README

This document contains the following sections:

Installation Guide

The Cadence® OrCAD® X and Allegro® X Installation Guide for Windows (*pcbInstall.pdf*) is available in the Disk 1 folder of the Cadence® Product DVD and, along with the Linux installation guide, on Cadence Online Support and the Cadence downloads site.

Migration Information

Migration information is available in the Migration Guide for Allegro X Platform Products Release 23.1, available when you install this software or on Cadence Online Support.

Note: If you are an OrCAD X customer, contact Cadence Channel Partners. Click here to see a list of Cadence Channel Partners.

What's New

Click here to view product release notes for release 23.1. A consolidated product note is also available in the Disk1 folder.

KPNS

Click here to view the Known Problems and Solutions (KPNS) documents for release 23.1.

System Requirements

Note: If you are an OrCAD® X customer, contact Cadence Channel Partners. Click here to see a list of Cadence Channel Partners.

For exceptions and product-specific requirements, see the following sections:

- Cadence License Server on page 4
- Allegro X Pulse on page 5
- Allegro X Advanced Package Designer and 3D Design Viewer Products on page 6

Operating System Requirements	
Windows	■ Windows 11 Professional and Enterprise ■ Windows 10 (64-bit) Professional and Enterprise, including Dark Theme mode ■ Windows Server 2022 ■ Windows Server 2019 ■ Windows Server 2016 (All Service Packs); **Note:** Cadence Allegro® X and OrCAD® X products do not support Windows 10 Starter and Home Basic. In addition, Windows Server support does not include support for Windows Remote Desktop. Windows RT and Tablets/Phones, including Windows 10 Phone, are not supported. **Note:** 64-bit Windows require 64-bit Flex software dongle drivers if using dongle-based licensing.
Linux	■ RHEL 8.4 or later (64-bit) ■ RHEL 7.4 or later (64-bit) ■ SLES 11 SP4 (64-bit) ■ SLES 12 SP3 (64-bit)

Recommended Hardware		
	Windows	**Linux**
Processor	■ Intel® Core™ i7 4.30 GHz with at least 4 cores ■ AMD Ryzen™ 7 4.30 GHz with at least 4 cores	
Memory	■ 16GB RAM	■ 8GB or more RAM
Hard Drive	■ 50GB free disk space (SSD recommended)	■ 10 GB (or greater) available disk space ■ 12GB Swap space
Graphics Display	■ 1920 X 1200 display resolution with true color (at least 32bit color)	■ TrueColor (65000 colors) required
Windows Manager		■ Gnome

Additional requirements for Windows systems:

- A dedicated graphics card supporting OpenGL, minimum 2GB (with additional support for DX11 for 3D Canvas)
- Dual monitors (For physical design)
- Broadband Internet connection for some service
- Ethernet port/card (for network communications and security hostID)
- Three-button Microsoft-compatible mouse

Cadence License Server	
Note: Download and install the latest License Server from the *Lic+Config_Utils* category of the Cadence Downloads page. Cadence® License Server 22.01, HotFix 002 is based on FLEXnet v11.19.1.1 and supports the following 64-bit platforms.	
■ **Windows**	■ Windows 10 ■ Windows 11 ■ Windows Server 2016[1] ■ Windows Server 2019
■ **Linux**	■ Linux RHEL 7.4 ■ Linux RHEL 8 ■ Linux SLES 12 ■ Linux SLES 15 ■ CentOS 7.4
■ **Ubuntu**	■ Ubuntu 14.04

1. Windows Server 2016 is no longer supported by FlexNet. Any support requiring FlexNet involvement must be reproduced in another Windows flavor listed in this table to be addressed by FlexNet.

Allegro X Pulse

Exceptions for Allegro X Pulse Features

Allegro® X EDM Flow Manager is not supported on the following operating systems:

- SLES
- Windows 2016 Server
- Win 2019 Server

Minimum Requirement for Client Applications Using Allegro X Pulse

- Cores: Four or more
- RAM: A minimum of 8 GB with 4 GB swap space. The recommended is 16 GB.

Note: Allegro X System Capture uses Allegro X Pulse for design data management by default. Allegro X PCB Editor or other applications will also require the configuration to use Allegro X Pulse for data management.

Data or master node servers for design and library management must be installed as service.

Allegro X Pulse Server Requirements

Server Type	CPU		RAM		Available Storage		System Type
	Recommended	Minimum	Recommended	Minimum	Recommended	Minimum	Hardware
Pulse Primary Server	>= 16 Cores	>= 16 Cores	32GB	32B	100GB	20GB	Physical
Pulse Data Node Server	>= 4 Cores	>= 4 Cores	8GB	8GB	20GB	5GB	Physical
Pulse Test Server	>= 16 Cores	>= 8 Cores	32GB	16GB	100GB	20GB	Physical
EDM Production Server	>= 4 Cores	>= 4 Cores	8GB	8GB	20GB	5GB	Physical
EDM Test Server	>= 4 Cores	>= 4 Cores	8GB	8GB	20Gb	5GB	Physical

Operating System for Servers

Recommended	■ Linux for high reliability
Supported	■ Windows Server

All primary and data nodes must be in the same configuration.

For example, if the primary server is in the EDM Production mode, the data nodes must also be in the EDM Production mode.

Allegro X Advanced Package Designer and 3D Design Viewer Products		
The following is a list of computing platforms supported for the listed products.		
Products	**Windows (64-bit)**	**Linux (64-bit)**
■ Allegro X Advanced Package Designer (SIP4150) ■ Cadence SiP Digital Architect - XL (SIP110) ■ Allegro X SiP Layout Option (SIP226) ■ Allegro X Silicon Layout Option (SIP230) ■ Allegro X SiP Layout Bundle(SIP4160)	■ Windows 11 ■ Windows 10 ■ 2022 Server ■ 2016 Server (All Service Packs) ■ 2019 Server	■ RHEL 8.4 or later ■ RHEL 7.4 or later

Note: For supported versions of related software, see the following sections:

- Supported Cadence Innovus Version
- Supported OA Version
- Supported Cadence Physical Verification System (PVS) Version
- Supported Cadence Pegasus Verification System Version

Compatibility with Other Software and Products

Supported MATLAB Versions	
For the PSpice®-MATLAB interface	■ R2020A-64Bit ■ R2020B-64Bit ■ R2021A-64Bit

Supported PTC Windchill Version	
For Publish For Manufacturing (PFM)	Publish for Manufacturing (PFM) is qualified with PTC Windchill version 11.0 M030-CPS17 REST 1.7 installed on Windows with SAML2 – PingFederate. **Note:** Refer to PTC documents for PTC Windchill installation requirements.

Supported Dassault 3D Experience (3DX) Version	
For Publish For Manufacturing (PFM)	Publish for Manufacturing (PFM) is qualified with Dassault 3DX version R2022x-FD04 installed on Linux RHEL 7.8. **Note:** Refer to Dassault 3DX documents for Dassault 3DX installation requirements.

Supported Cadence Innovus Version	
For Allegro® X Advanced Package Designer	19.10.000
Note: For additional platform limitations refer to Cadence Online Support for Innovus™ Computing Platforms.	

Supported OA Version	
For Allegro® X Advanced Package Designer	22.60.023

Supported Sigrity and Systems Analysis (SIGRITY/SYSANLS) Version	
For users of Sigrity™ Aurora, SystemSI, SystemPI, Allegro® X Sigrity™ PI, Allegro® X Sigrity™ SI, and APD–XtractIM and Topology Workbench	2023.1 HF2

Supported Cadence AWR Design Environment/Microwave Design Version	
For PCB Editor	17.03

Supported Cadence Physical Verification System (PVS) Version	
For Allegro X Advanced Package Designer and SI Layout Option	20.10 or later

Supported Cadence Pegasus Verification System Version	
For Allegro X Advanced Package Designer and SI Layout Option	20.10 or later