

FAQ / Application Note

Subject: Intel VROC PCH SATA RAID	
FAQ Document No: S23005	Date: 2023/05/18
Model Name: HPM-SRSUA	Rev. A1
Category: ☐General ☐H/W ■S/W ☐Others,	寫小分類
Purpose:	
Enable intel VROC PCH SATA RAID on Sapphire Ra	apids Platform

The Intel® Virtual RAID on CPU (Intel® VROC) is an enterprise RAID solution for both NVMe SSD and SATA devices for the enterprise servers, workstations and some high-end desktops.

Intel VROC interface Types:

- 1. Intel VROC NVMe RAID
- 2. Intel VROC PCH SATA RAID *
- 3. Intel VROC PCH NVMe RAID

Location of SATA Ports on HPM-SRSUA



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1. Check if SATA SSDs are detected. BIOS → Platform Config→ PCH-IO Configuration → SATA And RST Configuration

Aptio Setup – AMI Platform Config	
 Controller 2 SATA And RST Configuration Controller 3 SATA And RST Configuration Software Feature Mask Configuration for Controller 2 Software Feature Mask Configuration for Controller 3 	SATA Controller 3 Device Options Settings

There are 2 PCH SATA controllers, please ensure which SATA ports you used.

Controller 2 for SATA5 and M.2 Key.M SATA

Controller 3 for SATA1, SATA2, SATA3 and SATA4



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2. Configure SATA mode to RAID.



Press "F4" to save and exit.

3. Reboot to BIOS Setup and go to VROC SATA Controller

Aptio Setup – AMI Main Advanced Platform Config Socket Config Server	Mgmt Security Boot Save & Exit
 Trusted Computing ACPI Settings AST2600 Super IO Configuration Serial Port Console Redirection Option ROM Dispatch Policy USB Configuration Network Stack Configuration NVMe Configuration NVMe Configuration Intel(R) VROC tSATA Controller Intel(R) Ethernet Controller X550 - 00:04:5F:96:D1:90 Intel(R) Ethernet Controller X550 - 00:04:5F:96:D1:90 	This formset allows the user to manage RAID volumes on the Intel(R) RAID Controller
▶ Driver Health	<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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Configuration RAID to what you want.

Aptio Setup – AMI Advanced	
Intel(R) VROC 8.0.0.4006 tSATA 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 WD10EZEX-00BN5A0 SN:WD-WCC3F0111963, 931.51GB	
	<pre>++: Select Screen t↓: 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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4. <u>Download intel RAID driver from avalue web site</u>. Un-zip and put in USB drive.

Windo	ws 10 64bit			
No.	Release Date	Model	Description	Download
1	2023-03-08	HPM-SRSUA	Intel QTA2.0 driver Device:Other	U
2	2023-03-08	HPM-SRSUA	ASPEED VGA Driver Device:Video	0
3	2023-03-08	HPM-SRSUA	Intel LAN 27.6 Device:Gigabit_Ethernet	0
4	2023-03-08	HPM-SRSUA	Realtek Audio control panel Device:Video	0
5	2023-03-08	HPM-SRSUA	Realtek Audio driver Device:Video	U
6	2023-03-08	HPM-SRSUA	Intel VROC RAID F6 DRIVER Device:Other	-

5. Load driver from your USB when you install Windows

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🍚 섋 Windows Setup		
Select the driver	r to install	
Hide drivers that a	rent compatible with this computer's hardware.	
Browse	Rescan	Next
1 Collecting information 2 In	stalling Windows	
🕞 💰 Windows Setup		
Select the drive	r to install	
Intel(R) C600+/C22 < ✓ Hide drivers that Browse	Browse for Folder Browse to the driver, and then click OK. > CD Drive (1:) > CD Drive (2:) > CD Drive (K:) > CD Drive (K:) > EFI V Intel/VROC RAID_Win 11 8.0.0.4035 VROC 8.0.0.4035 F6-drivers Intel/VROC f6_laStorE_win10_64 Intel/VROC f6_laVROC_win10_64 > Boot (X:) OK Cancel	Vin 11 8.0.0.4035
1 Collecting information 2	nstalling Windows	

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You can install windows to your RAID now.

Sele	ect the driver	to install			
Inte	el(R) C600+/C220-	 series chipset tSATA R4 	ID Controller (M:\Inte	VROC RAID_Win 11 8	.0.0.4035
					_
<					>
⊠н	ide drivers that ar	en't compatible with this	computer's hardware		
		Deserve			Net
В	rowse	Kescan			Next

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