

UltraEDA Installation Guide

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1 Introduction

This installation guide describes how to install UltraIDE (Integrated Development Environment).

UltraIDE is the integrated development environment independently researched and developed by NANJING JiuXiao Intelligent Technology Co., Ltd. It provides the development and verification platform for the whole IC design flow.

UltraIDE integrates multiple features, such as UltraReg, UltraAutoBench, Lint, UltraWave and UltraSim.

UltraReg is a tool to build a digital chip register design verification flow, which automatically generates RTL, RAL models, test cases, and detailed design documents through the register format predefined in an EXCEL file.

UltraAutoBench is used to generate an UVM testbench automatically. It provides the base UVM class needed to quickly develop well-constructed and reusable UVM verification components and test environments.

Lint provides the rule check for HDL(Hardware Description Language).

UltraWave is a fully featured wave viewer which reads LXT, LXT2, VZT, FST and VCD files.

UltraSim is a powerful simulation engine enabling users to easily speed up high-activity and long-cycle tests in chip design cycle.

Besides the above features, UltraIDE also supports code check and edit functionality.

2 Prerequisites

2.1 Operation System requirement

Please install one of the OS (operation system) version listed in Table - 1.

OS Version	Software Media
CentOS 6.8 x64	
CentOS 6.9 x64	ueda-el6-1.0-1.x86_64.rpm
CentOS 6.10 x64	
CentOS 7.2 x64	ueda-el7-1.0-1.x86_64.rpm
CentOS 7.3 x64	
CentOS 7.4 x64	
CentOS 7.5 x64	
CentOS 7.6 x64	
CentOS 7.7 x64	
CentOS 7.8 x64	
CentOS 7.9 x64	
RedHat 7.9 x64	

Table - 1

2.2 License requirement

Please share the Hardware ID of your system with <u>JiuXiao support</u> and get the required license to make use of UltraIDE. You may use command "ifconfig" to find out the MAC address of your system and provide it to <u>JiuXiao support</u>.

3 Software Download

3.1 OS 6.x

For system with CentOS 6.x installed, please download the software media at: http://www.ultraeda.com/ > Download > ueda-el6-1.0-1.x86_64.rpm

3.2 OS 7.x

For systems with CentOS 7.x installed, please download the software media at: http://www.ultraeda.com/ > Download > ueda-el7-1.0-1.x86_64.rpm

4 Installing UltraIDE

After downloading the required rpm package, follow the procedures as described in this section:

4.1 Installation procedures

1. Right click the mouse and click "Open Terminal" to open a terminal



2. Logon with root user and go to the directory where the software media is

located

```
[root@192 download]# whoami
root
[root@192 download]# ls -lrt ueda-el7-1.0-1.x86_64.rpm
-rw-r--r-. 1 root root 103153590 Nov 22 12:08 ueda-el7-1.0-1.x86_64.rpm
[root@192 download]#
```

3. Install it via command: rpm -ivh ueda-el7-1.0-1.x86_64.rpm

4. After successfully installed, configure the environment via command:

source /usr/local/share/ueda/ueda_bashrc

[root@192 download]# source /usr/local/share/ueda/ueda_bashrc
[root@192 download]#

Note: If csh or tcsh is used in your system, please use below command

instead: source /usr/local/share/ueda/ueda_cshrc

5. Open UltraIDE via command: ueda

```
[root@192 download]# ueda
QStandardPaths: wrong ownership on runtime directory /run/user/1000, 1000 instead of 0
Qt: Session management error: None of the authentication protocols specified are suppor
ted
Version: 2.2
/home/susan/shareFolder/moving_average_rf_0926.xlsx
Using bash to get mac address. Point 1.
Using bash to get mac address. Point 2.
V.size():2
08-00-27-0f-15-53
                                              T
52-54-00-62-8e-5b
Current User :
                "root"
hardware id is :
AABS-VABi-jls=
license ERROR :
    license file not found
WebSocket connected
```

Note: if you want to run UltraIDE in another terminal, please make sure to open a new one, otherwise the old existing terminal will not recognize the environment defined in ueda_bashrc or udea_cshrc.

4.2 Register the license

Note: If no license is registered, then you will find all the necessary features will be disabled (gray out) when you open UltraIDE.



1. Click **Login** button in the left bar:

2. Click "Import license"

			UltraIDE				
Vietcome New New Save Coreare	-		Registration		- 1		
50	HardWare ID:	AABS-	/AAp-2F0=	1		1	
	User Type:	Unregis	aered				
		Permission	Validity Period	License Limit			
UVM	IDE						
÷	SIM						
RegSet	AUTOBENCH						
	REGSET						
	LINT						
UltraSim							
Lins Lins Issues Cosine A Login	If you want to b your hardware After you can comple	ay EDA module o d. We will genera t the license by th te the registration	r submit a problem, te a special loense e "import License" I v.	please call 1822 for you according sutton and click th	1329855, and tell us to your hardware ID, te "Register" button,		
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	L					1	

Choose the license file issued by NANJING JiuXiao Intelligent Technology
 Co., Ltd, then click "Open"

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root	🛅 rtl		F	Folder	2/22/2:46 AM	
	sv 📄		F	Folder	2/22/2:46 AM	
	license.lic		1 KB	ic File	4/4/23 10:09 AN	1
File <u>n</u> ame: Files of type:	license.lic license(*.lic)					©pen Cancel

4. Click "Register" to register the license

		Registration		-		
HardWare ID:	AABS-	AABS-VAA0-2F0=				
Jser Type:	Unregi	stered				
	Permission	Validity Period	License Limit			
DE						
SIM						
AUTOBENCH						
REGSET						
LINT						
your hardware id	 we will general 	ate a special license	for you according t	o your hardware ID		
your hardware ic After you import you can complet	. we will genera the license by the e the registratio	tte a special license le "Import License" I n.	for you according t outton and click the	o your hardware ID. "Register" button,		

5. After successfully registered, click "OK", then close the Registration Window

		Registration		-
HardWare ID:	AABS	-VAAo-2F0=		
User Type:	Vip Us	ser		
	Permission	Validity Period	License Limit	
IDE	\checkmark	2023-04-05	3	
SIM	\checkmark	2023-04-05	3	
AUTOBENCH	\checkmark	2023-04-05	3	
REGSET	\checkmark	2023-04-05	3	
LINT	V 🗖	Tips	×	
you can complet	e the registratio	n.	and and and and a	- regioner mettern,

4.3 Ready for use

Please refer to the <u>user manual</u> for further guidelines of IDE usage.

5 Upgrading

You can overwrite the existing installation with an update following the procedures described in this section:

1. Right click the mouse and click "Open Terminal" to open a terminal



- Logon with root user
 [root@192 download]# whoami
 root
- 3. Find the installed package in the system via command: rpm -qa | grep ueda

[root@192 download]#<mark>rpm -qa | grep ueda ueda</mark>-el7-1.0-1.x86_64 [root@192 download]#

4. Uninstall it via command: rpm -e ueda-el7-.10-1.x86_64 (please note that this

package name is the one got from step 3 above)

[root@192 download]#<mark>rpm -e ueda-el7-1.0-1.x86_64</mark> [root@192 download]#

5. Remove the leftover IDE directory via command: rm -rf /usr/local/share/ueda/

[root@192 download]# rm -rf /usr/local/share/ueda/ [root@192 download]#

- 6. Remove the leftover ueda processes via command: pkill -f ueda
- 7. Install the new version according to the procedures described in Chapter 4

6 Uninstalling

To uninstall the UltraIDE, please follow the procedures described below:

1. Right click the mouse and click "Open Terminal" to open a terminal



2. Logon with root user

[root@192 download]# whoami
root

3. Find the installed package in the system via command: rpm -qa | grep ueda

[root@192 download]# rpm -qa | grep ueda ueda-el7-1.0-1.x86_64 [root@192 download]#

4. Uninstall it via command: rpm -e ueda-el7-.10-1.x86_64 (please note that this

package name is the one got from step 3 above)

[root@192 download]#<mark>rpm -e ueda-el7-1.0-1.x86_64</mark> [root@192 download]#

5. Remove the leftover IDE directory via command: rm -rf /usr/local/share/ueda/

[root@192 download]#<mark>rm -rf /usr/local/share/ueda/</mark> [root@192 download]#

6. Remove the leftover ueda processes via command: pkill -f ueda