-nxp-i-mx>.

### SILEX TECHNOLOGY AMERICA WI-FI 802.11 MODULE

The Silex Technology SX-SDCAN is a low-power SDIO form factor wireless radio module built on the field-proven Qualcomm Atheros AR6003 802.11a/b/g/n radio. The SX-SDCAN is designed and validated to meet IEEE standards, and has been modular certified to save regulatory costs for device manufacturers. For more information visit <http://www.silexamerica.com/campaign/freescale-partner-page/>.