












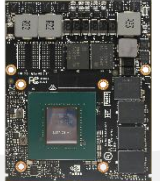


Empowering Tomorrow's AI Computing

# NVIDIA Quadro MXM GPU Module

## PRODUCT CATALOG

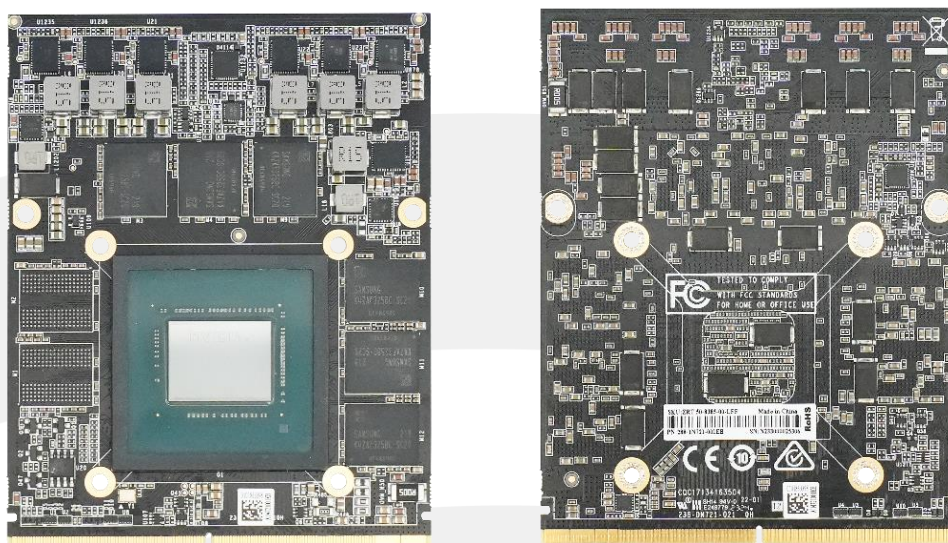
## Contents

NVIDIA Quadro Ada Lovelace Series .....	3
NVIDIA Quadro Ampere Series .....	5
NVIDIA Quadro Turing Series .....	8
NVIDIA Quadro Pascal Series.....	10

Ada Lovelace Series	31-0031-01-LFF	31-0039-01-LFF			
					
	RTX2000m 8G GDDR6 3DP 3072SP 56.5W	RTX3500m 12G GDDR6 4DP 5120SP 110W			
Ampere Series	80-8358-01-LFF	80-8354-01-LFF	80-8353-01-LFF		
					
	A1000m 4G GDDR6 4DP 2048SP 60W	A2000m 8G GDDR6 4DP 2560SP 80W	A4500m 16G GDDR6 4DP 5888SP 130W		
Turing Series	80-6352-00-LFF	80-8317-01-LFF			
					
	F88 T1000m 4G GDDR6 4DP 896SP 50W	F84 RTX3000m 6G GDDR6 4DP 1920SP 82W			
Pascal Series	80-6439-01-LFF	80-6449-00-LFF	80-8212-04-LFF	80-8212-05-LFF	80-6427-00-LFF
					
	F75 P1000m 4G GDDR5 4DP 512SP 58W	F75 P2000m 4G GDDR5 4DP 768SP 75W	F83 P3000m 6G GDDR5 4DP 1280SP 87W	F83 P4000m 8G GDDR5 4DP 1920SP 85W	F76 P5000m 16G GDDR5 4DP 2048SP 112W

# NVIDIA Quadro Ada Lovelace Series

NVIDIA Quadro RTX3500m 12G GDDR6 Type B MXM3.1



## Specification

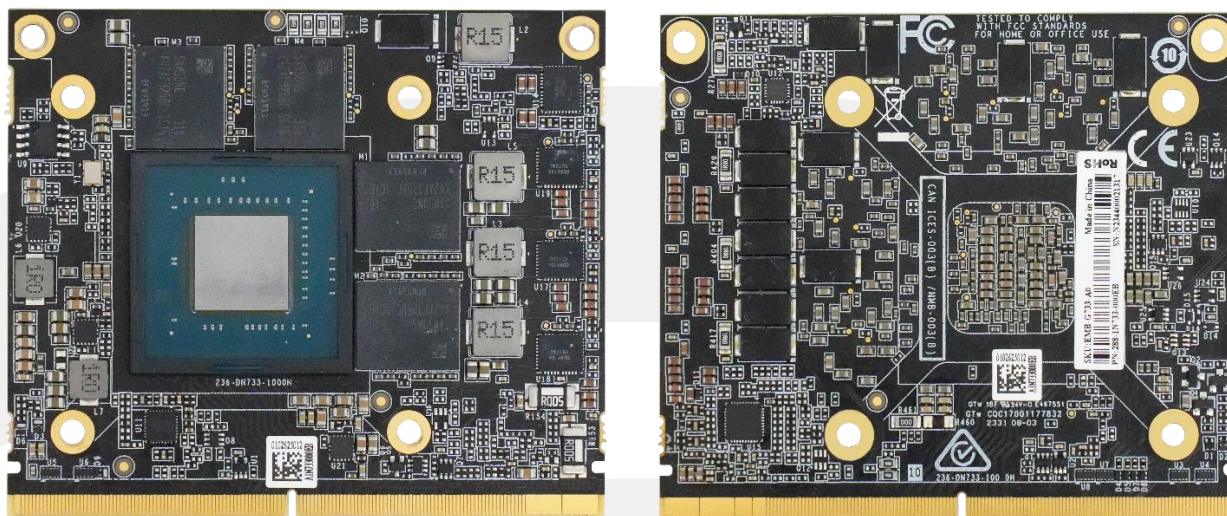
Model	MMR3500B6-12G
<b>GPU Architecture</b>	NVIDIA Ada Lovelace
<b>Graphics Processing Unit</b>	NVIDIA Quadro RTX3500m
<b>NVIDIA CUDA Core</b>	5120SP
<b>Memory Size</b>	12G 192bit GDDR6
<b>Graphics Clock</b>	1725MHz / 2250MHz (Boost)
<b>Memory Bandwidth</b>	432GB/s
<b>Tensor cores</b>	160
<b>RT cores</b>	40
<b>Board Dimensions</b>	MXM Graphics Module Version 3.1 Type B (105x82mm)
<b>Display Features</b>	DP A: Display Port 1.4++ DP B: Display Port 1.4++ DP C: Display Port 1.4++ DP D: Display Port 1.4++
<b>Board Power</b>	110W
<b>Direct X</b>	12
<b>OpenGL</b>	4.6
<b>Operation System</b>	Windows 11、Windows 10 64bit、Linux 64bit
<b>Operating Temperature</b>	0~45°C

Benchmark	Score
<b>3Dmark13</b>	FS:35142
	FSE:17028
	FSU:8274
<b>3Dmark11</b>	E29613
	P27399
	X14859
<b>Heaven</b>	99230
<b>鲁大师</b>	5181



# NVIDIA Quadro Ada Lovelace Series

NVIDIA Quadro RTX2000m 8G GDDR6 Type A MXM3.1



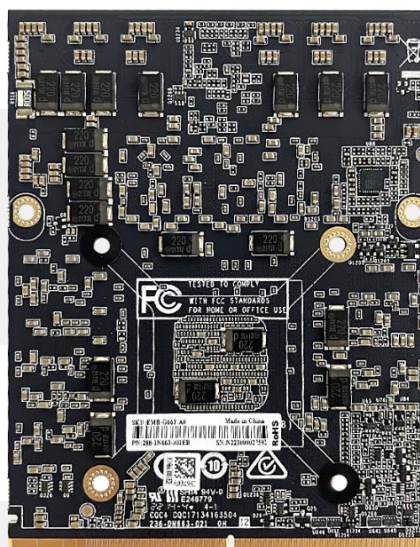
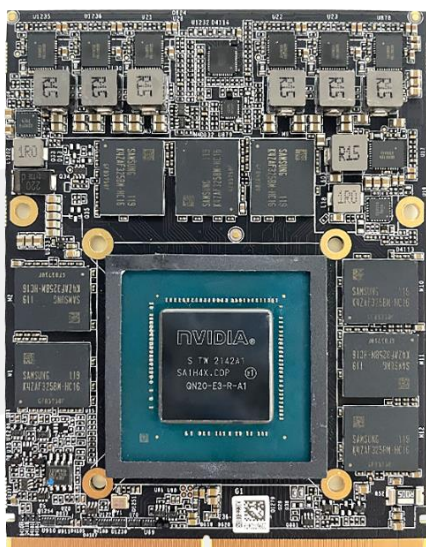
## Specification

Model	MMR2000A6-8G
<b>GPU Architecture</b>	NVIDIA Ada Lovelace
<b>Graphics Processing Unit</b>	NVIDIA Quadro RTX2000m
<b>NVIDIA CUDA Core</b>	3072SP
<b>Memory Size</b>	8G 128bit GDDR6
<b>Graphics Clock</b>	1635MHz / 21150MHz (Boost)
<b>Memory Bandwidth</b>	256GB/s
<b>Tensor cores</b>	96
<b>RT cores</b>	24
<b>Board Dimensions</b>	MXM Graphics Module Version 3.1 Type A (70x82mm)
<b>Display Features</b>	DP A: Display Port 1.4++ DP B: Display Port 1.4++ DP C: Display Port 1.4++
<b>Board Power</b>	56.5W
<b>Direct X</b>	12
<b>OpenGL</b>	4.6
<b>Operation System</b>	Windows 11、Windows 10 64bit、Linux 64bit
<b>Operating Temperature</b>	0~45°C

Benchmark	Score
<b>3Dmark13</b>	FSU:4582
	FSE:9797
	FS:21464
<b>3Dmark11</b>	E25844
	P21364
	X9278
<b>Heaven</b>	5336
<b>鲁大师</b>	317555

# NVIDIA Quadro Ampere Series

NVIDIA Quadro A4500m 16G GDDR6 Type B MXM3.1



## Specification

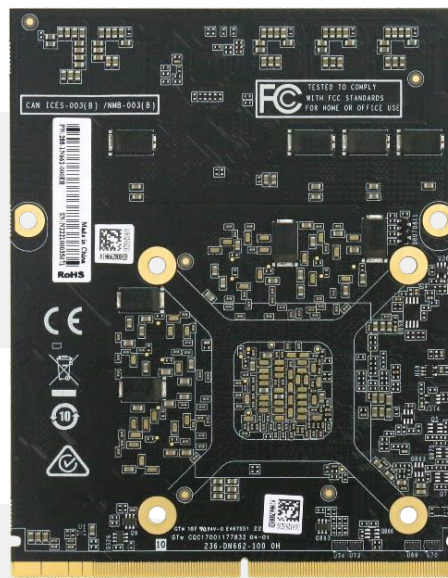
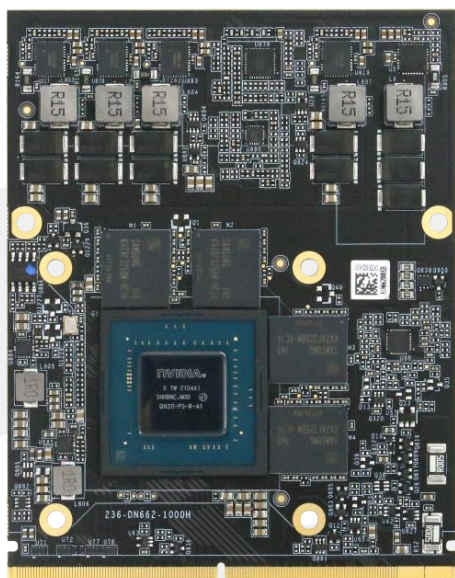
Model	MMA4500B6-16G
<b>GPU Architecture</b>	NVIDIA Ampere
<b>Graphics Processing Unit</b>	NVIDIA Quadro A4500m
<b>NVIDIA CUDA Core</b>	5888SP
<b>Memory Size</b>	16G 256bit GDDR6
<b>Graphics Clock</b>	1020MHz / 1575MHz (Boost)
<b>Memory Bandwidth</b>	512GB/s
<b>Tensor cores</b>	232
<b>RT cores</b>	58
<b>Board Dimensions</b>	MXM Graphics Module Version 3.1 Type B (105x82mm)
<b>Display Features</b>	DP A: Display Port 1.4++ DP B: Display Port 1.4++ DP C: Display Port 1.4++ DP D: Display Port 1.4++
<b>Board Power</b>	130W
<b>Direct X</b>	12 / 4.6
<b>Operation System</b>	Windows 11、Windows 10 64bit、Linux 64bit
<b>Operating Temperature</b>	0~45°C

Benchmark	Score	Benchmark	Score
<b>3Dmark13</b>	FS:27316	<b>Cuda</b>	
	FSE:13288		
	FSU:6600		
<b>3Dmark11</b>	E26516	<b>single kernels</b>	7889.81 / 108910
	P23473		
	X11964		
<b>Heaven</b>	4108	<b>N=10 w/o streams</b>	10126.4 / 266.439
<b>鲁大师</b>	385571	<b>N=10 with streams</b>	9853.04 / 281.048
<b>glmark2</b>	11128	<b>N=10 batched</b>	9904.23 / 281.008



# NVIDIA Quadro Ampere Series

NVIDIA Quadro A2000m 8G GDDR6 Type B MXM3.1



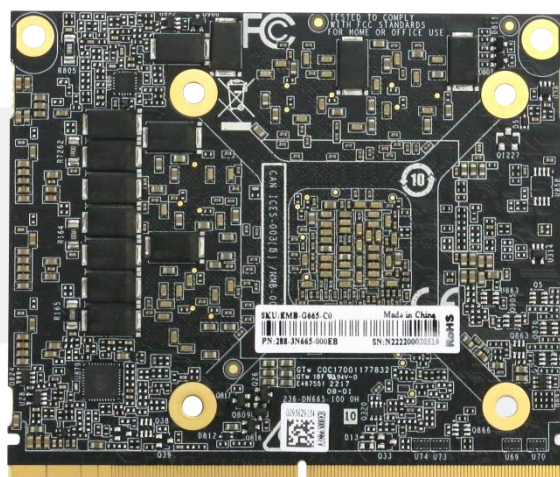
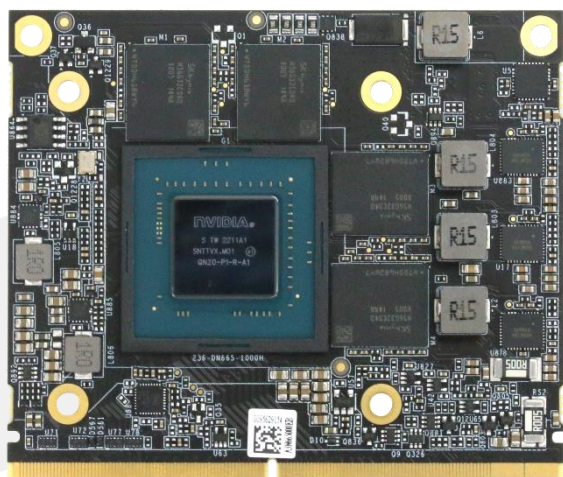
## Specification

Model	MMA2000B6-8G
<b>GPU Architecture</b>	NVIDIA Ampere
<b>Graphics Processing Unit</b>	NVIDIA Quadro A2000m
<b>NVIDIA CUDA Core</b>	2560SP
<b>Memory Size</b>	8G 128bit GDDR6
<b>Graphics Clock</b>	1387MHz / 1815MHz (Boost)
<b>Memory Clock</b>	1750MHz (14.0Gbps)
<b>Single Precision FLOPS</b>	9456GFLOPS
<b>Double Precision FLOPS</b>	155.1GFLOPS
<b>Board Dimensions</b>	MXM Graphics Module Version 3.1 Type B (105x82mm)
<b>Display Features</b>	DP A: Display Port 1.4++ DP B: Display Port 1.4++ DP C: Display Port 1.4++ DP D: Display Port 1.4++
<b>Board Power</b>	80W
<b>Operation System</b>	Windows 11、Windows 10 64bit、Linux 64bit
<b>Operating Temperature</b>	0~45°C

Benchmark	Score	Benchmark	Score
3Dmark13	FS:14887	Cuda	
	FSE:6880		
	FSU:3325		
3Dmark11	E21114	single kernels	689.432 / 5406.84
	P16289		
	X6739		
Heaven	2200	N=10 w/o streams	4500.91 / 106.915
鲁大师	161382	N=10 with streams	5488.8 / 134.173
glmark2	11100	N=10 batched	5187.23 / 133.465

# NVIDIA Quadro Ampere Series

NVIDIA Quadro A1000m 4G GDDR6 Type A MXM3.1



## Specification

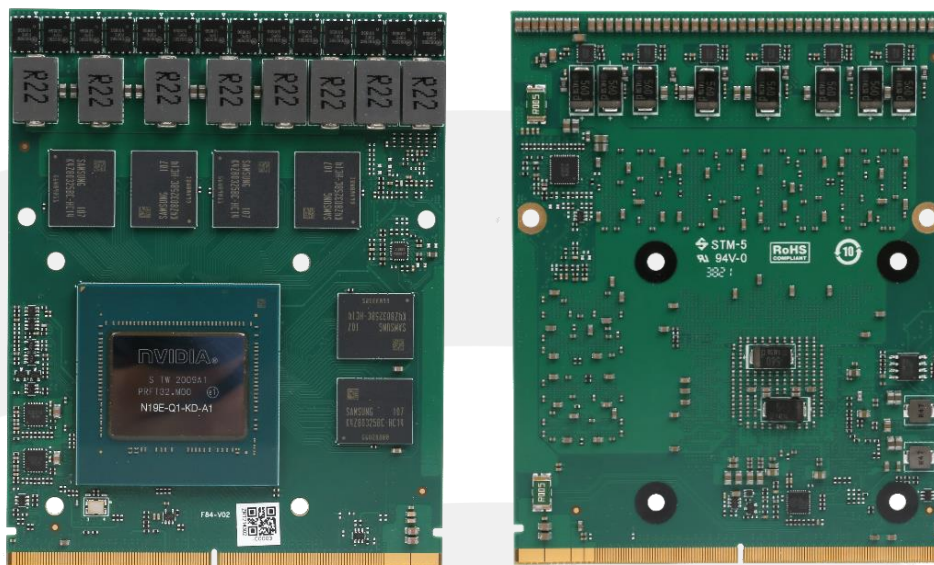
Model	MMA1000A6-4G
<b>GPU Architecture</b>	NVIDIA Ampere
<b>Graphics Processing Unit</b>	NVIDIA Quadro A1000m
<b>NVIDIA CUDA Core</b>	2048SP
<b>Memory Size</b>	4G 128bit GDDR6
<b>Graphics Clock</b>	1192MHz / 1627MHz (Boost)
<b>Memory Clock</b>	1750MHz (14.0Gbps)
<b>Memory Bandwidth</b>	224.0GB/s
<b>Single Precision FLOPS</b>	7652GFLOPS
<b>Double Precision FLOPS</b>	124.1GFLOPS
<b>Board Dimensions</b>	MXM Graphics Module Version 3.1 Type A (70x82mm)
<b>Display Features</b>	DP A: Display Port 1.4++ DP B: Display Port 1.4++ DP C: Display Port 1.4++ DP D: Display Port 1.4++
<b>Board Power</b>	60W
<b>Operation System</b>	Windows 11、Windows 10 64bit、Linux 64bit
<b>Operating Temperature</b>	0~45°C

Benchmark	Score	Benchmark	Score
<b>glmark2</b>	10071	<b>Cuda</b>	
<b>3Dmark13 FS</b>	FS:11916 FSE:5596 FSU:2471	<b>single kernels</b>	562.699 / 5249.91
<b>3Dmark11</b>	E18995 P14150 X5473	<b>N=10 w/o streams</b>	4168.93 / 105.786
<b>3Dmark Vantage</b>	53278	<b>N=10 with streams</b>	4769.3 / 105.847
<b>Heaven</b>	1635	<b>N=10 batched</b>	4012.55 / 105.841
<b>鲁大师</b>	10860		



# NVIDIA Quadro Turing Series

NVIDIA Quadro RTX3000m 6G GDDR6 Type B MXM3.1



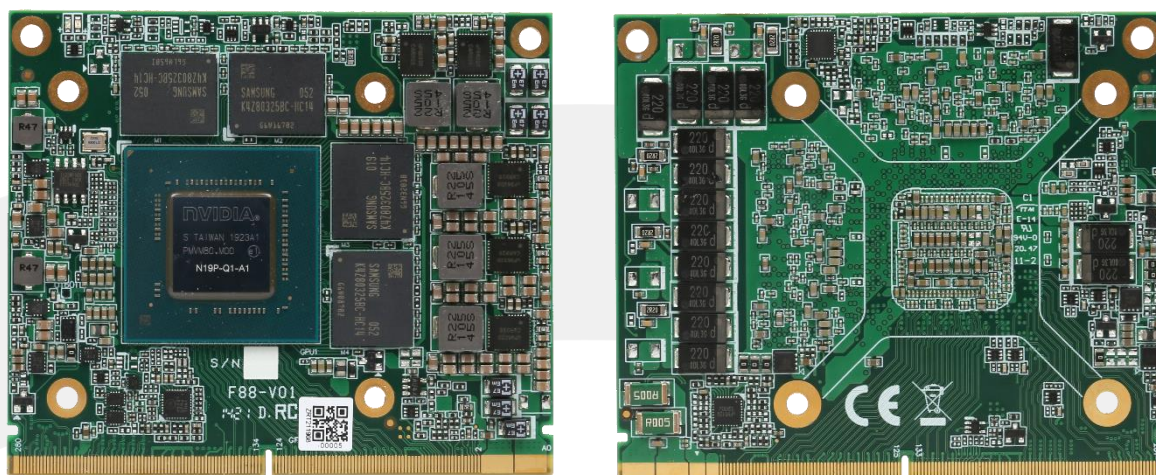
## Specification

Model	MMR3000B6-6G
<b>GPU Architecture</b>	NVIDIA Turing
<b>Graphics Processing Unit</b>	NVIDIA Quadro RTX3000m
<b>NVIDIA CUDA Core</b>	1920SP
<b>Memory Size</b>	6G 192bit GDDR6
<b>Graphics Clock</b>	945MHz / 1380MHz (Boost)
<b>Memory Clock</b>	1750MHz (7.0Gbps)
<b>Single Precision FLOPS</b>	6820GFLOPS
<b>Double Precision FLOPS</b>	223.5GFLOPS
<b>Board Dimensions</b>	MXM Graphics Module Version 3.1 Type B (105x82mm)
<b>Display Features</b>	DP A: Display Port 1.4++ DP B: Display Port 1.4++ DP C: Display Port 1.4++ DP D: Display Port 1.4++
<b>Board Power</b>	82W
<b>Operation System</b>	Windows 10 64bit、Linux 64bit
<b>Operating Temperature</b>	0~45°C

Benchmark	Score	Benchmark	Score
<b>3Dmark13</b>	FS:15709	<b>Cuda</b>	
	FSE:7287		
	FSU:3462		
<b>3Dmark11</b>	E21557	<b>single kernels</b>	3103.59 / 86451.8
	P16749		
	X6954		
<b>Heaven</b>	4065	<b>N=10 w/o streams</b>	5278.91 / 225.733
<b>鲁大师</b>	200677	<b>N=10 with streams</b>	5315.12 / 277.525
<b>glmark2</b>	12248	<b>N=10 batched</b>	5096.35 / 225.435

# NVIDIA Quadro Turing Series

NVIDIA Quadro T1000m 4G GDDR6 Type A MXM3.1



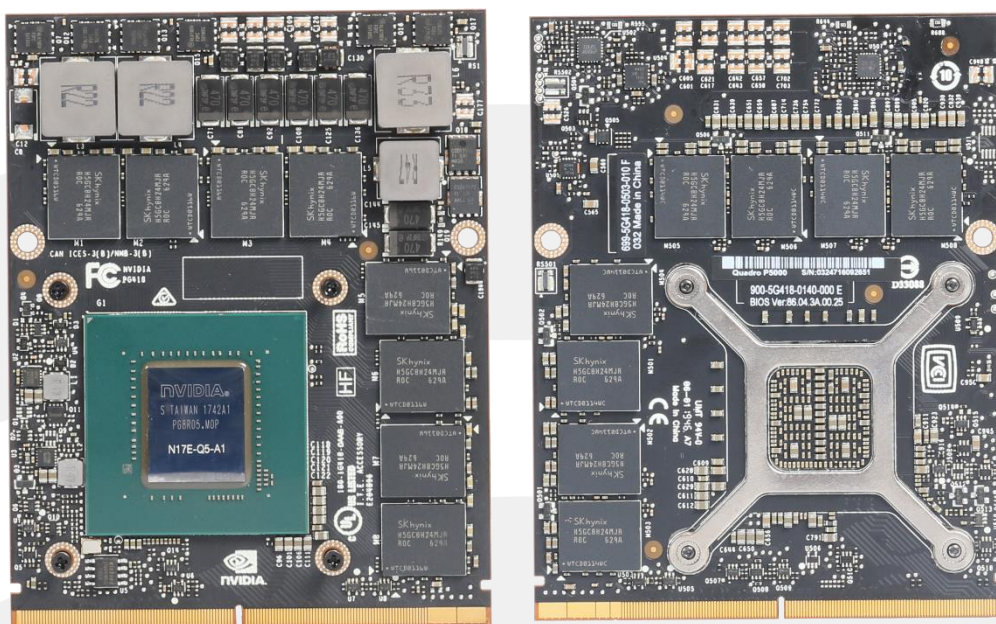
## Specification:

Model	MMT1000A6-4G
<b>GPU Architecture</b>	NVIDIA Turing
<b>Graphics Processing Unit</b>	NVIDIA Quadro T1000m
<b>NVIDIA CUDA Core</b>	896SP
<b>Memory Size</b>	4G 128bit GDDR6
<b>Graphics Clock</b>	1395MHz / 1650MHz (Boost)
<b>Memory Clock</b>	1500MHz (12.0Gbps)
<b>Memory Bandwidth</b>	192.0GB/s
<b>Single Precision FLOPS</b>	3458GFLOPS
<b>Double Precision FLOPS</b>	107.7GFLOPS
<b>Board Dimensions</b>	MXM Graphics Module Version 3.1 Type A (70x82mm)
<b>Display Features</b>	DP A: Display Port 1.4++ DP B: Display Port 1.4++ DP C: Display Port 1.4++ DP D: Display Port 1.4++
<b>Board Power</b>	45W
<b>Operation System</b>	Windows 10 64bit, Linux 64bit
<b>Operating Temperature</b>	0~45°C

Benchmark	Score	Benchmark	Score
<b>glmark2</b>	10071	<b>Cuda</b>	
<b>3Dmark13 FS</b>	FS:9749 FSE:4365 FSU:1975	<b>single kernels</b>	2336.12 / 57831.1
<b>3Dmark11</b>	E18436 P12993 X4539	<b>N=10 w/o streams</b>	2629.1 / 106.733
<b>3Dmark Vantage</b>	43970	<b>N=10 with streams</b>	3169.43 / 107.89
<b>Heaven</b>	1105	<b>N=10 batched</b>	1835.12 / 107.791
<b>鲁大师</b>	116398		

# NVIDIA Quadro Pascal Series

NVIDIA Quadro P5000m 16G GDDR5 Type B MXM3.1



## Specification:

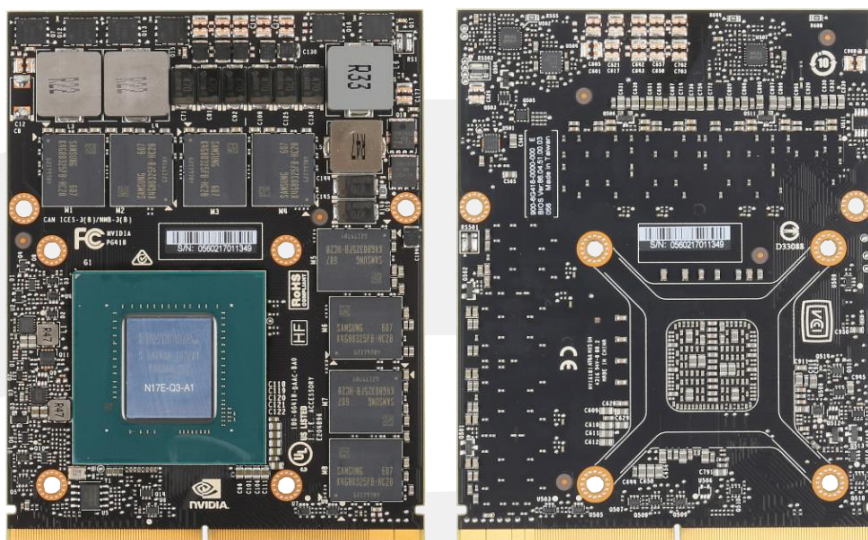
Model	MMP5000B5-16G
GPU Architecture	NVIDIA Pascal
Graphics Processing Unit	NVIDIA Quadro P5000m
NVIDIA CUDA Core	2048SP
Memory Size	16G 256bit GDDR5
Graphics Clock	1278MHz / 1582MHz (Boost)
Memory Clock	1502MHz (6.0Gbps)
Memory Bandwidth	192.3GB/s
Single Precision FLOPS	6494GFLOPS
Double Precision FLOPS	209.1GFLOPS
Board Dimensions	MXM Graphics Module Version 3.1 Type B (105x82mm)
Display Features	DP A: Display Port 1.4++ DP B: Display Port 1.4++ DP C: Display Port 1.4++ DP D: Display Port 1.4++
Board Power	112W
Operation System	Windows 10 64bit、Linux 64bit
Operating Temperature	0~45°C

Benchmark	Score	Benchmark	Score
3Dmark13 FS	12720	<b>Cuda</b>	
3Dmark11	P15413 X6876	single kernels	4367.13 / 155.763
3Dmark Vantage	41550	N=10 w/o streams	4915.69 /198.913
Heaven	5630	N=10 with streams	5395.71 / 197.42
鲁大师	199701	N=10 batched	6098.41 / 199.216



# NVIDIA Quadro Pascal Series

NVIDIA Quadro P4000m 8G GDDR5 Type B MXM3.1



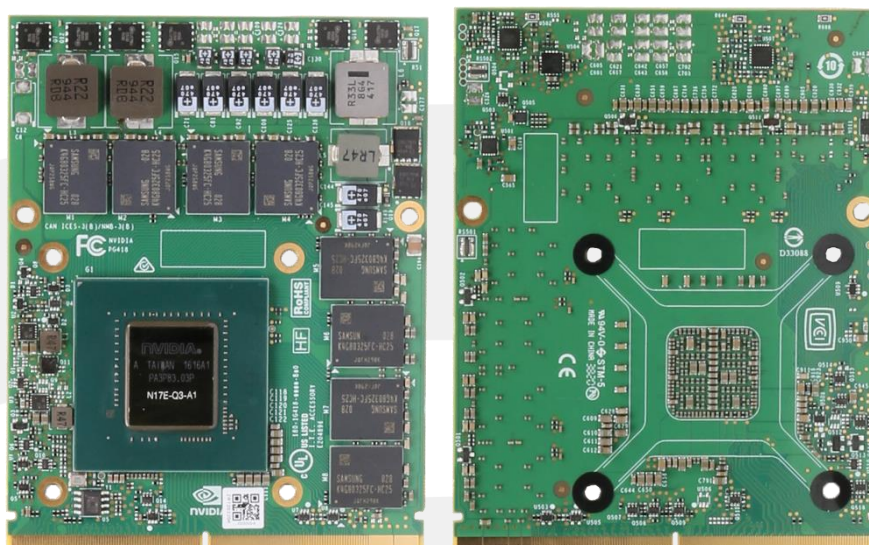
## Specification:

Model	MMP4000B5-8G V2
<b>GPU Architecture</b>	NVIDIA Pascal
<b>Graphics Processing Unit</b>	NVIDIA Quadro P4000m
<b>NVIDIA CUDA Core</b>	1792SP
<b>Memory Size</b>	8G 256bit GDDR5
<b>Graphics Clock</b>	1202MHz / 1228MHz (Boost)
<b>Memory Clock</b>	1502MHz (6.0Gbps)
<b>Single Precision FLOPS</b>	4112GFLOPS
<b>Double Precision FLOPS</b>	135.7GFLOPS
<b>Board Dimensions</b>	MXM Graphics Module Version 3.1 Type B (105x82mm)
<b>Display Features</b>	DP A: Display Port 1.4++ DP B: Display Port 1.4++ DP C: Display Port 1.4++ DP D: Display Port 1.4++
<b>Board Power</b>	92W
<b>Operation System</b>	Windows 7/8/8.1/10 64bit, Linux 64bit
<b>Operating Temperature</b>	0~45°C

Benchmark	Score	Benchmark	Score
<b>3Dmark13</b>	FS:12446	<b>Cuda</b>	
	FSE:5959		
	FSU:2912		
<b>3Dmark11</b>	E17273	<b>single kernels</b>	3674.16 / 118.685
	P13451		
	X5532		
<b>Heaven</b>	1881	<b>N=10 w/o streams</b>	3573.27 / 121.955
<b>鲁大师</b>	152555	<b>N=10 with streams</b>	3716.97 / 119.576
<b>glmark2</b>	12494	<b>N=10 batched</b>	4011.49 / 120.57

# NVIDIA Quadro Pascal Series

NVIDIA Quadro P4000m 8G GDDR5 Type B MXM3.1



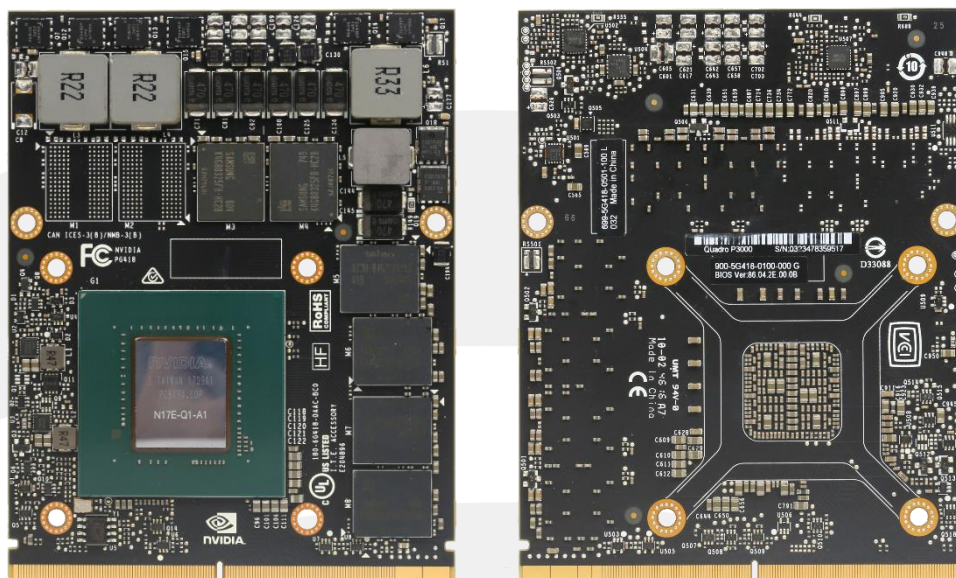
## Specification:

Model	MMP4000B5-8G
<b>GPU Architecture</b>	NVIDIA Pascal
<b>Graphics Processing Unit</b>	NVIDIA Quadro P4000m
<b>NVIDIA CUDA Core</b>	1920SP
<b>Memory Size</b>	8G 256bit GDDR5
<b>Graphics Clock</b>	1202MHz / 1228MHz (Boost)
<b>Memory Clock</b>	1502MHz (6.0Gbps)
<b>Single Precision FLOPS</b>	4528GFLOPS
<b>Double Precision FLOPS</b>	150.3GFLOPS
<b>Board Dimensions</b>	MXM Graphics Module Version 3.1 Type B (105x82mm)
<b>Display Features</b>	DP A: Display Port 1.4++ DP B: Display Port 1.4++ DP C: Display Port 1.4++ DP D: Display Port 1.4++
<b>Board Power</b>	85W
<b>Operation System</b>	Windows 7/8/8.1/10 64bit、Linux 64bit
<b>Operating Temperature</b>	0~45°C

Benchmark	Score	Benchmark	Score
<b>3Dmark13</b>	FS:13130	<b>Cuda</b>	
	FSE:6220		
	FSU:3102		
<b>3Dmark11</b>	E17572	<b>single kernels</b>	3894.01 / 142.081
	P14013		
	X5880		
<b>Heaven</b>	3048	<b>N=10 w/o streams</b>	4112.14 / 142.202
<b>鲁大师</b>	161566	<b>N=10 with streams</b>	4059.76 / 142.968
<b>glmark2</b>	11801	<b>N=10 batched</b>	4457.41 / 142.986

# NVIDIA Quadro Pascal Series

NVIDIA Quadro P3000m 6G GDDR5 Type B MXM3.1



## Specification:

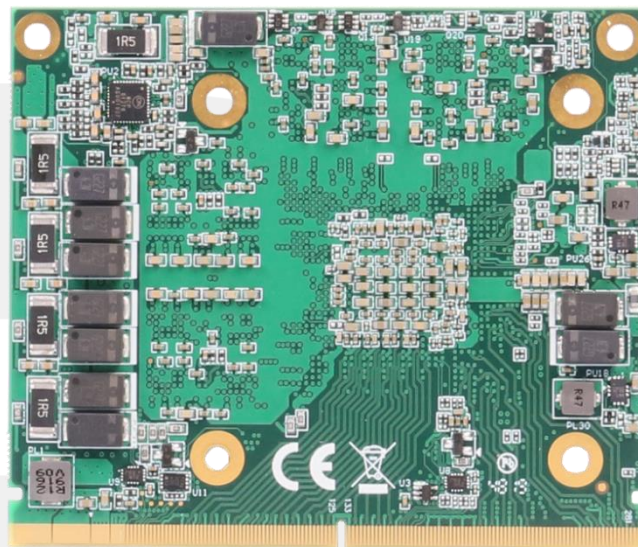
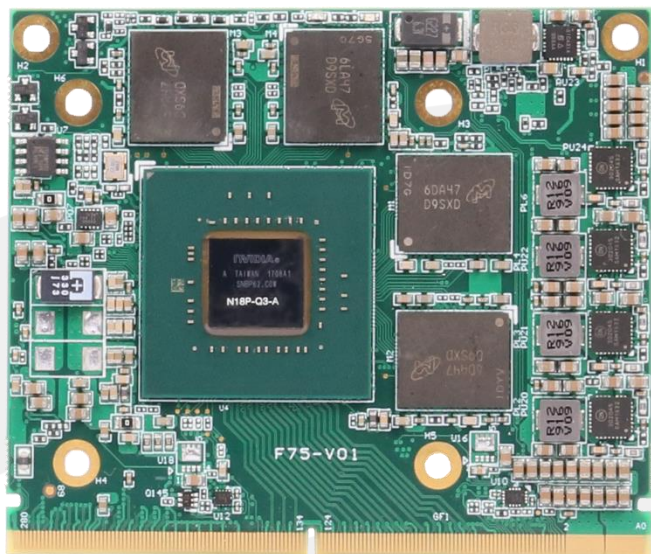
Model	MMP3000B5-6G
<b>GPU Architecture</b>	NVIDIA Pascal
<b>Graphics Processing Unit</b>	NVIDIA Quadro P3000m
<b>NVIDIA CUDA Core</b>	1280SP
<b>Memory Size</b>	6G 192bit GDDR5
<b>Graphics Clock</b>	1088MHz / 1215MHz (Boost)
<b>Memory Clock</b>	1752MHz (7.0Gbps)
<b>Single Precision FLOPS</b>	2908GFLOPS
<b>Double Precision FLOPS</b>	96.52GFLOPS
<b>Board Dimensions</b>	MXM Graphics Module Version 3.1 Type B (105x82mm)
<b>Display Features</b>	DP A: Display Port 1.4++ DP B: Display Port 1.4++ DP C: Display Port 1.4++ DP D: Display Port 1.4++
<b>Board Power</b>	87W
<b>Operation System</b>	Windows 7/8/8.1/10 64bit, Linux 64bit
<b>Operating Temperature</b>	0~45°C

Benchmark	Score	Benchmark	Score
<b>3Dmark13</b>	FS:9361	<b>Cuda</b>	
	FSE:4409		
	FSU:2138		
<b>3Dmark11</b>	E14916	<b>single kernels</b>	2306.53 / 91.1071
	P10889		
	X4065		
<b>Heaven</b>	1323	<b>N=10 w/o streams</b>	2588.46 / 91.3833
<b>鲁大师</b>	111895	<b>N=10 with streams</b>	2564.41 / 91.6849
<b>glmark2</b>	9979	<b>N=10 batched</b>	2853.39 / 91.6422



# NVIDIA Quadro Pascal Series

NVIDIA Quadro P2000m 4G GDDR5 Type A MXM3.1



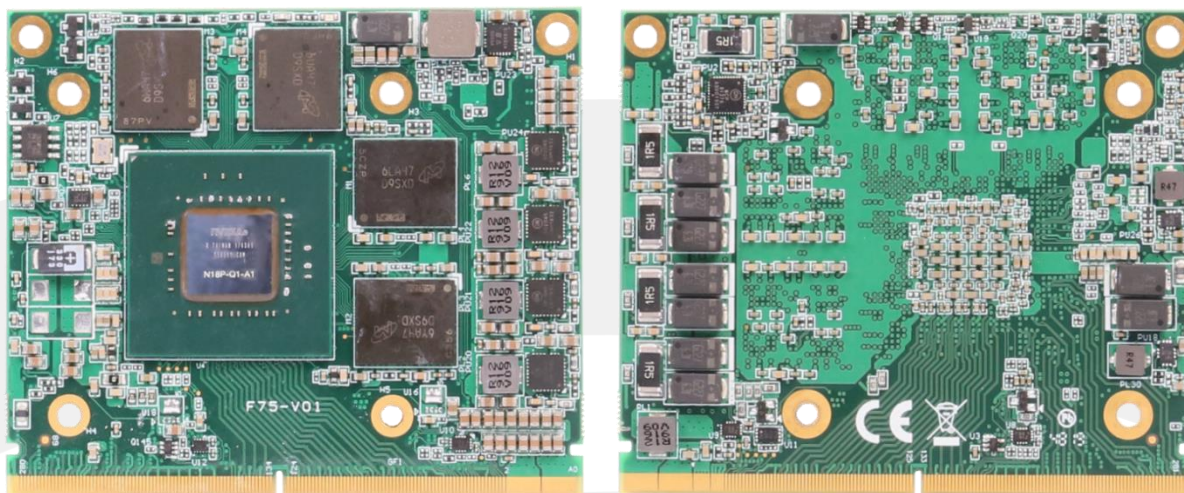
## Specification:

Model	MMP2000A5-4G
<b>GPU Architecture</b>	NVIDIA Pascal
<b>Graphics Processing Unit</b>	NVIDIA Quadro Embedded P2000m
<b>NVIDIA CUDA Core</b>	768SP
<b>Memory Size</b>	4G 128bit GDDR5
<b>Graphics Clock</b>	1455MHz / 1481MHz (Boost)
<b>Memory Clock</b>	1502MHz (6.0Gbps)
<b>Single Precision FLOPS</b>	2214GFLOPS
<b>Double Precision FLOPS</b>	69.76GFLOPS
<b>Board Dimensions</b>	MXM Graphics Module Version 3.1 Type A (70x82mm)
<b>Display Features</b>	DP A: Display Port 1.4++ DP B: Display Port 1.4++ DP C: Display Port 1.4++ DP D: Display Port 1.4++
<b>Board Power</b>	58W
<b>Operation System</b>	Windows 10 64bit、Linux 64bit
<b>Operating Temperature</b>	0~45°C
<b>Storage Temperature</b>	-20~75°C

Benchmark	Score	Benchmark	Score
<b>3Dmark13 FS</b>	6800	<b>Cuda</b>	
<b>3Dmark11</b>	E8589	<b>single kernels</b>	1785.5 / 65.0026
	P6821		
	X2962		
<b>3Dmark Vantage</b>	29823	<b>N=10 w/o streams</b>	1851.34 / 65.8818
<b>Heaven</b>	2711	<b>N=10 with streams</b>	1881.4 / 66.1985
<b>鲁大师</b>	81544	<b>N=10 batched</b>	2063.9 / 65.6442

# NVIDIA Quadro Pascal Series

NVIDIA Quadro P1000m 4G GDDR5 Type A MXM3.1



## Specification:

Model	MMP1000A5-4G
<b>GPU Architecture</b>	NVIDIA Pascal
<b>Graphics Processing Unit</b>	NVIDIA Quadro Embedded P1000m
<b>NVIDIA CUDA Core</b>	512SP
<b>Memory Size</b>	4G 128bit GDDR5
<b>Graphics Clock</b>	1354MHz / 1392MHz (Boost)
<b>Memory Clock</b>	1502MHz (6.0Gbps)
<b>Single Precision FLOPS</b>	1407GFLOPS
<b>Double Precision FLOPS</b>	44.14GFLOPS
<b>Board Dimensions</b>	MXM Graphics Module Version 3.1 Type A (70x82mm)
<b>Display Features</b>	DP A: Display Port 1.4++ DP B: Display Port 1.4++ DP C: Display Port 1.4++ DP D: Display Port 1.4++
<b>Board Power</b>	58W
<b>Operation System</b>	Windows 10 64bit、Linux 64bit
<b>Operating Temperature</b>	0~45°C
<b>Storage Temperature</b>	-20~75°C

Benchmark		Score	
<b>3Dmark13 FS</b>	4580	<b>Cuda</b>	
3Dmark11	E7726	<b>single kernels</b>	1164.74 / 41.5765
	P5573		
	X2023		
3Dmark Vantage	20859	<b>N=10 w/o streams</b>	1221.94 / 41.8201
Heaven	1816	<b>N=10 with streams</b>	1198.93 / 41.6121
鲁大师	50528	<b>N=10 batched</b>	1298.74 / 41.6423

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