

Graphics Boards for *hyperMILL*®

System requirements: graphics engine requires an OpenGL accelerated graphics display driver. Latest generation of GPU with OpenGL 4.0 or higher is recommended.

The following table gives the list of graphic cards and display driver suggested. **Please note:** This does not mean that *hyperMILL*® can only run on these specific systems. These are only the systems that are currently running automated test or are currently used in daily work. *hyperMILL*® should run on any graphics system that supports a complete implementation of OpenGL.

Reference driver can be installed on notebook GPUs. However, please note that your notebook original equipment manufacturer (OEM) provides drivers for your specific notebook on their website. Please check with your notebook OEM about recommended software updates for your notebook.

On system with two graphic boards select the accelerated GPU (AMD/NVIDIA) instead of the integrated one, from the relative display control panel. With NVIDIA Quadro/RTX board we recommend to use the "Workstation app - dynamic streaming" or the "3D App - Visual Simulation" profiles from the NVIDIA control panel.

Windows update may change the display driver or video card settings without any notification. We recommend checking after the Windows update. The hyperCAD-S\<version>\systemchecktool.exe application may help you to identify problems.

The recommended graphics drivers do not consider the connection of additional peripheral devices. Connected devices can affect the quality and performance of the graphics card. Therefore OPEN MIND Technologies recommends to contact the hardware manufacturer in these cases. All liability is excluded, all information is given without guarantee of being complete, correct and up-to-date.

Brand	Year	Series	Product	Windows 10	Windows 11
NVIDIA	2014	Kepler	K620	472.84	472.84
			K1200		
			K2200		
			K4200		
			K5200		
	2015	Maxwell	M2000	472.84	472.84
			M4000		
			M5000		
			M6000		
	2017	Pascal	P400	472.84	472.84
			P600		
			P1000		
			P2000		
			P4000		
			P5000		
			P6000		
			GP100		
	2018	Pascal	P620	472.84	472.84
			P2200		
			P5200		
			GV100		
	2019	Turing	RTX 3000	472.84	472.84
			RTX 4000		
			RTX 5000		
			RTX 6000		
			RTX 8000		
	2021	Turing	T400	472.84	472.84
			T600		
			T1000		
	2022	Ampere	RTX A2000	538.33	538.33
RTX A4000					
RTX A4500					
RTX A5000					
RTX A5500					
2023-2024	Ada Lovelace	RTX A6000	551.61	551.61	
		RTX 2000			
		RTX 4000			
		RTX 4500			
		RTX 5000			
			RTX 6000		

Brand	Year	Series	Product	Windows 10	Windows 11		
NVIDIA	Quadro / RTX notebook	2014	Kepler	K1100M	376.84		
				K2100M			
				K3100M			
				K4100M			
				K5100M			
		2014	Kepler	K2200M	472.84, 517.40, 528.49	472.84, 517.40, 528.49	
		2015	Maxwell	M500M	472.84	517.40	528.49
				M600M			
				M1000M			
				M2000M			
				M3000M			
				M4000M			
		M5000M					
		2016	Maxwell	M620	472.84	517.40	528.49
				M1200	472.84	517.40	528.49
				M2200	472.84	517.40	528.49
		2017	Pascal	P600	472.84	517.40	528.49
				P1000			
				P2000			
				P3000			
				P4000			
		P5000					
		2018	Pascal	P3200	472.84	517.40	528.49
				P4200	472.84	517.40	528.49
				P5200	472.84	517.40	528.49
		2019	Turing	T1000	472.84	517.40	528.49
				T2000	472.84	517.40	528.49
		2020	Turing	RTX 3000	472.84	517.40	528.49
				RTX 4000	472.84	517.40	528.49
				RTX 5000	472.84	517.40	528.49
				RTX 6000	472.84	517.40	528.49
		2021	Turing	T500 / T550	472.84	517.40	528.49
T600	472.84			517.40	528.49		
T1200	472.84			517.40	528.49		
2022	Ampere	RTX A1000	538.33	551.61	538.33		
		RTX A2000					
		RTX A3000					
		RTX A4000					
		RTX A4500					
		RTX A5000					
RTX A5500							
2023	Ada Lovelace	RTX 2000	538.33	551.61	538.33		
		RTX 3000					
		RTX 3500					
		RTX 4000					
		RTX 5000					

		Brand	Year	Series	Product	Windows 10	Windows 11
NVIDIA	GeForce desktop / notebook		2014	Kepler	GTX 750	372.70	471,68
					GTX 760	398.36	
					GTX 770	430.86	
					GTX 780	442.19	
					GTX TITAN	471.68	
			2015	Maxwell	GTX 950	372.70	471,68
					GTX 960	398.36	
					GTX 970	430.86	
					GTX 980	442.19	
					GTX TITAN X	471.68	
			2016-2017	Pascal	GTX 1050	471.68	471.68
					GTX 1060	472.84	472.84
					GTX 1070 / Ti	517.40	517.40
					GTX 1080 / Ti	528.49	528.49
					TITAN XP	528.49	528.49
			2018-2019	Turing	RTX 2060	471.68	471.68
					RTX 2070	472.84	472.84
					RTX 2080 / Ti	517.40	517.40
					TITAN RTX	528.49	528.49
			2020-2022	Ampere	RTX 3050 / Ti	471.68	471.68
					RTX 3060 / Ti	472.84	472.84
					RTX 3070 / Ti	517.40	517.40
					RTX 3080 / Ti	528.49	528.49
					RTX 3090 / Ti	528.49	528.49
			2023	Ada Lovelace	RTX 4050		
					RTX 4060	528.49	528.49
					RTX 4070	551.61	551.61
					RTX 4080		
RTX 4090							

	Brand	Year	Series	Product	Windows 10	Windows 11
AMD - ATI	FirePro desktop workstation	2014	W	W600	15.301.2601 18Q1 - 23.20.15018.16 20Q1 - 26.20.14001.22011 20Q3 - 27.20.1027.2005	
				W5000		
				W7000		
				W8000		
				W9000		
		2015	W	W2100	15.301.2601 18Q1 - 23.20.15018.16 20Q1 - 26.20.14001.22011 20Q3 - 27.20.1027.2005	
				W4100		
				W5100		
				W7100		
				W8100		
		2017	WX	WX 2100	21Q4 - 30.0.14011.2006 22Q2 - 30.0.21020.2	21Q4 - 30.0.14011.2006 22Q2 - 30.0.21020.2
				WX 3100		
				WX 4100		
				WX 5100		
	2019	WX	WX 7100	21Q4 - 30.0.14011.2006 22Q2 - 30.0.21020.2	21Q4 - 30.0.14011.2006 22Q2 - 30.0.21020.2	
			WX 8200			
	2020	W	W 5500	21Q4 - 30.0.14011.2006 22Q2 - 30.0.21020.2	21Q4 - 30.0.14011.2006 22Q2 - 30.0.21020.2	
			W 5700			
	2021-2022	W	W 6400	21Q4 - 30.0.14011.2006 22Q2 - 30.0.21020.2	21Q4 - 30.0.14011.2006 22Q2 - 30.0.21020.2	
			W 6600			
			W 6800			
	2023	W	W 7500	23Q4 - 31.0.23013.3005	23Q4 - 31.0.23013.3005	
			W 7600			
			W 7700			
			W 7800			
			W 7900			
	Radeon Pro / workstation	2015	R9	270	Crimson 16.2.1 Driver 15.301.1901 Adrenalin 19.5.2 - 26.20.11015.5009 Adrenalin 20.4.2 - 26.20.15029.27017	
280						
290						
380						
390						
2016		RX 400	460	Adrenalin 19.5.2 - 26.20.11015.5009 Adrenalin 20.4.2 - 26.20.15029.27017 Adrenalin 21.8.2 - 27.20.22025.1006 Adrenalin 22.2.1 - 30.0.14023.7007	Adrenalin 22.2.1 - 30.0.14023.7007	
			470			
			480			
2018		RX 500	550	Adrenalin 19.5.2 - 26.20.11015.5009 Adrenalin 20.4.2 - 26.20.15029.27017 Adrenalin 21.8.2 - 27.20.22025.1006 Adrenalin 22.2.1 - 30.0.14023.7007	Adrenalin 22.2.1 - 30.0.14023.7007	
			560			
			580			
			590			
2019		VEGA	VEGA Series	Adrenalin 20.4.2 - 26.20.15029.27017 Adrenalin 21.8.2 - 27.20.22025.1006 Adrenalin 22.2.1 - 30.0.14023.7007	Adrenalin 22.2.1 - 30.0.14023.7007	
2020		RX 5000	5500	Adrenalin 20.4.2 - 26.20.15029.27017 Adrenalin 21.8.2 - 27.20.22025.1006 Adrenalin 22.2.1 - 30.0.14023.7007	Adrenalin 22.2.1 - 30.0.14023.7007	
			5600			
			5700			
2021	RX 6000	6500	Adrenalin 21.8.2 - 27.20.22025.1006 Adrenalin 22.2.1 - 30.0.14023.7007	Adrenalin 22.2.1 - 30.0.14023.7007		
		6600				
		6700				
		6800				
		6900				