

# PowerVR Insider SDK



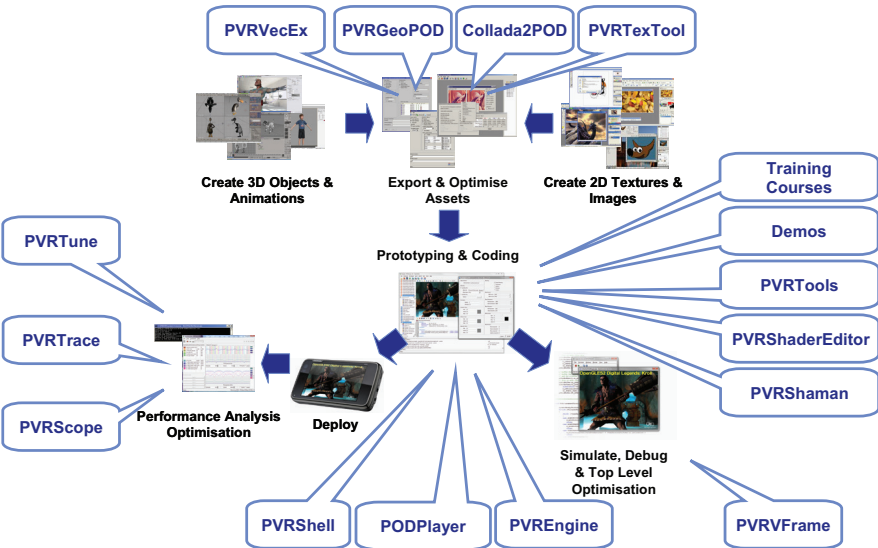
The PowerVR™ Insider SDK addresses every step of graphics-rich application development for leading standard APIs such as OpenGL ES 1.1, 2.0 and 3.0, OpenVG 1.1 and Direct3D Mobile on a wide range of mobile and embedded application platforms. It includes tutorials, source code, documentation, extensions specifications, a platform abstraction framework and a powerful and extensive tools library, supported by a set of utilities optimized for the embedded market.

Components of the PowerVR Insider SDKs are integrated into an ever growing number of SDKs from leading semiconductor, OEM and middleware vendors, reflecting the maturity and industry respect for the tools.

## Support for over 80 platforms

<b>OS</b>	Linux, Linux X11, Android, Meego, Bada, iOS, Windows desktop Legacy: Limo, Symbian, Palm/WebOS, WinCE
<b>API</b>	OpenGL ES 3.0, OpenGL ES 2.0, OpenGL ES 1.1, OpenGL 2.0, OpenCL, OpenVG 1.1
<b>Platforms</b>	Please see <a href="http://www.imgtec.com/partners/licensees">www.imgtec.com/partners/licensees</a> for latest information

## PowerVR SDK Utilities



## Features

- Utilities specifically designed for the embedded graphics market
- Support for more than 60 OS/device/product platforms
- Source code tutorials and demonstrations
- A platform abstraction framework enabling easy platform porting
- Optimized 3D tools library with full source code
- Documentation and guidelines
- Dedicated support team

## Benefits

- Market-proven solution with thousands of professional users
- Support for millions of PowerVR graphics enabled devices already in the market
- Integrated into many industry-leading third party tool chains
- Built around industry standard content creation tools and APIs
- PC emulation enables development to start ahead of hardware availability
- Solid tools built for stability

## Applications

- Feature/smart phones
- Multimedia computers
- Personal media players
- Games consoles
- Mobile internet devices
- Personal and in-car navigation and information
- Digital TV and set-top boxes
- UMPC

## Utilities Designed for Embedded Graphics

The SDK contains a comprehensive set of utilities to assist the development flow, available in Windows, Linux and MacOS versions supporting PowerVR MBX, PowerVR SGX Series5/5XT and PowerVR Series6 graphics IP core families, including:

### PVRVFrame

A set of emulation libraries which allow OpenGL ES 1.0/1.1/2.0/3.0 and Direct3D Mobile applications to run directly on desktop PCs enabling development to start prior to hardware availability.

### PVRTexTool

Tools to convert standard bitmap files to any texture type supported by PowerVR hardware including PVRTC, PVRTC2, DXT and ETC compressed formats.

### PVRGeoPOD

PowerVR geometry and animation export plug-in for Autodesk 3ds Max, Autodesk Maya and Blender. Exports model data into an optimized 3D file format.

### PowerVR COLLADA2POD

Standalone tool which converts Khronos COLLADA digital assets geometry and animations into the optimized PowerVR POD file format.

### PVRVecEx

Plug-in for Adobe Illustrator enabling the export of vector graphics artwork into file formats optimized for efficient rendering through the Khronos OpenVG API.

### PVRShaderEditor

Graphical front-end for the offline shader compiler allowing easy creation and editing of OpenGL ES 2.0 and 3.0 Shading Language vertex and fragment shader programs in addition to PowerVR FX (PFX) files.

### PVRShaman

Visual integrated shader composer designed to ease the creation of GLSL ES vertex and fragment shaders. Supports POD or COLLADA formats and built-in models.

### PVRTrace

A library that takes a snapshot of all API calls done in a single or a sequence of frames, which can later be analyzed with the PVRTrace stand-alone utility.

## Additional tools

Available from Imagination under non-disclosure agreement or from licensees:

### PVRTune

Remote hardware performance profiler for PowerVR SGX platforms to graph on-chip and drivers counters in real time.

### PVRScope

A series of libraries giving access to internal SGX performance counters.

## Support

### Source Code Tutorials and Demonstrations

SDK sample source code takes developers from the simplest triangle to more complex examples in a tutorial style. Advanced demonstration examples are also provided.

### Platform Abstraction PVRShell Framework

An abstraction framework enabling quick and easy application porting between different platforms, reducing fragmentation and speeding up time to market.

### Optimized Tools Library

Collection of valuable helper functions for 3D graphics application development in source form.

### Documentation and Guidelines

Detailed documentation is provided in the SDK, including a usage guide, technology overview, articles, utility documentation, source code documentation and file-format descriptions.

### Dedicated Support Team

The SDK is maintained and supported (e-mail, phone, on-site) by the industry's largest dedicated embedded graphics support team. Specialists in each tool provide in-depth knowledge on each area of the SDK and they can be contacted at [devtech@imgtec.com](mailto:devtech@imgtec.com).

### Ecosystem

The SDK is provided as part of Imagination's PowerVR Insider ecosystem. Find out more at [www.PowerVRinsider.com](http://www.PowerVRinsider.com).

### Download the latest SDKs from:

[www.imgtec.com/powervr/insider/sdkdownloads](http://www.imgtec.com/powervr/insider/sdkdownloads)



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