[Confidential - Distribution with NDA]

AMD Windows Catalyst Driver
Release Notes

Table of Contents

1. Overview 2
2. New in this Release 2
3. Windows Driver Support 2
4. OS & Processor Family support 2
Note: * - Refer validation details in section 10. 2
5. Supported feature list 2
6. Processor Display support 3
7. Platform configurations 4
8. SW Package 4
9. SW Package - Graphics Driver Version 5
10. Known Issues/Limitations 6
a) R1000 & V1000 Platform (Bilby) 6
b) Issues on Windows 11: 6
c) Issues with Eyefinity: 7
11. Notes on Validation 7
12. Support 7

1. Overview

Windows Embedded Catalyst Drivers include a set of drivers to enable Graphics and peripheral devices on selected development platforms.

2. New in this Release

- Catalyst & Chipset drivers refresh Embedded V1000 & R1000.

3. Windows Driver Support

Catalyst/Graphics Driver Support. **Win11, x64 bit*** **Win10, x64 bit**	Radeon Software Version	25.4.1
	AMDVER	31.0.21923.1000
	Driver Packaging Version	250306a-415645C
Chipset Driver	AMD_Software_7.09.25.559	

4. OS & Processor Family support

Processor family	AMD Program	Win11 24H2 x64 bit	Win10 22H2 x64 bit	Win10 21H2 LTSC x64 bit
R1000 Series	Raven2 FP5		Yes	Yes
V1000 Series	Raven1 FP5	Yes*	Yes	

Note: * - Refer validation details in section 10.

5. Supported feature list

Features Group	Features category	V1000 Series
3D	OGL 4.6	Yes
3D	Vulkan	Yes
Display	4K Cinema	Yes
Display	Number of displays	Refer display support table below
Display	DP MST	Yes
Multimedia	H.264 decode	Yes
Multimedia	H.265 decode	Yes
Multimedia	VP9 decode	Yes
Multimedia	10-bit decode	Yes
Audio	DP Audio	Yes

External discrete graphics card (dGPU) validation	Refer table for dGPU pairing	No
Eyefinity	Auto Eyefinity (MST)	Yes
Eyefinity	Mixed rotation	No
Eyefinity	Mixed Alignment	Yes
Eyefinity	Tiled display SLS(4x1,3x1,2x1etc..)	Yes
Eyefinity	Mixed Tiled display (2x2 ,1x3 etc…)	Yes
Eyefinity	Tiled Groups (1x2+1 ,1x2 + 1x2 etc…)	Yes
Eyefinity	Multi GPU (Eyefinity on single GPU)	No
Eyefinity	Bezel Compensation	Yes
EDID management	Advance Feature	Yes
Custom timing	Advance Feature	No
10-bit color	Advance Feature	Yes
dGMA	OpenGL	No
dGMA	OpenCL	No
OpenGL	OpenGL	Yes
OpenCL	OpenCL	Yes
Peripherals	AHCI Drivers	Yes
Peripherals	AMD PSP Drivers	Yes
Peripherals	USB 3.0 Driver (ITB)	Yes
Peripherals	eMMC driver (ITB) (HS400 mode only)	No
Peripherals	Ethernet driver	No
Peripherals	Audio driver	Yes
Peripherals	GPIO2	Yes
Peripherals	I2C	Yes
Peripherals	UART	Yes
Peripherals	SMBUS	Yes
Peripherals	Watchdog	Yes
Peripherals	SPI	Yes
Peripherals	Serial (UART w/ COM interface)	Yes

6. Processor Display support

APUs	Max No of display
R1000 Series • R1305G • R1102G	 • 3x 1080p • 2x 1080p

• R1505G & R1606G	• 3x 4K60
V1000 Series • V1202B, V1404I & V1605B • V1756B & V1807B	 • 3x 4K60 / 4x 1080p60 • 4x 4K60

7. Platform configurations

a) R1000 Platform (Bilby)

R1000 Platform (Bilby)	
Processor family	R1000 Series
Model (nominal TDP), CPU Base Frequency	**R1505G** (B2 15W), 2.4 GHz **R1606G** (B4 15W), 2.6 GHz **R1305G** (LP B4 8W) 1.5 GHz **R1102G** (LP B2 6W) 1.2 GHz
BIOS version	RBB1121C
VRAM setting	4 GB
RAM (DDR4)	2x 8GB (LP B2 6W supports single 8GB DIMM)
Display Convertors / Dongles Used	DP to HDMI, DP to VGA, DP to DVI, mDP
Storage disk	M.2 SATA SSD

b) V1000 Platform

V1000 Platform (Bilby)	
Processor family	V1000 Series
Model (CPU config, nominal TDP, CPU Base Frequency, GPU config)	**V1807B** (4C 45W 3.35GHz CPU, 11 GPU CUs) **V1756B** (4C 45W 3.25GHz CPU, 8 GPU CUs) **V1605B** (4C 15W 2GHz, 8 GPU CUs) **V1202B** (2C 15W 2.3GHz, 3 GPU CUs) **V1500B** (16W NPU), 2.2 GHz **V1780B** (45W NPU), 3.35 GHz
BIOS version	RBB1121C
VRAM setting	4 GB
RAM (DDR4)	2x 8 GB
Display Convertors / Dongles Used	DP to HDMI, DP to VGA, DP to DVI, mDP
Storage disk	M.2 SATA SSD

8. SW Package

SW Component	WHQL certified drivers	Catalyst Installer Package	Chipset Installer Package
Display	Yes	Yes	No

PSP	Yes	No	Yes
SBDrv:acpi	Yes	No	Yes
SBDrv:SFH	Yes	No	Yes
SBDrv:SFHI2C	Yes	No	Yes
SBDrv:I2C	Yes	No	Yes
SBDrv:SMBus	Yes	No	Yes
SBDrv:UART	Yes	No	Yes
Audio:ACPBus	Yes	Yes	No
Audio:HDMI	Yes	Yes	No
Audio:HDABus	Yes	No	No
Audio:I2S	Yes	Yes	No
Audio:I2STDM	Yes	Yes	No
XGBE	Yes	No	Yes
Ryzen Power Plan	Yes	No	Yes
IOV	Yes	No	Yes
SMBUS	Yes	No	Yes
CIR	Yes	No	Yes
USB 3.1	Yes	No	Yes
GPIO2	Yes	No	Yes
Serial	Yes	No	Yes
Watchdog	Yes	No	Yes

9. SW Package - Graphics Driver Version

The graphics driver package is also termed as 'V1756 25Q2 CCB Driver' or 'Radeon Software'.

This package contains various independent drivers. Below are the version numbers of Radeon software and other drivers included. The same should also be visible with Radeon Software->System->Software & Driver Details.

S. No	SW Driver Description	Version
1	Radeon Software Version	23.19.23.01
2	Radeon Software Edition	Adrenalin
3	AMDVER	31.0.21923.1000
4	Driver Packaging Version	23.19.23.01-250306a-415645C
5	2D Driver Version	8.1.1.1634

6	Direct3D®	12.1
7	OpenGL®	4.6
8	AMD Audio Driver	10.0.1.30
9	Vulkan™ Driver	2.0.279
10	Vulkan™ API	1.3.260

10. Known Issues/Limitations

a) R1000 & V1000 Platform (Bilby)

1. Few testcases failed (45/79) with OCL Conformance test suite.
2. SD Card as bootable device does not support High Speed (HS) and at UHS I – DDR50
3. MPEG/H.264 playback stutter observed after switching from windowed mode to full screen and vice versa.
4. ROM Armor is an unsupported feature for SPI ROM driver. No plan to enable ROM Armor in the future.
5. Radeon Pro Settings UI not opening after EDID emulation and Reboot.
   Workaround: Close Radeon Pro UI before reboot
6. I2STDM driver supports both I2S & I2STDM functionality but are not validated.
7. For I2S & I2STDM functionality, use below workaround.
   Workaround: Uninstall ACPBus & I2STDM driver obtained by default from Catalyst driver. Install ACPBus and I2STDM provided explicitly after reboot.
8. Frequently (7/10 times) video playback corruption observed while performing windowed to full screen mode with Eyefinity enabled."
9. Frame Rate displays as N/A in metrics under performance of AMD Radeon software.
10. Multiple tests failure observed while running OCL_Conformance 2.0.
11. Sporadically Uninstall fails after catalyst driver installed in Minimal method
12. With 4x4K connected, sporadically(1/15) observed system hang and TDR during reboot and shutdown cycle.

b) Issues on Windows 11:

13. Version Number cannot be determined for WDT and SMBUS in AMD Chipset Software installation summary

c) Issues with Eyefinity:

14. Very Sporadically TDR observed during Eyefinity creation.
15. TDR and system hang observed during S3 long run.
16. Setup failed Error during hot unplug after quick Eyefinity.
17. Tearing with Eyefinity: All displays will be tear free only if all displays are using the same timing and same connector type.
18. Display blank out is observed for Eyefinity in portrait mode.
19. Sporadically Display blank out, system hang, BSOD is observed during video playback with Eyefinity arrangement.
20. Eyefinity is not functional with mix of DP and HDMI monitors.
21. Using Quick Setup Vertical position Eyefinity configuration fails for 1st time.
22. Sporadically observing system hung during reboot with 2x1 or 1x2 Eyefinity configuration.

11. Notes on Validation

1. V1756 OPN can support Win11 24H2 OS version but is not validated in this release.

12. Support

Please contact your Field Application Engineer for support on this release.

© 2025 Advanced Micro Devices, Inc. All rights reserved.

The information contained herein is for informational purposes only and is subject to change without notice. While every precaution has been taken in the preparation of this document, it may contain technical inaccuracies, omissions and typographical errors, and AMD is under no obligation to update or otherwise correct this information. Advanced Micro Devices, Inc. makes no representations or warranties with respect to the accuracy or completeness of the contents of this document, and assumes no liability of any kind, including the implied warranties of noninfringement, merchantability or fitness for particular purposes, with respect to the operation or use of AMD hardware, software or other products described herein. No license, including implied or arising by estoppel, to any intellectual property rights is granted by this document. Terms and limitations applicable to the purchase or use of AMD's products are as set forth in a signed agreement between the parties or in AMD's Standard Terms and Conditions of Sale. Any unauthorized copying, alteration, distribution, transmission, performance, display or other use of this material is prohibited.

Trademarks

AMD, the AMD Arrow logo, AMD AllDay, AMD Virtualization, AMD-V, PowerPlay, Vari-Bright, and combinations thereof are trademarks of Advanced Micro Devices, Inc. Other product names used in this publication are for identification purposes only and may be trademarks of their respective companies.
Dolby is a trademark of Dolby Laboratories.

HDMI is a trademark of HDMI Licensing, LLC.

HyperTransport is a licensed trademark of the HyperTransport Technology Consortium.

Microsoft, Windows, Windows Vista, and DirectX are registered trademarks of Microsoft Corporation in the US and/or other countries.
MMX is a trademark of Intel Corporation.

OpenCL is a trademark of Apple Inc. used by permission by Khronos.

PCIe is a registered trademark of PCI-Special Interest Group (PCI-SIG).

USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum.

Reverse engineering or disassembly is prohibited.
USE OF THIS PRODUCT IN ANY MANNER THAT COMPLIES WITH THE MPEG ACTUAL OR DE FACTO VIDEO AND/OR AUDIO STANDARDS IS EXPRESSLY PROHIBITED WITHOUT ALL NECESSARY LICENSES UNDER APPLICABLE PATENTS. SUCH LICENSES MAY BE ACQUIRED FROM VARIOUS THIRD PARTIES INCLUDING, BUT NOT LIMITED TO, IN THE MPEG PATENT PORTFOLIO, WHICH LICENSE IS AVAILABLE FROM MPEG LA, L.L.C., 6312 S. FIDDLERS GREEN CIRCLE, SUITE 400E, GREENWOOD VILLAGE, COLORADO 80111.