



Mali GPU Shader Library Release Note

Media Processing Division

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Abstract

This document contains notes relating to the EAC release of the Mali GPU Shader Library version 1.0.

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General suggestion for additions and improvements are also welcome.

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1 PREFACE

The Mali Shader Library is a collection of example shader programs. These examples contain the ESSL vertex and fragment shader source files for shader programs to help developers start developing shader programs for the Mali GPUs. You can use the shader programs as they are provided, modify them to suit your requirements or use them to learn and develop your own. Currently the supported platform is Windows XP and Linux.

This document contains general release information about the Mali GPU Shader Library version 1.0 and covers the following topics:

- Deliverables summary
- Known issues

1.1 Change Control

Issue	Date	Change
1.0	September 15, 2009	Release notes for EAC release of Mali GPU Shader Library version 1.0

1.2 References

This document refers to the following documents.

Ref.	Document No.	Title
[1]	PR389-PRDC-011096	Mali GPU Shader Library Release Note
[2]	ARM DUI 0510A	Mali GPU Shader Library User Guide
[3]	PR389-PRDC-011097	Mali GPU Shader Development Studio Release Note
[4]	PR389-PRDC-011098	Mali GPU Shader Development Studio Errata

Table 1: Table of References

1.3 Intended Audience

This document is written for developers who wish to use the Mali GPU Shader Library to develop shader programs for Mali GPU.

2 GLOSSARY

The following terminology is used in this manual.

TERM	MEANING
Platform Baseboard (PB)	One of the ARM RealView® Versatile family of boards. This is a development board that can run ARM Embedded Linux (AEL), and that is equipped with Mali FPGA tile.
DDK	Driver Development Kit
EAC	Early Access
GPU	Graphics Processing Unit

3 PRODUCT DELIVERABLES

3.1 Files

The deliverables are individually downloadable parts which can be downloaded from <https://malidevelopers.com>. The names and description of various deliverables that can be downloaded are as detailed in Table -2.

Deliverable Names	Description
Mali_GPU_Shader_Library_WinXP_v1.0.exe	Windows Installer for Mali GPU Shader Library
Mali_GPU_Shader_Library_RHEL4_v1.0.tar.gz	Tar Gzipped package for Mali GPU Shader Library
Mali_GPU_Shader_Library_User_Guide.pdf	User guide for Mali GPU Shader Library
Mali_GPU_Shader_Library_Release_Note.pdf	Release Note for Mali GPU Shader Library

Table -2: List of Parts in the Deliverable

4 DOCUMENTATION

Documents are supplied as “Adobe PDF” (Portable Document Format) files. These files are readable on most common computer platforms and operating systems using an appropriate file reader. A suitable file reader can be downloaded from the Adobe site at <http://www.adobe.com/>. Select “Acrobat” and download the reader for your computer platform/operating system.

The Red Hat Linux system contains an inbuilt PDF reader which can be used to open the PDF files. Go to Applications > Graphics > PDF Viewer or type ‘gpdf’ on a linux terminal to open the viewer.

4.1 Mali GPU Shader Library Release Note

This document [1] contains general release information about the Mali GPU Shader Library v1.0 product.

4.2 Mali GPU Shader Library User Guide

This document [2] provides information on how to use the Mali GPU Shader Library product.

5 REFERENCE PLATFORM

The Mali GPU Shader Library has been tested on the platforms listed below. ARM Limited recommends the use of Mali GPU Shader Library on these platforms only.

1. Microsoft® Windows XP™ Professional Service Pack 2 with a NVIDIA 8400 GS video card.
2. Redhat Enterprise GNU/Linux release 4, revision 2.6.9-55.ELsmp with a NVIDIA 8400 GS video card.

6 INSTALLATION

6.1 Installation Procedure

For a description on how to install the Mali GPU Shader Library see the Mali GPU Shader Library User Guide [2], Section 2.1 for Windows Installation procedure and Section 2.2 for Linux Installation procedure.

7 KNOWN ISSUES AND LIMITATIONS

There is no Errata document for this release of Mali GPU Shader Library.

There are few issues and limitations that may not be obvious and which deserve mention:

1. All pixels are drawn in black color while rendering *CH14 - Diffraction* effect in *OrangeBookExamples* on PB11MPCore + Mali200 platform (refer to section 5.1.2 of Mali GPU Shader Development Studio Release Note [3]) using Mali Shader Development Studio. Issue is under investigation.
2. Direction of cubemap textures in y direction is inverted in Mali Shader Development Studio (refer to Mali GPU Shader Development Studio Errata [4]). This has been worked around in *shaders.shaderconfig* by supplying already inverted textures in y direction for *CH10 - Cube Map* effect of *OrangeBookExamples*.

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