phyBOARD-WEGA-AM335x

Software Development Kit Installing Manual for Windows



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1. Installing WEGA SDK

Download the Source of WEGA_SDK for windows64 bit machine from the following link <u>ftp://ftp.phytec.de/pub/Products/India/phyBOARD-WEGA-AM335x/Linux/PD14.0.0/tools/WinHostSDK/</u> or copy from the DVD placed in Windows Directory, installing steps are as below.



All the license agreements are explained here,

🔁 WEGA_SDK Setup	×
End-User License Agreement Please read the following license agreement carefully	
The purpose of WEGA_SDK software package is to bundle the below components in a single package to make the installation easy. Here by PHYTEC is not selling any of the below components to the customer. All the Software below have their own LICENSE TERMS.	* III
Software Components & License path in SDK: 1. Eclipse (IDE):	Ŧ
 I accept the terms in the License Agreement I do not accept the terms in the License Agreement 	
Advanced Installer Canc	:el

Give the path other than 'C' drive, it require minimum 2.5 GB of free space,

WEGA_SDK Setup	_ = X
Select Installation Folder This is the folder where WEGA_SDK will be installed.	
To install in this folder, click "Next". To install to a different folder, "Browse".	enter it below or click
	biomscill
Advanced Installer Sack Nex	t > Cancel



After installing the Software, intalled directory contains the following contents

1.1 Contents in the installed directory

- → \docs\: directory contains the documents of Application development kit, QT development kit and system development kit for linux
- \rightarrow \eclipse \: it contains installed eclipse IDE setup
- → \images\: all the images required to boot the board with 256MB NAND flash, subdirectory with 'images_512MB' is for WEGA board with 512MB NAND flash
- \rightarrow \msys\: this setup adds linux commands to work in windows machine
- \rightarrow \README\: all the software licenses document is here
- \rightarrow \src\: it contains patched sources of bootloaders, kernel and their patches
- → \toolchain\: toolchain for cortex-A8
- \rightarrow \tools\: softwares like putty, tftpd, USBNet_Drivers.

2. Installing USB RNDIS driver in Windows

WEGA Board is mounted with Micro USB port which can use as virtual Ethernet, Connect the board with Micro-AB USB cable from a free USB port on your host PC to the WEGA Board.

The Windows Host PC will detect the WEGA Ethernet Device and the network interface will show up in ifconfig as usb0, if the driver of RNDIS is not installed in windows PC follow the steps





Give the path of

<path of WEGA_SDK>\wega_sdk\tools\USBNet_Drivers

Bro	wse for driver software on your computer
bio	wse for driver software on your computer
Searc	h for driver software in this location:
C:\[Program Files\PHYTEC\WEGA_SDK\wega_sdk\tools\USBNet_Dri 👻 Browse
🗸 In	clude subfolders
+	Let me pick from a list of device drivers on my computer
	This list will show installed driver software compatible with the device, and all driver software in the same category as the device.

Installing driver software	Windows Security
	Windows can't verify the publisher of this driver software
	Don't install this driver software You should check your manufacturer's website for updated driver softwa for your device.
	Install this driver software anyway Only install driver software obtained from your manufacturer's website or disc. Unsigned software from other sources may harm your computer or information.
	See datailr



After installing the driver, default 'ip address' of USB0 port in board is <192.168.56.4>, so set ip in Windows machine with same network as <192.168.56.X>.

ex: 192.168.56.2

nize • Disable this network device	Diagnose this connection Rename this connection View status of this connection Change settings of this connection
Local Area Connection Disabled Intel(R) 82579V Gigabit Network C.	Diagnose this connection Rename this connection View status of this connection Change settings of this connection Local Area Connection 2 Unidentified network Linux USB Ethernet/RNDIS Gadget Image: Connect using: Image: Connect using: Image: Connection uses the following tems: Im
	Description IP address: 192 . 168 . 56 . 2 Transmission Control Protocol/Internet Protocol. The wide area network protocol that provides communicat across diverse interconnected networks. Subnet mask: 255 . 255 . 0 Default gateway: . . .
	OK Obtain DNS server address automatically Use the following DNS server addresses: Preferred DNS server: Alternate DNS server:

3. Installing Virtual Hard drive file using virtual box

To use Customized ubuntu-12.04 in virtual box follow the steps



Open the Virtual Box and click on the 'New' at left corner

Here give the name as your wish and Version as Ubuntu (32 bit)



Allocate the RAM memory required ex: 1024

Gracle VM VirtualBox Man	ger 📃 🗉 🕺
Pile Machine Help	Create Virtual Machine

Here mark the 'Use an existing virtual hard drive file' option

😚 Oracle VM VirtualBox Manager		
Voracle VM VirtualBox Manager	Create Virtual Machine Create Virtual Machine Hard drive If you wish you can add a virtual hard drive to the new machine. You can either create a new hard drive file or select one from the list or from another location using the folder icon. If you need a more complex storage set-up you can skip this step and make	Details Snapshots
	If you need a more complex storage set-up you can skip this step and make the changes to the machine settings once the machine is created. The recommended size of the hard drive is 8.00 GB. Do not add a virtual hard drive Dreate a virtual hard drive now Use an existing virtual hard drive file Empty Create Create	oose a virtual hard drive file

Select the path of existing virtual hard drive file which was provided in the DVD/Linux/ubuntu-12.04, extract the source in the drive with 8GB of free space,

and give its path as follows



🞯 Oracle VM VirtualBox Manager		
File Machine Help		
New Settings Start Discard	<u>ହ</u> ା ହ	Details 💿 Snapshots
	Create Virtual Machine Hard drive If you wish you can add a virtual hard drive to the new machine. You can either create a new hard drive file or select one from the list or from another location using the folder icon. If you need a more complex storage set-up you can skip this step and make the changes to the machine settings once the machine is created. The recommended size of the hard drive is 8.00 GB. Do not add a virtual hard drive Greate a virtual hard drive now Use an existing virtual hard drive file Ubuntu-12.04.vdi (Normal, 30.59 GB) Create Cancel	y now because you haven't
		.

After selecting the existing hard drive file create it, so that customized ubuntu got installed in the

virtual box





Click on the start button, after booting enter the password as 'ubuntu'



3.1 Contents present in the Customized Ubuntu-12.04 for WEGA

→ /var/phytec/phycore-AM335x/PD13.1.2

Contains all the prebuilt images and sources of RDK (Rapid Development Kit)

→ /var/phytec/wega/images

All the prebuilt images for WEGA

→ /var/phytec/wega/scripts

Script to prepare the SD-Card for MMC booting

→ /var/phytec/wega/src

Contains the extracted sources of bootloder, kernel and

root_file_system of both hard_float and soft_float

→ /var/phytec/wega/tools/

Contains eclipse IDE, QT, and toolchains for both hard_float and soft_float.