

FAQ / Application Note

Subject: Intel SATA RAID SOP

FAQ Document No: S21019	Date: 2021/12/28
Model Name. HPM series	Rev. A1

Category: □General □H/W ■S/W □Others, 寫小分類

Purpose:

Know how to setup intel SATA RAID

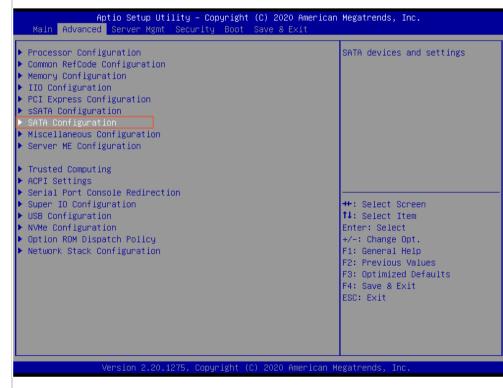
Note: Intel VROC SATA RAID is only available when the system is configured for UEFI boot mode.

To set RAID configuration, please follow the instructions below.

Set RAID 1 (DATA Mirroring)

Step 1:

- Enter SATA Configuration. If you install HDD in SSATA1 or SSATA2, go to sSATA Configuration.



· Select "SATA Mode options" as "RAID"

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Aptio Setup Utilit Advanced	y – Copyright (C) 2020 America	n Megatrends, Inc.
SATA Configuration		 Identify the SATA port is connected to Solid State Drive or Hard Disk Drive
SATA Controller Configure SATA as SATA RSTE Boot Info ▶ SATA Mode options	[Enable] [RAID] [Enable]	
Alternate Device ID on RAID Load EFI Driver for RAID	[Disable] [Enable]	
SATA1 Software Preserve SATA Port Hot Plug	Configure SATA as — AHCI RAID	++: Select Screen t∔: Select Item
Spin Up Device SATA Device Type SATA2	[Disable] [Hard Disk Drive] WDC WD5000LPLX - 500.1 GB	Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values
Software Preserve SATA Port Hot Plug Spin Up Device SATA Device Type	Unknown [Enable] [Disable] [Disable] [Hard Disk Drive]	F3: Optimized Defaults F4: Save & Exit ESC: Exit
SATAS	[Not Installed]	00 •
Version 2.20.1275	. Copyright (C) 2020 American	Megatrends, Inc.

- Press "F4" to Save and Reset system

Step 2: Enter "Intel® VROC SATA Controller"

 Processor Configuration Common RefCode Configuration Memory Configuration IIO Configuration PCI Express Configuration SSATA Configuration SATA Configuration Miscellaneous Configuration Server ME Configuration 	This formset allows the user to manage RAID volumes on the Intel(R) RAID Controller
 Trusted Computing ACPI Settings Serial Port Console Redirection Super ID Configuration USB Configuration NVMe Configuration Option ROM Dispatch Policy Network Stack Configuration Intel(R) VROC SATA Controller 	++: Select Screen f1: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit

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Step 3: Enter "Create RAID Volume"

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Intel(R) VROC 6.0.0.1024 SATA Driver ▶ Create RAID Volume	This page allows you to create a RAID volume
Non-RAID Physical Disks: ▶ Port 0, TOSHIBA MQ01ABD100 SN:Y2FSP0A8T, 931.51GB ▶ Port 1, WDC WD5000LPLX-08ZNTTO SN:WD-WXJ1AB5151TT, 465.76GB	
	<pre>++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit</pre>
Vancian 2 20 4275 Conunight (C) 2020 American M	

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Step 4:

- Enter "Name" as "name of RAID"
- Set "RAID Level" as "RAID1"
- Select Disks "Port 0" and "Port 1"
- Select "Capacity"
- Enter "Create Volume"

Aptio Setup Utility - Advanced	Copyright (C) 2020 American	Megatrends, Inc.
Create RAID Volume		Create a volume with the settings specified above
Name: RAID Level:	Volume0 [RAID1(Mirror)]	Sectings specified above
Select Disks: Port 0, TOSHIBA MQ01ABD100 SN:Y2FSP0ABT, 931.516B	[X]	
Port 1, WDC WD5000LPLX-082NTTO SN:WD-WXJ1AB5151TT, 465.76GB	[X]	
Capacity (GB):	442.46	
▶ Create Volume		<pre>++: Select Screen 14: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit</pre>
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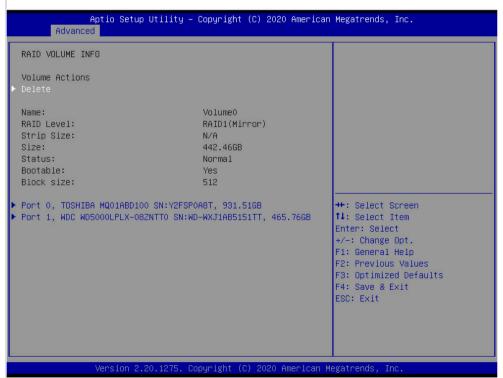
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Step 5: RAID1 has been created. Select "Volume0" to check details.

Intel(R) VROC 6.0.0.1024 SATA Driver	Select to see more information
Create RAID Volume	about the RAID Volume
RAID Volumes: Volume0, RAID1(Mirror), 442.4668, Normal	
	<pre>++: Select Screen 11: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit</pre>
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Step 6: This page shows the RAID information.



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Step 7: Download intel RAID driver from avalue web site. Un-zip and put in USB drive.

Wind	ows 10 64bit			
No.	Release Date	Model	Description	Download
	2020-11-04	HPM-621DE	Intel RAID Win10_64 Device:Other	ų
2	2020-11-04	HPM-621DE	Intel VROC win10_64 Device:Other	0
3	2020-11-04	HPM-621DE	Intel Lan win10_64 Device:Gigabit_Ethernet	U
4	2020-11-04	HPM-621DE	Aspeed VGA win10_64 Device:Video	
5	2020-11-04	HPM-621DE	Intel Chipset Win10_64_10.1.9.2 Device:Chipset	U

Step 8: Load driver from your USB when you install Windows

Name		Total size	Free space T	уре
€ <u>* B</u> efresh € Load driver	Delete	Eormat	- Ngw	
\sim		ge driver, click Load driver.		Next

- Select SATA RAID Controller.

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		troller (C:\Intel RAID Win10_64_6.1.0.1226\iaStorE.fre troller (C:\Intel RAID Win10_64_6.1.0.1226\iaStorE.fre	
Intel(R)	C600+/C220+ series chipset SATA A	HCI Controller (C:\Intel RAID Win10_64_6.1.0.1226\i	
		HCI Controller (C:\Intel RAID Win10_64_6.1.0.1226\i HCI Controller (C:\Intel RAID Win10 64 6.1.0.1226\i	
		HCI Controller (C:\Intel RAID Win10_04_0.1.0.1226\i HCI Controller (C:\Intel RAID Win10_64_6.1.0.1226\i	
Intel(R)	C600+/C220+ series chipset SATA A	HCI Controller (C:\Intel RAID Win10_64_6.1.0.1226\i	
		HCI Controller (C:\Intel RAID Win10_64_6.1.0.1226\i	
		HCI Controller (C:\Intel RAID Win10_64_6.1.0.1226\i AID Controller (C:\Intel RAID Win10_64_6.1.0.1226\i	
		AID Controller (C:\Intel RAID Win10_64_6.1.0.1226\ii	
Intel(R)	C600+/C220+ series chipset SATA R	AID Controller (C:\Intel RAID Win10_64_6.1.0.1226\i	~
<		>	
Hide	drivers that aren't compatible with th	is computer's hardware.	-
1	se <u>R</u> escan		Next

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- After the driver is installed. We now have hard drive appears to install Windows.

Name	Name		Free space	Туре
Drive1 Un	allocated Space	442.5 GB	442.5 GB	
€ <u>r R</u> efresh	Delete	Format	* N <u>e</u> w	
Load driver	Extend	L ound	- 11 <u>2</u> 11	
				Nex

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