



**serial**  
CABLES

# PCI6-AD-x8EDSFF-VE3/VE1/VEQ



User's Manual

REV: 1.0

January. 2025



## Change history

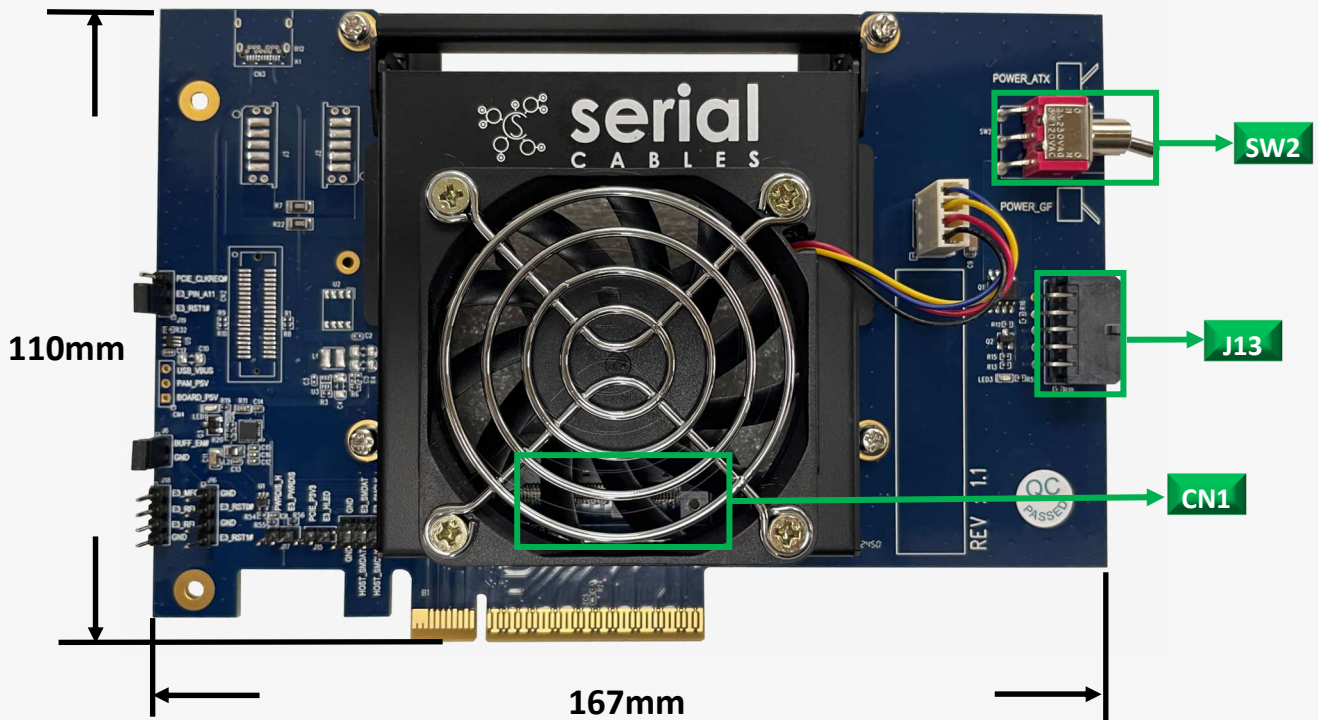
REV	Change history	Date of Release
1.0	New created	Jan. 2025



## Function Description For Connectors

For PCI6-AD-x8EDSFF-VE3 And

PCI6-AD-x8EDSFF-VE1

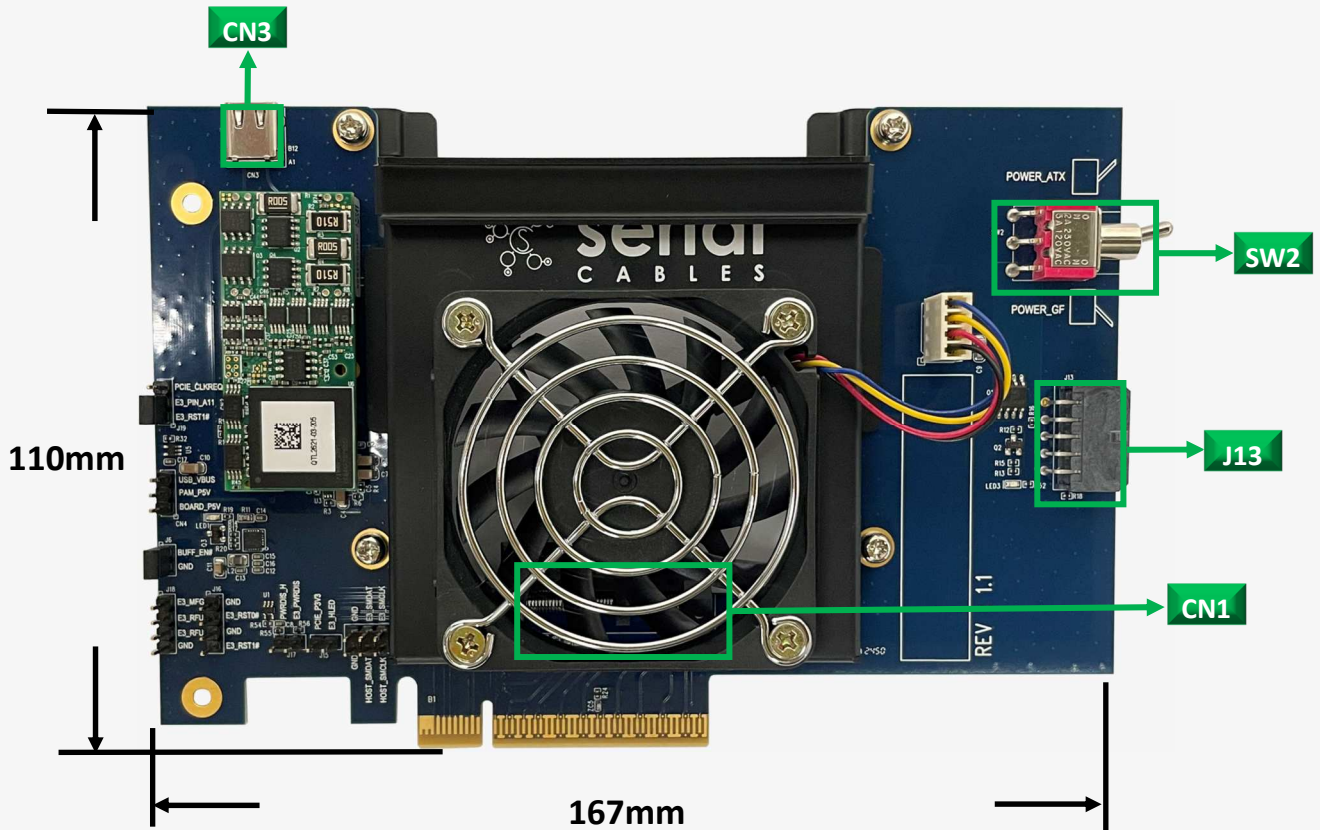


Connectors	Descriptions
SW2	Toggle switch Toward Up, EDSFF drive powered by ATX (Quarch PPM connector in ). Toward Down, EDSFF drive powered by host (Golden finger).
J13	Quarch power connector
CN1	X8 84Pins Right angle EDSFF Connectors



## Function Description For Connectors

For PCI6-AD-x8EDSFF-VEQ

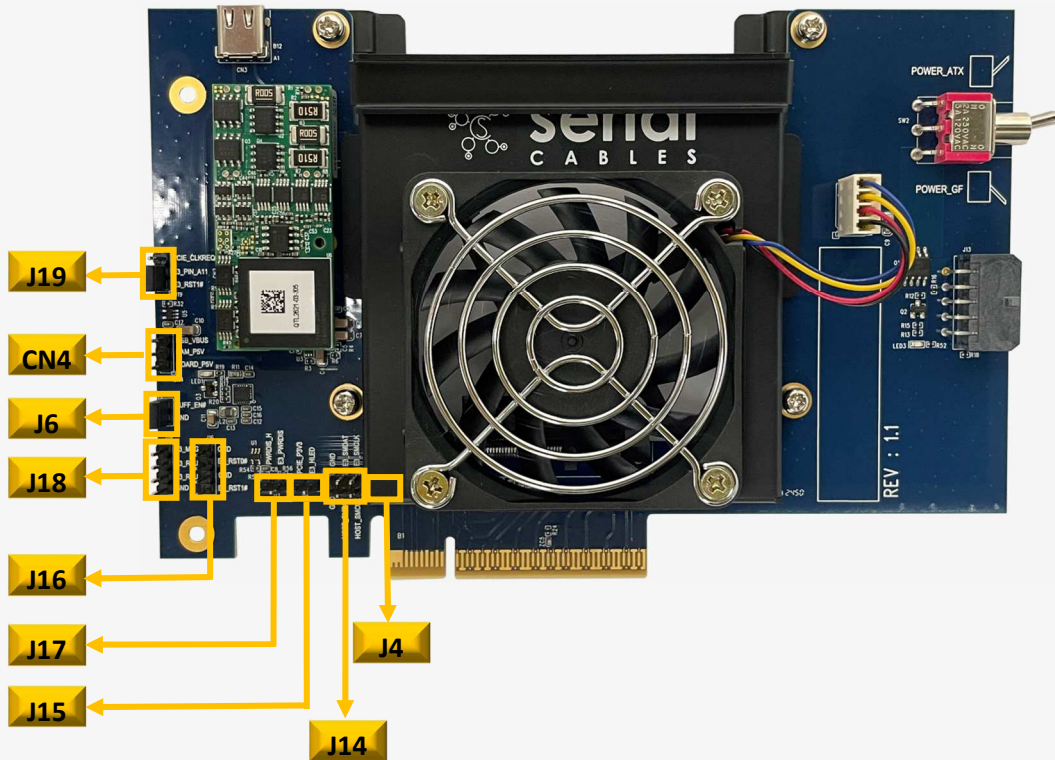


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SW2	Toggle switch Toward Up, EDSFF drive powered by ATX (Quarch PPM connector in ). Toward Down, EDSFF drive powered by host (Golden finger).
J13	Quarch power connector
CN1	X8 84Pins Right angle EDSFF Connectors
CN3	Type C USB connector





## Function Description For Headers



Headers	Descriptions			
J19	Select the Pin11 of EDSFF connected to PCIE_CLKREQ# or PERST#. 1.) Jumper on Pin1&2. support single port in EDSFF also connect the CLKREQ# signal from host to EDSFF device. 2.) Jumper on Pin2&3. support dual port in EDSFF also connect PERST# of golden finger to PERST1# of EDSFF	Pins in Header	Signals	Pins in EDSFF/ Golden finger
		3	PCIE_CLKREQ#	GF_P12
		2	EDSFF_P11	EDSFF_A11
		1	EDSFF_PERST1#	
CN4	Support in "VEQ" SKU only. it is used to select PAM_P5V come from USB connector or on-board power regulator. 1.) Jumper on Pin1&2. PAM_P5V comes from USB connector. 2.) Jumper on Pin2&3. PAM_P5V comes from on-board power regulator.	Pins in Header	Signals	
		3	USB_VBUS	
		2	PAM_P5V	
		1	P5V	
J6	Disable or enable clock buffer output to EDSFF connector. 1.) Jumper ON. Clock buffer outputs HCSL clock to EDSFF connector. 2.) Jumper OFF. Disable clock buffer output.	Pins in Header	Signals	
		1	BUFF_OE#	
		2	GND	
J18	J18 is used for MFG and FRU signals level check	Pins in Header	Signals	Pins in EDSFF
		1	EDSFF_MFG	EDSFF_B7
		2	EDSFF_FRU	EDSFF_B8
		3	EDSFF_FRU1	EDSFF_A42
		4	GND	



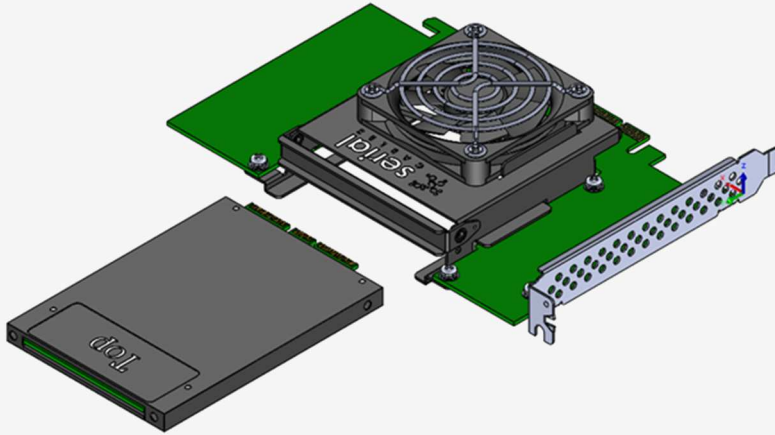
## Function Description For Headers (cont.)

Headers	Descriptions																								
J16	<p>J16 is used for EDSFF PERST# manual reset.</p> <p>Note: EDSFF PERST1# support in dual port only.</p> <p>J19 pin2 and pin3 must be short to connect PERST1# to EDSFF Pin A11.</p> <table border="1"> <thead> <tr> <th>Pins in Header</th> <th>Signals</th> <th>Pins in EDSFF</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>GND</td> <td></td> </tr> <tr> <td>2</td> <td>EDSFF_PERST0#</td> <td>EDSFF_B10</td> </tr> <tr> <td>3</td> <td>GND</td> <td></td> </tr> <tr> <td>4</td> <td>EDSFF_P11</td> <td>EDSFF_A11</td> </tr> </tbody> </table>	Pins in Header	Signals	Pins in EDSFF	1	GND		2	EDSFF_PERST0#	EDSFF_B10	3	GND		4	EDSFF_P11	EDSFF_A11									
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J17	<p>J17 is for EDSFF PWRDIS setting.</p> <p>1.) Jumper ON. Set EDSFF PWRDIS to be "H" level.</p> <p>2.) Jumper OFF. Set EDSFF PWRDIS to be "L" level.</p> <table border="1"> <thead> <tr> <th>Pins in EDSFF</th> <th>Signals</th> <th>Pins in Header</th> </tr> </thead> <tbody> <tr> <td></td> <td>PWRDIS_H</td> <td>1</td> </tr> <tr> <td>EDSFF_B12</td> <td></td> <td>2</td> </tr> </tbody> </table>	Pins in EDSFF	Signals	Pins in Header		PWRDIS_H	1	EDSFF_B12		2															
Pins in EDSFF	Signals	Pins in Header																							
	PWRDIS_H	1																							
EDSFF_B12		2																							
J15	<p>J15 is for EDSFF HLED control.</p> <p>1.) Jumper ON. Connect HLED to P3V3.</p> <p>2.) Jumper OFF. No connect in HLED.</p> <table border="1"> <thead> <tr> <th>Pins in EDSFF</th> <th>Signals</th> <th>Pins in Header</th> </tr> </thead> <tbody> <tr> <td></td> <td>PCIE_P3V3</td> <td>1</td> </tr> <tr> <td>EDSFF_A10</td> <td></td> <td>2</td> </tr> </tbody> </table>	Pins in EDSFF	Signals	Pins in Header		PCIE_P3V3	1	EDSFF_A10		2															
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EDSFF_A10		2																							
J14	<p>J14 is for EDSFF SMBus accessing.</p> <p>Pin1&amp;2, Pin3&amp;4 ON: connect the SMBus of EDSFF to host in pins of golden finger.</p> <p>Or SMBus accessing from external I2C analyzer via pins 1, 3 and 5.</p> <table border="1"> <thead> <tr> <th>Pins in EDSFF</th> <th>Signals</th> <th>Pins in Header</th> </tr> </thead> <tbody> <tr> <td></td> <td>GND</td> <td>6</td> </tr> <tr> <td>GF_B6</td> <td>HOST_SMDAT</td> <td>4</td> </tr> <tr> <td>GF_B5</td> <td>HOST_SMCLK</td> <td>2</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Pins in EDSFF</th> <th>Signals</th> <th>Pins in Header</th> </tr> </thead> <tbody> <tr> <td></td> <td>GND</td> <td>5</td> </tr> <tr> <td>EDSFF_A8</td> <td>EDSFF_SMDAT</td> <td>3</td> </tr> <tr> <td>EDSFF_A7</td> <td>EDSFF_SMCLK</td> <td>1</td> </tr> </tbody> </table>	Pins in EDSFF	Signals	Pins in Header		GND	6	GF_B6	HOST_SMDAT	4	GF_B5	HOST_SMCLK	2	Pins in EDSFF	Signals	Pins in Header		GND	5	EDSFF_A8	EDSFF_SMDAT	3	EDSFF_A7	EDSFF_SMCLK	1
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J4	<p>J4 is used to set dual port enable/disable in EDSFF.</p> <p>1.) Jumper ON. Set EDSFF to support dual port.</p> <p>2.) Jumper OFF. Set EDSFF to support single port.</p> <table border="1"> <thead> <tr> <th>Pins in Header</th> <th>Signals</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>EDSFF_DPEN#</td> </tr> <tr> <td>2</td> <td>GND</td> </tr> </tbody> </table>	Pins in Header	Signals	1	EDSFF_DPEN#	2	GND																		
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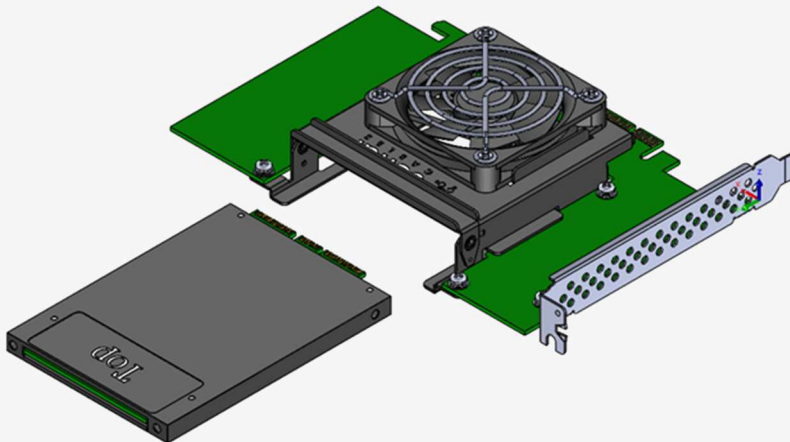


## “VE3” FAN-cage for E3 SSDs Installation

Hinge down for 7.5mm height E3 SSD



Hinge up for 16.8mm height E3 SSD

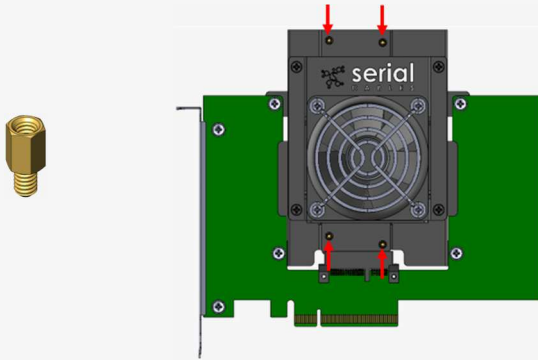




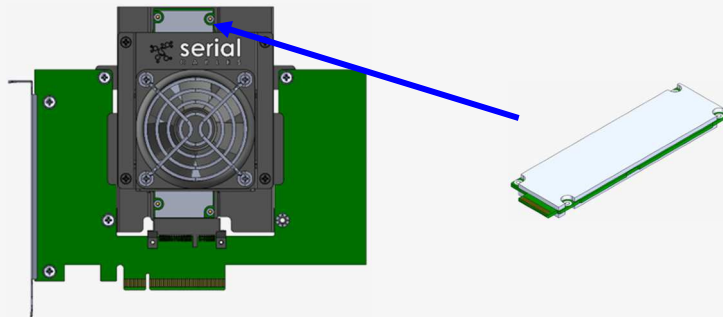
## “VE1” FAN-cage for E1.S SSDs Installation

### E1S 5.9mm/8.01mm SSDs Installation

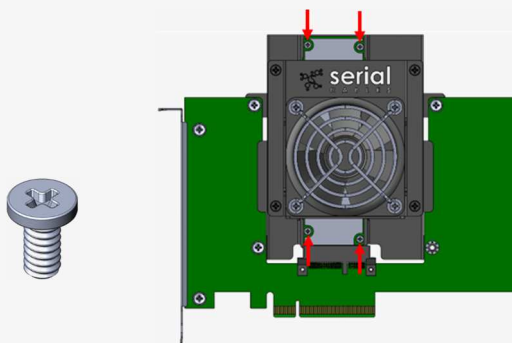
Step1: screw 4pcs of copper pillar onto E1.S FAN-cage



Step2: Install E1.S SSDs.



Step3: screw E1.S SSD



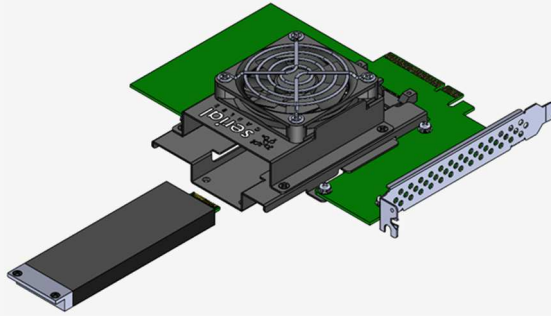




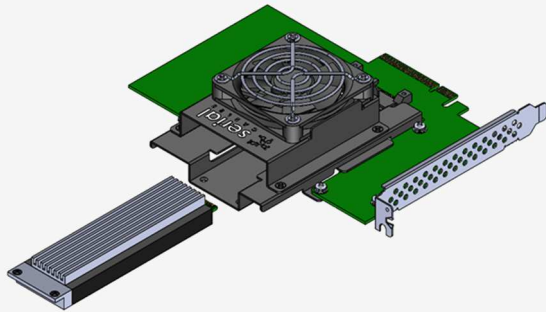
## “VE1” FAN-cage for E1.S SSDs Installation

### E1S 9.5mm/15mm/25mm SSDs Installation

E1.S 9.5mm SSD



E1.S 15mm SSD



E1.S 25mm SSD

