

# 4D SYSTEMS

TURNING TECHNOLOGY INTO ART

**Workshop 4 Installation** 

Document Date: November 14<sup>th</sup>, 2012

**Document Revision: 1.0** 

# Description

This document describes how to install and configure WorkShop 4. It is highly recommended to follow this document prior to the other ones.

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# What You Need

For this application note, the following items are needed:

- A 4D Systems screen with GFX PmmC installed
- A 4D Systems programming cable
- A Windows PC
- A micro-SD card FAT16 formatted
- A micro-SD USD adaptor

# **Download and Install Workshop 4**

Workshop 4 is the integrated development environment that features four different environments for the 4D screens:

- Designer,
- ViSi,
- ViSi-Genie.
- Serial.

Go to <u>4DSystems.com.au</u> to download the latest version of Workshop 4.



#### Go to the Workshop 4 page at: http://4dsystems.com.au/prod.php?id=111 \_ 🗆 🗙 $\leftarrow$ http://4dsystems.com.au/prod.php?id=111 Ω-⊠0× A ★ ∰ 4D Workshop3 IDE - Softwa... × 4D Systems 🐴 💌 🔝 👻 🚔 💌 Page 🕶 Safety 🕶 Tools 💌 🔞 💌 🧝 💝 About 4D Systems PTY LTD 4D SYSTEMS TURNING TECHNOLOGY INTO ART Home Company Products 4DGL Support forum Distributors News & Events Contact us App Notes 🚺 SHARE 📑 😭 💐 ...) 4D Workshop3 IDE Pb 4DGL Editor/Compiler/Linker/Downloader/ Description Features 4D ViSi The **4D-Workshop3 IDE** provides an Integrated software Development Environment for all of the latest 4D family of processors, such as the GOLDELOX-GFX2, GOLDELOX-SGC, PICASO-GFX2, PICASO-SGC, GOLDELOX-PGGa and respective display modules. The IDE combines the Editor; Complex, Linker and Compiled Code Downloader to develop complex downloader to develop complex, Linker and Compiled Code Downloader to develop complex 4DGL applications and download to the embedded target 4D processor. All user application code is developed using the Workshop3 IDE. The downloaded setup application will create the required 4D-Workshop3 folders and install all the required files. 4D Workshop3 has been developed for the new generation of GFX processors, such as the GOLDELOX-GFX2. This Workshop is 100% backward compatible with first generation of GFX processors. Users of the older version of 4DGL and GOLDELOX-GFX PmmCs should migrate to the new PmmCs as soon as possible, as backward compatibility will be dropped at some future date. Note: 4D Workshop3 supports GOLDELOX-GFX2, Legacy GOLDELOX and PICASO-GFX so it completely replaces the existing 4DGL Workshop3 IDE, 4DGL Workshop Beta 2.4. and 4DGL Workshop2 IDE. 4 Latest Firmware 3.3.0.16 Updated on 27 Aug 2012 Click on Save:

# Do you want to open or save WORKSHOP3 INSTALLER.3.3.0.16.zip (19,5 MB) from www.4dsystems.com.au?

Open

Save - Cancel

Гhe download starts:				
5% of WORKSHOP3 INSTALLER.3.3.0.16 (1).zip dow	vnloaded 1 min 3	35 sec remaining	×	
		Pause Ca	View downloads	
Click on <b>View Downloads</b> .				
View Downloads - Windows Internet Explo	rer			
View and track your downloads		Search downloads	٩	
Name	Location	Actions		
WORKSHOP3 Izip 19,5 MB www.4dsystems.com.au	Downloads		Open 💌	
Options		CI	ear list Close	

#### Click on **Open**.

The downloaded file is being unzipped:

#### - O X Olivier.4D > Downloads > WORKSHOP3 INSTALLER.3.3.0.16 - 44 Search WORKSHOP3 INSTALLER.3.3.0.... 🔎 Extract all files = - 1 0 Organize 🔻 . Type Password ... Size Name Compressed size ☆ Favorites 🧮 Desktop WORKSHOP3 INSTALLER.3.3.0.16 19 989 KB No Application \rm Downloads 💔 Dropbox 📃 Recent Places \land SkyDrive 🔚 Libraries Documents J Music Pictures 🛃 Videos 🍓 Homegroup 💻 Computer 🚢 Local Disk (C:) 👝 Recovery (D:) 86. LaCie 8 Go (F:) 👝 Local Disk (Q:) + € 1 item

Double-click on the unzipped file to launch it.

#### Installation starts:

InstallAw	vare Wizard
<b>P</b>	The InstallAware Wizard is verifying the contents of this setup package. This may take a moment.
	Cancel

#### A welcome screen is displayed:

4D Workshop 4 IDE - Instal	IAware Wizard
<b></b>	Welcome to the InstallAware Wizard for 4D Workshop 4 IDE
	The InstallAware Wizard will install 4D Workshop 4 IDE on your computer.
	WARNING: This program is protected by copyright law and international treaties.
	To continue, click Next.
	< Back Next > Cancel

#### Click on Next.

The window displays the licence agreement:

he window displays the licence agreement:				
4D Workshop 4 IDE - InstallAware Wizard				
License Agreement Please carefully read the following license agreement.				
4D SYSTEMS PTY LTD TERMS AND CONDITIONS				
<b>Customer Acknowledgement</b> . The Customer acknowledges agreement with these Terms and Conditions by order of downloading software product from 4D Systems Pty Ltd. 4D Systems Pty Ltd is the trading name of 4D Systems Pty Ltd. This contract is between the entity named 'the Customer' and 4D Systems Pty. Ltd. All software is supplied on these terms and conditions only and no person in the employment or otherwise as agent for 4D Systems has any authority to supply software on any other terms and conditions or to vary these				
InstallAware				

Click on I accept the terms of the licence agreement and then on Next.

The installer asks for the destination folder, where Workshop is going to be placed:

🔷 4D Workshop	p 4 IDE - InstallAware Wizard	
Destination Select folde	Folder er where setup will install files.	5
Install 4D	Workshop 4 IDE to:	
C:\Progra	m Files (x86)\4D Labs\4D Workshop 4 IDE	Change
Destinat	tion Folder	
Required Remainin	l Disk Space: ng Disk Space:	159,460 KB 583,153 MB
		,
InstallAware —	< Bad	< Next > Cancel

Accept the proposed folder and click on Next.



The installer asks for the shortcut on the Windows Start menu:

Accept the proposed folder and click on **Next**.

A final screen summarises the options previously defined:

🔹 4D Workshop 4 IDE - InstallAware Wizard				
	Completing the InstallAware Wizard for 4D Workshop 4 IDE			
	The InstallAware Wizard is now ready to configure 4D Workshop 4 IDE on this computer.			
	- Click Next to begin configuration			
	- Click Back to change settings			
	- Click Cancel to exit			
	< Back Next > Cancel			

Click on Next.

Installation st	arts:	Ins	stallation go	es on:
4D Worksho	p 4 IDE - InstallAware Wizard		4D Worksho	p 4 IDE - InstallAware Wizard
Installing 4 The progra	D Workshop 4 IDE am features you selected are being configured.		Installing 4 The progra	D Workshop 4 IDE am features you selected are being configured.
17	Please wait while the InstallAware Wizard installs 4D Workshop 4 IDE. This may take several minutes.		1 <del>0</del>	Please wait while the InstallAware Wizard installs 4D Workshop 4 IDE. This may take several minutes.
	Status: Updating component registration			Status: Shortcut: worksh~1 workshop
InstallAware		т	nstallAware	
	< Back Next > Cancel			< Back Next > Cancel

When installation is completed, an alias to Workshop 4 is placed on the desktop:



To run 4D Workshop, just double-click on the alias:



Installing Workshop 4 doesn't remove previous versions.

Workshop 3 and Workshop 4 reside alongside on the Program Files directory:



# Download and Install the Programming Cable Driver

Do not connect the programming cable until the driver is installed. Please install first the driver and then connect the programming cable.

Go to the4D Systems website and download the latest version of the driver for the programming cable from the 4D Programming Cable page.



Go to the 4D Programming Cable page at:

#### http://4dsystems.com.au/prod.php?id=138



#### Click on Drivers for Windows to start downloading:

2	Do you want to run or save CP210x_VCP_Win_XP_S2K3_Vista_7.exe (6,78 MB) from w	/ww.silabs.c	:om?		×
-	(	Run	Save	•	Cancel

Click on **Save**.

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Րhen click on View Donloads։				A welcome screen is displayed:
View Downloads - Windows Internet Explo	orer			Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 - Inst
View and track your downloads	Location	Search downloads Actions	٩	Welcome to the InstallShield Wizard for Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 v6.5.3
CP210x_VCPexe 6,78 MB www.silabs.com	Downloads		Run	The InstallShield Wizard will copy Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 v6.5.3 onto your computer. To continue, click Next.
WORKSHOP3 Izip 19,5 MB www.4dsystems.com.au	Downloads		Open •	
Options		Clear I	ist Close	< Back Next > Cancel

Click on **Run** to launch the installation of the driver.

Click on Next.

The license agreement is displayed:	The installer asks for the destination folder, where the driver is going to be
Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 - Inst	placed:
License Agreement	Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 - Inst
Please read the following license agreement carefully.	Choose Destination Location Select folder where setup will install files.
END-USER LICENSE AGREEMENT	Setup will install Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 v6.5.3 in the following folder.
SILICON LABORATORIES INC., SILICON LABORATORIES INTERNATIONAL PTE. LTD., AND THEIR AFFILIATES (COLLECTIVELY, "SILICON LABS") HAVE DEVELOPED CERTAIN MATERIALS (E.G., DEVELOPMENT TOOLS, EXAMPLE CODE, EMBEDDABLE CODE, DLLs, SOFTWARE/COMPUTER PROGRAMS AND OTHER THIRD PARTY PROPRIETARY MATERIAL) ("LICENSED MATERIALS") THAT YOU MAY USE IN CONJUNCTION WITH SILICON LABS' MCU PRODUCTS. ANY USE OF THE LICENSED MATERIALS IS SUBJECT TO THIS END-USER LICENSE	To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
I accept the terms of the license agreement     Print     I do not accept the terms of the license agreement  InstallShield	Destination Folder c:\\MCU\CP210x\Windows_XP_S2K3_Vista_7
Click on Laccept the the terms of the license agreement and then click on	InstallShield <u>&lt; Back</u> <u>Next</u> Cancel

Accept the default folder and click on Next.

Next.

A final screen summarises the options previously defined:	Installation goes on:
Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 - Inst	Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 - Inst
Ready to Install the Program The wizard is ready to begin installation.	Setup Status
Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.	The InstallShield Wizard is installing Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 v6.5.3
InstallShield Cancel	InstallShield Cancel

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#### The installer is now ready.

Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 - InstallShield		
	InstallShield Wizard Complete	
	The InstallShield Wizard has successfully copied the Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 v6.5.3 to your hard drive. The driver installer listed below should be executed in order to install drivers or update an existing driver.	
	Launch the CP210x VCP Driver Installer.	
	Click Finish to complete the Silicon Laboratories CP210x VCP Drivers for Windows XP/2003 Server/Vista/7 v6.5.3 setup.	
< Back Finish Cancel		

Click Finish to install the driver.

A new window asks for confirmation:

🚜 Silicor	n Laboratories CP210x USB to UART Bridge Driver Installer
3	Silicon Laboratories Silicon Laboratories CP210x USB to UART Bridge
	Driver Version 6.5.3
	Install Cancel

Click on **Install** to proceed.

The driver is being installed. Port are scanned:



A final screen informs the driver is installed and ready.



#### Now it's time plug the 4D programming cable in. the USB port.



Windows detects the cable and activates the adequate driver:

Driver Software Installation	<b>X</b>
Installing device driver software	
CP2102 USB to UART Bridge Controller OSearching Windows Update	
Obtaining device driver software from Windows Update might take a while. Skip obtaining driver software from Windows Update	
	Close

#### Windows displays a final message:

U Driver Software Installation	<b></b>
Silicon Labs CP210x USB to UART Bridge (COM3) installed	
Silicon Labs CP210x USB to UART Bridge (COM3)	
	Close

A confirmation window shows the installed port, here COM3.

It is important to remember it as it is going to be used on Workshop 4 for uploading, here *COM3*:

	Status at 19:16:32 uLCD-32PT [v3.0]	
Comms		

## Format the Micro-SD Card

The micro-SD card shall be FAT16-formatted. Partition can't exceed 2 GB. If the micro-SD cards exceeds 2 GB, it requires to be partitioned with the utility REMPT Removable Media Partition Tool available at

http://4dsystems.com.au/prod.php?id=86.

Please follow the instructions provided by the Application Note 4D-AN-P1001 Partitioning a micro-SD into FAT and RAW Components on PICASO Based Modules. To connect the micro=SD card, either

• Insert the micro-SD card into the USB adaptor and plug the USB adaptor into an USB port of the PC.





- Or
  - Insert the micro-SD card into a micro-SD to SD card converter and plug the SD card converter into the SD card slot of the PC.





Check the micro-SD card is mounted, here as drive F:.

#### - 0 X Computer ► ▼ 4 Search Computer Q ----Organize 🔻 AutoPlay Eject Properties System properties Uninstall or change a program Map network drive >> Hard Disk Drives (2) 쑦 Favorites Local Disk (C:) Recovery (D:) 🥽 Libraries 598 GB free of 676 GB 5 2,28 GB free of 21,4 GB Devices with Removable Storage (2) 🜏 Homegroup DVD RW Drive (E:) Removable Disk (F:) 📜 Computer 1.84 GB free of 1.86 GB 🚢 Local Disk (C:) 💼 Recovery (D:) Network Location (1) 👝 Removable Disk (F:) 🛒 Minimax-1 2 To (\\Extreme) (Z: 📬 Network Removable Disk (F:) Space used: Total size: 1,86 GB Removable Disk Space free: 1,84 GB File system: FAT

On Windows, right-click on the micro-SD card, E: here, and select Format:

Rem	Removable Disk (F:)	
1,84		<b>Open</b> Open in new window Open AutoPlay
	0	Share with Open as Portable Device Analyse F:\
		Format
		Eject
		Cut Copy
		Create shortcut Rename
	_	Properties

#### A window asks for details:

Format Removable Disk (F:)
Capacity:
1,86 GB 🔹
File system
FAT (Default)
Allocation unit size
Default allocation size 🔹
Restore device defaults
Volume label
Format options           Quick Format           Create an MS-DOS startup disk
Start Close

- Select FAT on the drop-down list File System,
- Keep **Default allocation size** on the Allocation unit size.
- Optionally define a name under Volume label .
- Keep **Quick Format** checked.

• Then click Start.

A windows prompts for confirmation:

Format F	Removable Disk (F:)
	WARNING: Formatting will erase ALL data on this disk. To format the disk, click OK. To quit, click CANCEL.
	OK Cancel

Click **OK** to proceed.

#### Formatting starts:

Formatting Removable Disk (F:)		
Capacity:		
1,86 GB	~	
File system		
FAT (Default)	<b>_</b>	
Allocation unit size		
32 kilobytes	<b>_</b>	
Restore device defaults Volume label		
Format options Quick Format Create an MS-DOS startu	ıp disk	
Start	Cancel	

A window informs format is complete:

Formatting Removable Disk (F:)	×
Format Complete.	
	ОК

Click **OK** to close the window.

Congratulations! Workshop 4 is installed now and you can proceed with Application Note 4D-AN-1002VG Getting Started — First Project with ViSi-Genie.

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