



Mali GPU Shader Development Studio Release Note

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Abstract

This document contains notes relating to the v1.1 release of the Mali GPU Shader Development Studio.

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General suggestion for additions and improvements are also welcome.

CONTENTS

1	Preface	5
2	Product Deliverables	6
2.1	Files	6
2.1.1	ShaderServer	6
3	Documentation	7
3.1	Mali GPU Shader Development Studio Errata	7
3.2	Mali GPU Shader Development Studio User Guide	7
3.3	Release Note	7
4	Required Tools	8
4.1	Reference platform	8
4.1.1	Windows	8
4.1.2	Linux	8
4.1.3	ShaderServer	8
4.2	Build platform	8
4.2.1	ShaderServer	8
5	Installation	9
5.1	Installation Procedure	9
6	Building	10
7	Changes in Functionality From Previous Releases	11
8	Known Issues and Limitations	12
8.1	“Ghost” Eclipse Perspective after uninstallation	12
8.2	Automatic Renderer discovery	12

1 PREFACE

This document contains general release information about the Mali GPU Shader Development Studio v1.1 deliverables and covers the following topics:

- Deliverables summary.
- Details of external tools required.
- Build instructions.
- Changes and fixes in this release.
- Known issues.
- Details of testing prior to release.

2 PRODUCT DELIVERABLES

2.1 Files

The Mali GPU Shader Development Studio is delivered as a single compressed archive containing a local Eclipse Update Site. The specific filename is dependent on target platform. Table 2-1 describes this.

File Name	Description
Mali_GPU_Shader_Development_Studio_WinXP_v1.1.exe	A self-extracting archive containing the Mali GPU Shader Development Studio for Windows.
Mali_GPU_Shader_Development_Studio_RHEL4_v1.1.tar.gz	A gzipped UNIX tarball containing the Mali GPU Shader Development Studio for Linux.
Mali_GPU_Shader_Development_Studio_Release_Note_v1.1.pdf	Release Note (this document)

Table 2-1 Files making up the Mali GPU Shader Development Studio

2.1.1 ShaderServer

Both the Windows and Linux versions of the Mali GPU Shader Development Studio contain source code to the “ShaderServer”, an executable that wraps an OpenGL ES 2.0 implementation in a Mali Remote Interface layer to allow OpenGL ES 2.0 shaders to be rendered on hardware that would not otherwise be able to utilize the Mali Remote Interface. The Mali GPU Shader Development Studio User Guide contains more information about the ShaderServer.

3 DOCUMENTATION

3.1 Mali GPU Shader Development Studio Errata

This document describes the errata discovered in the implementation of the Mali GPU Shader Development Studio, categorised by level of severity. Each description includes:

- a description of where the implementation deviates from the specification,
- the conditions under which erroneous behaviour occurs,
- the implications of the erratum with respect to typical applications,
- the application and limitations of a work-around where possible,
- the status of corrective action.

3.2 Mali GPU Shader Development Studio User Guide

The user guide provides user information for users of the Mali GPU Shader Development Studio. It describes how to install and operate the software.

3.3 Release Note

This document contains general release information about the Mali GPU Shader Development Studio product.

4 REQUIRED TOOLS

ARM Limited recommends the use of the same tools that were used to develop and test the Mali GPU Shader Development Studio. This section lists the additional hardware and software that is required.

4.1 Reference platform

4.1.1 Windows

The reference platform for Windows is a desktop PC running Windows XP Professional Service Pack 2 with Eclipse 3.5.

4.1.2 Linux

The reference platform for Linux is a desktop PC running Red Hat Enterprise Linux 4 with Eclipse 3.5.

4.1.3 ShaderServer

4.1.3.1 Windows

The reference platform for ShaderServer on Windows is Microsoft® Windows XP™ Professional Service Pack 2 with a NVIDIA 8400 GS video card and driver version 178.24.

4.1.3.2 Linux

The reference platform for ShaderServer on Linux is a RealView Platform Baseboard equipped with: PB11MP Core with Mali200 r0p5 bitfile programmed on Virtex-5 FPGA, running ARM Embedded Linux 2.5.0, linux kernel 2.6.24 with 2.6.24-arm2 patch and Mali 200 OpenGL-ES 2.0 libraries.

4.2 Build platform

The Mali GPU Shader Development Studio is a binary release and cannot be built from source.

4.2.1 ShaderServer

The ShaderServer build platform is a Linux machine with a 2.6 kernel release, GNU Toolchain, Sourcery G++ Lite for ARM GNU/Linux version 2007q1-21 and ARM Mali200 OpenGL ES 2.0 hardware and libraries.

5 INSTALLATION

5.1 Installation Procedure

For information on installing the Mali GPU Shader Development Studio, see the Mali GPU Shader Development Studio User Guide.

6 BUILDING

For instructions on building the ShaderServer binary from the supplied source code, consult the Mali GPU Shader Development Studio User Guide.

7 CHANGES IN FUNCTIONALITY FROM PREVIOUS RELEASES

This is the first release of the Mali GPU Shader Development Studio.

8 KNOWN ISSUES AND LIMITATIONS

Issues related to this release are documented in the Mali GPU Shader Development Studio Errata. Additionally, the following issues are known:

8.1 “Ghost” Eclipse Perspective after uninstallation

In some circumstances, a “ghost” Eclipse Perspective remains after uninstalling the Mali GPU Shader Development Studio. This perspective will have the name “<Mali GPU Shader Development Studio>”. Attempting to activate this perspective will result in no activity.

This is believed to be an issue with Eclipse 3.5. The plugin has successfully uninstalled. The ghost perspective can be removed through the “General” → “Perspectives” preference pane in Eclipse by selecting the ghost perspective and clicking “Delete”.

8.2 Automatic Renderer discovery

Due to technical limitations in the Linux implementation of the Mali GPU Shader Development Studio, automatic discovery of Renderers on the local subnet via UDP broadcast is unreliable. Renderers should be added manually in the “Renderers” preference pane.

Please contact support@arm.com regarding any issues with the installation and content of this release.

It should be noted that Support of the product will only be provided by ARM if such support is covered by a current contract with the recipient.