

Moxa Industrial Linux

Moxa's Debian-based industrial-grade stable Linux distribution for long-term projects



Features and Benefits

- Debian-based distribution that can use all standard Debian packages
- Long-term support up to the year 2027; includes bug fixes and security patches
- Unified APIs to manage cross-vendor cellular connections
- Ready-to-use APIs and library to ease access to hardware and I/O interfaces
- Crash-free robust file system
- Over-the-air (OTA) software updates

Introduction

Moxa Industrial Linux (MIL) is a high-performance industrial-grade Linux distribution developed by Moxa to help accelerate your industrial projects. MIL is based on Debian and the standard Linux kernel, which makes it easy to deploy your applications on multiple systems.

To address the long-term system needs of smart cities and industries such as power, water, oil and gas, transportation, and factory automation, every odd-number version (e.g., MIL v1.0, MIL v3.0) of MIL comes with 10-year Linux support that includes security patches and bug fixes, making industrial projects secure and sustainable.

In addition, Moxa is working with industry leaders to create a reliable and secure Linux-based embedded software platform that can be sustained for more than 10 years. Moxa is a member of The Linux Foundation® and is part of its Civil Infrastructure Platform (CIP) project that aims to create an open-source platform for managing and monitoring smart cities, civil infrastructure, and factories, to make them secure, reliable, scalable, and sustainable.

Debian Compatibility

Moxa Industrial Linux is a Debian-based distribution that can use all standard Debian packages for the kernel version. Benefits include:

- Access to the comprehensive repository of packages from Debian
- Field-proven OS stability



Robust File System

The robust file system integrated into Moxa Industrial Linux provides extra protection during firmware upgrades and downgrades with:

- Guaranteed system operation when there are power losses during firmware upgrades/downgrades
- Fast and secure reset-to-default function built into the system



Over-the-air (OTA) Software Updates

Because gateway computers are usually located at remote sites, it is a challenge to upgrade the system and applications. A suitable way to upgrade the firmware on remote computers is to use wireless technology such as cellular or Wi-Fi. Moxa Industrial Linux supports an Advanced Packaging Tools (APT) software-upgrade mechanism for remote upgrades.



Long-term Support

Moxa Industrial Linux allows users to keep the same kernel version and Debian user space without having to upgrade the whole system frequently. In addition, subscription services for Moxa Industrial Linux, throughout its 10-year life-cycle phase*, provide security updates and bug fixes as follows:

- Critical security patches
- High-priority bug fixes



*For details, refer to <https://www.moxa.com/Moxa/media/Products/document/Moxa-Industrial-Linux-SLTS.pdf>.

Specifications

System Requirements

Supported Devices	Eligible Devices-Moxa Industrial Linux		
	Eligible Devices		
	Series	Model	Revision
Supported Devices	UC-2100	UC-2101-LX	1.0.0 and above
		UC-2102-LX	1.0.0 and above
		UC-2104-LX	1.0.0 and above
		UC-2111-LX	1.0.0 and above
		UC-2112-LX, UC-2112-T-LX	1.0.0 and above
	UC-2100-W Series	UC-2114-T-LX	1.0.0 and above
		UC-2116-T-LX	1.0.0 and above
	UC-3100 Series	UC-3101-T-(US/EU/AU)-LX	1.0.0 and above
		UC-3111-T-(US/EU/AU)-LX	1.0.0 and above
		UC-3121-T-(US/EU/AU)-LX	1.0.0 and above
UC-3101-T-AP-LX, UC-3111-T-AP-LX, UC-3121-T-AP-LX		3.0.0 and above	
UC-5100 Series	UC-5101-LX, UC-5101-T-LX	1.0.0 and above	
	UC-5102-LX, UC-5102-T-LX	1.0.0 and above	
	UC-5111-LX, UC-5111-T-LX	1.0.0 and above	
	UC-5112-LX, UC-5112-T-LX	1.0.0 and above	
UC-8100 Series	UC-8131-LX	3.0.0 and above	
	UC-8132-LX	3.0.0 and above	
	UC-8162-LX	3.0.0 and above	
	UC-8112-LX	3.0.0 and above	
UC-8100-ME-T Series	UC-8112-ME-T-LX	3.0.0 and above	

	Eligible Devices	
Series	Model	Revision
	UC-8112-ME-T-LX1	3.0.0 and above
UC-8100A-ME-T Series	UC-8112A-ME-T-LX	1.0.0 and above
	UC-8112A-ME-T-LX-(US/EU/AP)	1.0.0 and above
UC-8200 Series	UC-8210-T-LX, UC-8210-T-LX-S	1.0.0 and above
	UC-8220-T-LX	1.0.0 and above
	UC-8220-T-LX-(US/EU/AP)-S	1.0.0 and above
UC-8410A Series	UC-8410A-LX (deb9)	2.1.0 and above
	UC-8410A-T-LX (deb9)	2.1.0 and above
	UC-8410A-NW-LX (deb9)	2.1.0 and above
	UC-8410A-NW-T-LX (deb9)	2.1.0 and above

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