

Components – North America

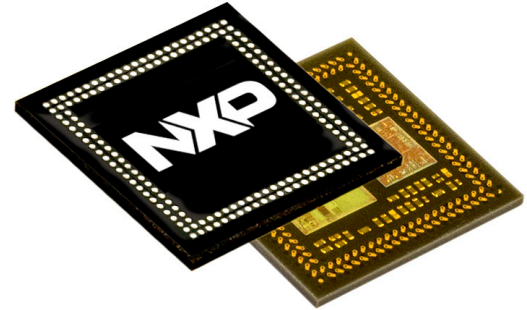
SCM-i.MX 6SoloX – Product Brief

Arrow SCM Exclusive SCM-i.MX 6SoloX

Arrow's exclusive SCM partnership with NXP has created a new Single Chip System Module (SCM) integrating NXP's flagship i.MX 6 series applications processors to simplify designing into IoT devices, wearables, and smart-home technology.

The newest member of the SCM portfolio, the SCM-i.MX 6SoloX, contains NXP's i.MX 6SoloX applications processor, a power management system, and over forty passive system components. The result is a tightly integrated system solution that will reduce your time-to-market and allow you to create a CPU/PMIC/memory sub-system design that is smaller than a discrete implementation.

The SCM-i.MX 6SoloX speeds and eases development time by eliminating the need for high-speed DDR layout, reducing the power management design complexity, eliminating the need to place bulky passive components, and providing a known tested hardware configuration of CPU core plus memory plus power.



SCM Technology Inside SCM

- NXP i.MX 6SoloX processor based on ARM® Cortex®-A9
- NXP MMPF0100 for system power management
- 40 discrete components

Memory

- Delivered with 32-bit 512MByte or 1 GByte or LPDDR2 Package-on-Package (PoP) memory or 512MByte plus 4GByte eMMC (ePoP), 168-ball 0.5mm FBGA

i.MX 6SoloX

- CPU Complex: ARM® Cortex®-A9, operating up to 800 MHz, and ARM® Cortex®-M4, operating up to 200MHz
- Multimedia: 2D/3D GPU
- HMI: LVDS, camera
- Connectivity: Ethernet, USB 2.0, SD/MMC, audio
- Security: High assurance boot, hardware ciphers, tamper detection

Software

- Linux and Android Board Support Packages (BSPs) are available at www.nxp.com/scm

Package and temperature

- 13mm x 13mm 0.75 pitch FCBGA PoP
- Consumer and industrial products are available

Features	Benefits
Majority of the components intergrated inside the module	Reduce your hardware design time by up to 25% - bring your products to market faster
Unprecedented, ultra-small form factor (13 × 13 × 1.9mm)	>50% PCB area reduction over comparable discrete solutions
Enabled for LPDDR2 PoP memory and embedded power managment	Reduces your design complexity and cost of integrating and validating DDR memory and power management sub-system
Complete module with options for HW/SW customization and support	Reduces your supply chain complexity and provides proven options to improve your product time to market

Development Kits and Tool Detail

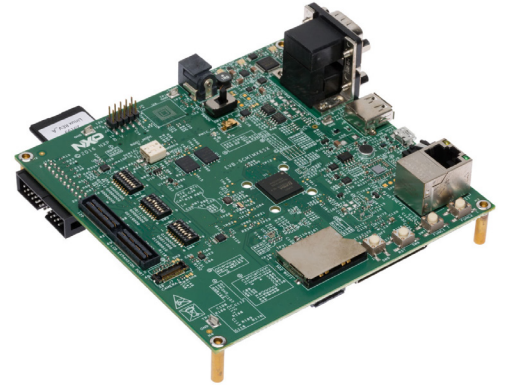
The NXP Evaluation board for the SCM-i.MX 6SoloX introduces customers to high-performance processing and showcases the size advantage and design simplification that can be achieved with Single Chip System Modules. This board has many features including a wide variety of on-board interfaces that provide access to many user interface and connectivity options. The hardware reference design files together with Linux and Android Board Support Packages (BSPs) are available. The board is populated with the SCM-i.MX 6SoloX device with 1GByte LPDDR2.

Ordering Information

SCM-i.MX 6SoloX	Type	NXP Base	Micron Memory	Module Temp Range (Tj)
MSCMMX6XYDM08AA5MOA	i.MX 6SoloX 512MB LPDDR2	MSCMMX6XYDM08AA	EDB4432BBPA-1D-F-D	Commercial: 0C - 85C
MSCMMX6XYDM08AA1G0B	i.MX 6SoloX 1GB LPDDR2	MSCMMX6XYDM08AA	EDB8132B4PM-1D-F-D	Commercial: 0C - 85C
MSCMMX6XYDM08AA5M4GA	i.MX 6SoloX 4GB eMMC+512MB LPDDR2	MSCMMX6XYDM08AA	MT29PZZ4D4BKEPK-18 W.94H	Commercial: 0C - 85C
MSCMMX6XYCM08AA1G0C	i.MX 6SoloX 1GB LPDDR2	MSCMMX6XYCM08AA	EDB8132B4PM-1DAT-F-D	Industrial: -40C - +105C

Component datasheets are available on www.nxp.com/scm and www.micron.com

SCM-i.MX 6SoloX Evaluation Board



Part # EVB-SCMIMX6SX

<https://www.arrow.com/en/products/evb-scmimx6sx/nxp-semiconductors>

Evaluation board kit contents

- SCM-i.MX 6SoloX Evaluation Board
- Power supply
- Quick start guide
- Bootable SD card with Linux image
- 1GB LPDDR2 memory



For more information visit

<https://www.arrow.com/en/campaigns/nxp-single-chip-module>

In Person

Please contact your local Arrow account manager or 800-833-3557

Online

www.arrow.com

V | Five Years Out