

Service and Support Department

Gaming Desktop -Enabling Resizable BAR

June 28th 2021

1. Eligibility Check If your system is on the list, please proceed to Step 2.

Compatible Desktop			
DT Series	Marketing Name		
	Aegis RS 10DS-217US		
	Aegis RS 10TD-059US		
	Aegis RS 10TD-067US		
	Aegis RS 10TD-213US		
	Aegis RS 10TE-054US		
	Aegis RS 10TE-058US		
	Aegis RS 10TE-066US		
	Aegis RS 10TE-072US		
Aegis RS	Aegis RS 10TE-081US		
	Aegis RS 10TF-214US		
	Aegis RS 10TG-091US		
	Aegis RS 10TH-060US		
	Aegis RS 10TH-061US		
	Aegis RS 11TD-096US		
	Aegis RS 11TE-095US		
	Aegis RS 11TE-219US		
	Aegis RS 11TG-222US		
	Aegis R 10TC-083US		
	Aegis R 10TC-087US		
	Aegis R 10TC-204US		
Apris D	Aegis R 10TC-205US		
Aegis k	Aegis R 10TC-220US		
	Aegis R 10TD-055US		
	Aegis R 10TD-068US		
	Aegis R 10TG-069US		
	Codex R 10TC-027US		
	Codex R 10TC-028US		
Codex R	Codex R 10TD-022US		
	Codex R 10TG-020US		
	Codex R 10TG-021US		
	Infinite RS 10TD-065US		
	Infinite RS 10TD-080US		
	Infinite RS 10TD-208US		
	Infinite RS 10TE-063US		
Infinite RS	Infinite RS 10TE-064US		
	Infinite RS 10TH-062US		
	Infinite RS 11TE-092US		
	Infinite RS 11TE-093US		

for specific technical requirements for Resizeable BAR, see *1.1

*1.1 Eligibility Check supplemental

Resizable BAR is available for systems with compatible CPU, VGA, and chipset, along with the latest BIOS and GeForce Game Ready driver:

Compa	atible Graphic Cards (NVIDIA Ampe	ere)
	RTX 3090	
	RTX 3080 Ti	
	RTX 3080	
	RTX 3070 Ti	
	RTX 3070	
	RTX 3060 Ti	
	RTX 3060	

Compatible CPUs (Intel & AMD)					
Intel 10th Gen	Intel 11th Gen S	AMD Zen 3			
i9-10xxx	i9-11xxx	Ryzen 3 5xxx			
i7-10xxx	i7-11xxx	Ryzen 5 5xxx			
i5-10xxx	i5-11xxx	Ryzen 7 5xxx			
i3-10xxx		Ryzen 9 5xxx			

Compatible Chipsets (Intel & AMD)				
Intel Series	AMD Series			
Z590	X570			
B560	B550			
H510	A520			
Z490	X470			
B460	B450			
H410				

2. Compatibility Continue

To verify Resizable BAR status, open NVIDIA Control Panel (rightclick on Desktop) and select Help > System Information from the top menu.

If Resizable BAR is showing "No", proceed to Step 3.

ystem Information				
Detailed information abou	t your NVIDIA hardware and the	system it's running or	1.	
Display Components				
System information Operating system: W DirectX runtime version: 12	indows 10 Home, 64-bit			
Items	Details			
NVIDIA GeForce RTX 3070	Driver version: Driver Type: Direct3D feature lev CUDA Cores:	466.11 DCH 12_1 5888	^	
	Resizable BAR	No		
	Graphics boost clock: Memory data rate: Memory interface: Memory bandwidth:	1755 MHz 14.00 Gbps 256-bit 448.06 GB/s		
	Total available grap Dedicated video me	24536 MB 8102 MR CDDR6	~	
			About	

3. Updating the MB BIOS

To download and update to the latest BIOS for your system's motherboard, please follow the instructions below:

 From <u>https://us.msi.com/Desktops</u>, go to your system's product page by clicking Support and selecting the model.



2. Download the latest BIOS, extract, and save its content onto a USB flash drive. Leave the USB drive inserted.

Products Service		Driver	Manual	Utility	
Download	Special Note:				
Ask a Question	How to make a bootable f Please to load optimized	lash disk and to flash BIOS, ple default first after flashing BIOS	ease click here.		
	For Windows 7 /Windows	8/ Windows 8.1/ Windows 10 S	0P		
Specification					
Warranty Information	- BIOS				
O Contact Us	Release Date 2021-02-03	File Size 7.68 MB			٩

 Restart your computer and enter BIOS by pressing "DEL" during boot up.



3. Updating the MB BIOS - cont'd

4. Press M-Flash and click "Yes" to enter M-Flash mode. *Alternatively,* you can press "CTRL+ALT+T" to enter.



5. Select the BIOS file that was saved onto the USB flash drive. Please make sure the PC is not turned off during this process.

			dr cpu 37 ℃ / 98 °F	🏀 CPU 985 RPI
File Path : fs0:\E7C8	2IZ1.1A2	r 11 -		
FS0: Generic Flash	Disk 8.07	Are you sure to select this E7C82IZ1.1A2 Yes N	s file? 216 E7C82IZ1	Volume Information
Current BIOS] Selected BIOS]	Model Name: E7C8212 Model Name: E7C8212	1 Version: V1.A2 Version: V1.A2	Build Date: 04/20/202 Build Date: 04/20/202	

6. System will automatically reboot after the flash has completed.

4. Updating the vBIOS

To enable Resizable BAR, compatible graphics cards require a vBIOS update through MSI Dragon Center or MSI Live Update.

At the top right corner of the Dragon Center menu, go to Support, Advanced, and click "Scan".

1 👸	nsi Dragon Center	0.	MSI Devi	ce 👻	Scenario : 👻 Gamin	— X g Mode : ON
	Advanced Update MSI deer not recommend to update BIOS when system has no powe.				Scan	
ŝ	Item		Current Ver.	Online Ver.	Size	
88						
	MH-V388		173	174	3.4 MB	
(ij)	Last Scan : 2021/04/01				Install	

Once scanning is complete, the program will show any available firmware and/or vBIOS update. Please update to the latest vBIOS for your VGA by checking the box in front of it, then click "Install" and follow the instructions.

8	nsi oragon center	•	MSI Device 🗸	Gaming Mode :
	Advanced Update			
ŝ				Ĩ
88				
	System reboot is mandatory to Do not shutdown the system du	complete BIOS/drivers/software uring installation process.	: update.	
	Install		Cancel	
3				

4. Updating the VBIOS Continue

When the vBIOS update begins, it will prompt for confirmation. Press "Y"

NVIDIA Firm	nware Update
EEPROM ID (C2,2534) : MX MX25U8033E-MX25U8035F 1.65-2.0V 8192Kx1S, page
Current	 Version:94.04.25.80.54 ID:10DE:2484:1462:3908 GPU Board (Normal Board)
Replace wit	h - Version:94.04.3A.40.63 ID:10DE:2484:1462:3908 GPU Board (Normal Board)
Update disp	lay adapter firmware?

Wait for the update process to complete.

av NVIDIA Firmware Update

```
EEPROM ID (C2,2534) : MX MX25U8033E-MX25U8035F 1.65-2.0V 8192Kx15, page

EEPROM ID (C2,2534) : MX MX25U8033E-MX25U8035F 1.65-2.0V 8192Kx15, page

Current - Version:94.02.26.40.97 ID:10DE:2204:1462:3881

GPU Board (Normal Board)

Replace with - Version:94.02.42.00.2F ID:10DE:2204:1462:3881

GPU Board (Normal Board)

Update display adapter firmware?

Press 'y' to confirm (any other key to abort):

EEPROM ID (C2,2534) : MX MX25U8033E-MX25U8035F 1.65-2.0V 8192Kx15, page

Storing updated firmware image...

J 70 %
```

Once completed, restart the PC.

5. Updating the NVIDIA Drivers

Go to https://www.nvidia.com/Download/index.aspx?lang=en-us to download the latest NVIDIA drivers. Run the downloaded NVIDIA file and Click OK to extract the setup files *driver version at the time of download may be different



Wait for the Extraction



Click on "Agree and Continue"



Select "Custom (Advanced)"



Click on "Next"



Check "Perform a Clean Installation"

NVIDIA Installer			-	
NVIDIA Graphics Version 382.53	s Driver			
 System Check License Agreement 	Custom installati	on optic	ons	
Options	Component	New Version	Current Version	
Install Finish	Graphics Driver 3D Vision Driver HD Audio Driver NVIDIA GeForce Experien PhysX System Software	382.53 382.53 1.3.34.27 3.6.0.74 9.17.0329	382.33 382.33 1.3.34.26 3.6.0.74 9.17.0329	
	Perform a clean installation	s all NVIDIA settir ated.	gs to the default valu	e and removes
	BA	ск	NEXT	<u>C</u> ANCEL

Click on "Next"



Wait for process to complete



*Some systems will uninstall the drivers and then prompt for a reboot in between, please reboot and the new driver install will automatically resume after login

When Installation is complete, click on "Close" and restart the PC.

Sustam Chack	NVIDIA Installer	has finis	hed
 System Check License Agreement 	Component	Version	Status
Options	PhysX System Software	9.17.0329	A newer or a same version
Inetall	HD Audio Driver	1.3.34.27	Installed
listan	Graphics Driver	362.53	Installed
Finish	3D Vision Driver	382.53	Installed
	<		
	Create desktop shortcut for	NVIDIA GeForce	Experience

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6. Enabling Resizable BAR under BIOS

Enter BIOS by restarting your system and pressing "DEL" during boot up. Go to "Settings > Advanced > PCI Subsystem Settings"

Enable the following settings:

- Re-Size BAR Support
- Above 4G memory/Crypto Currency mining

Then **press** "F10", to save the settings and reboot.



Menus may vary depending on motherboard model, rut the Re-Size BAR Support sub-menu should always be there.



7. Verify Drivers Support Resizebar Feature

To verify Resizable BAR status , open the NVIDIA Control Panel and select "Help > System Information" from the menu.

> Check if Resizable BAR is showing "YES". If it is, your system is now Resizable BAR-ready. Congratulations!

tem Information				
Detailed information about yo	our NVIDIA hardware and the	system it's running on.		
isplay Components				
System information				
Operating system: Wind	ows 10 Home, 64 bit			
DirectX runtime version: 12.0				
Graphics card information				
Graphics card information	Details			
Graphics card information Items NVIDIA GeForce RTX 3070	Details Driver version:	466.11	^	
Graphics card information Items NVIDIA GeForce RTX 3070	Details Driver version: Driver Type:	466.11 DCH	^	
Graphics card information Items NVIDIA GeForce RTX 3070	Details Driver version: Driver Type: Direct3D feature lev	466.11 DCH 12_1	^	
Graphics card information Items NVIDIA GeForce RTX 3070	Details Driver version: Driver Type: Direct3D feature lev CLIDA Cores:	466.11 DCH 12_1 5888	^	
Graphics card information Items NVIDIA GeForce RTX 3070	Details Driver version: Driver Type: Direct3D feature lev CUDA Cores: Resizable BAR	466.11 DCH 12_1 5888 Yes	^	
Graphics card information Items NVIDIA GeForce RTX 3070	Details Driver version: Driver Type: Direct3D feature lev CUDA Cores: Resizable BAR Graphics boost clock:	466.11 DCH 12_1 5888 Yes 1755 MHz	^	
Graphics card information Items NVIDIA GeForce RTX 3070	Details Driver version: Driver Type: Direct3D feature lev CLIDA Cores: Resizable BAR Graphics boost clock: Memory data rate:	466.11 DCH 12_1 5888 Yes 1755 MHz 14.00 Gbps	^	
Graphics card information Items NVIDIA GeForce RTX 3070	Details Driver version: Driver Type: Direct3D feature lev CLIDA Cores: Resizable BAR Graphics boost clock: Memory data rate: Memory interface:	466.11 DCH 12_1 5888 Yes 1755 MHz 14.00 Gbps 256-bit	^	
Graphics card information Items NVIDIA GeForce RTX 3070	Details Driver version: Driver Type: Direct3D feature lev CUDA Cores: Resizable BAR Graphics boost clock: Memory data rate: Memory interface: Memory bandwidth:	466.11 DCH 12_1 5888 Yes 1755 MHz 14.00 Gbps 256-bit 448.06 GB/s	^	
Graphics card information Items NVIDIA GeForce RTX 3070	Details Driver version: Driver Type: Direct3D feature lev CUDA Cores: Resizable BAR Graphics boost clock: Memory data rate: Memory data rate: Memory bandwidth: Total available grap	466.11 DCH 12_1 5888 Yes 1755 MHz 14.00 Gbps 256-bit 448.06 GB/s 24536 MB		