

i.MX Applications Processor for Multimedia

i.MX53 Quick Start Development Board

Cost-effective, multi-purpose platform

Energy Efficient Solutions by Freescale

Overview

Freescale delivers a cost-efffective, easy-to-use platform designed to simplify product evaluation and speed time to market with its new Quick Start development boards based on the i.MX family of multimedia applications processors.

The first in the series, the i.MX53 Quick Start board is a $149 open-source, multi-purpose embedded development platform that comes with a power-efficient ARM® Cortex™-A8 based 1 GHz processor with peripherals and hardware accelerated graphics to support applications like human machine interface (HMI) as well as support for HD multimedia functions. Complete with highly optimized drivers and software, this board enables broad-based applications in the embedded consumer, industrial and medical markets. Supported by a rich ecosystem and a community of developers at **imxcommunity.org**, the Quick Start board simplifies your out-of-box experience so you can get started quickly.



i.MX53 Quick Start board with HDMI module



i.MX53 Quick Start board with touch-screen LCD module

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Benefits

First Step Evaluation Platform

At $149, the i.MX53 Quick Start board is priced to attract a broad base of users that includes professional developers as well as hobbyists. The Quick Start board is designed as an entry level platform which allows you to begin writing code and experimenting before committing to additional development efforts.

Comprehensive and yet Easy to Use

With an array of peripherals and a breadth of optimized software, the i.MX53 Quick Start board eases system design and allows for a full demonstration of features, such as the fully integrated LCD controller, Ethernet controller and multimedia functionality.

Rich Ecosystem, Vibrant Community

Build on the expertise of Freescale's ecosystem partners to do everything from customizing your application's user interface (UI) to using low cost debuggers and development tools optimized to work with the Quick Start board. Join your fellow i.MX developers online at **imxcommunity.org**, an active community of open source developers.

Software and Tools

The i.MX53 Quick Start board comes pre-installed with the Linux® OS. Android™ and Windows® Embedded Compact 7 board support packages (BSPs) are also available through third parties. In addition to optimized BSPs, Freescale also provides a large portfolio of optimized video, speech and audio codecs. The Quick Start development system is also bundled with Inflexion™ UI for i.MX processors by Mentor Embedded at no additional charge.* This exclusive offer enables rapid creation of visually rich, animated UIs to help customers develop compelling and differentiated Android and Linux-based devices.

Hardware Features	
Processor	• i.MX53 1 GHz ARM Cortex-A8 Processor • Power management IC • 1 GB DDR3 memory
Display	• LVDS connector • VGA connector • Parallel LCD add-on card (via expansion connector) • HDMI add-on card (via expansion connector)
Audio	• SPDIF output via HDMI add-on card • Freescale SGTL5000 audio codec • Microphone jack • Headphone jack
Expansion Connector	• Enables parallel LCD or HDMI output • Camera CSI port signals • I^2C, SSI, SPI signals
Connectivity	• Full-size SD/MMC card slot • microSD card slot • 7-pin SATA data connector • 10/100 Base-T Ethernet port • Two High-Speed USB host ports • Micro USB device port
Debug	• JTAG connector • DB-9 UART port
Miscellaneous	• 3" x 3" 8-layer PCB • 3-axis Freescale accelerometer (MMA8450QT) • 2A, 5V power supply

Ordering Information

Part Number	Description	MSRP (USD)
MCIMX53-START	i.MX53 Quick Start development board	$149
MCIMXHDMICARD	24-bit HDMI output port	$49
MCIMX28LCD	4.3" 800x480 WVGA with 4-wire touch screen	$199

A variety of cost-effective debugging tools and complete development suites from partners like SEGGER Microcontroller, CodeSourcery, Macgraigor and IAR Systems are optimized to work with the Quick Start board. Also included is a VMware® player image running ready-to-go Linux allowing those with Windows PCs to bypass the typical setup of a standard Linux-based development system. For a complete list of our Quick Start board ecosystem partners, please visit **freescale.com/iMXQuickStart**.

i.MX53 Quick Start Development Board Kit Contents

- i.MX53 1 GHz ARM Cortex-A8 processor
- 4 GB microSD card with Linux image
- 5V power supply with worldwide adapters
- Micro USB cable
- Quick Start Guide
- DVD with VMware player, getting started video, demos and other documents

* Certain restrictions apply. Visit **freescale.com/iMXinflexion** for details.

Learn More: For current information about Freescale products and documentation, please visit **freescale.com/iMXQuickStart**.

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