



serial
C A B L E S

PCIe/CXL MCIO Retimer Based Host Card

PCI5-AD-X162X8RA-RT



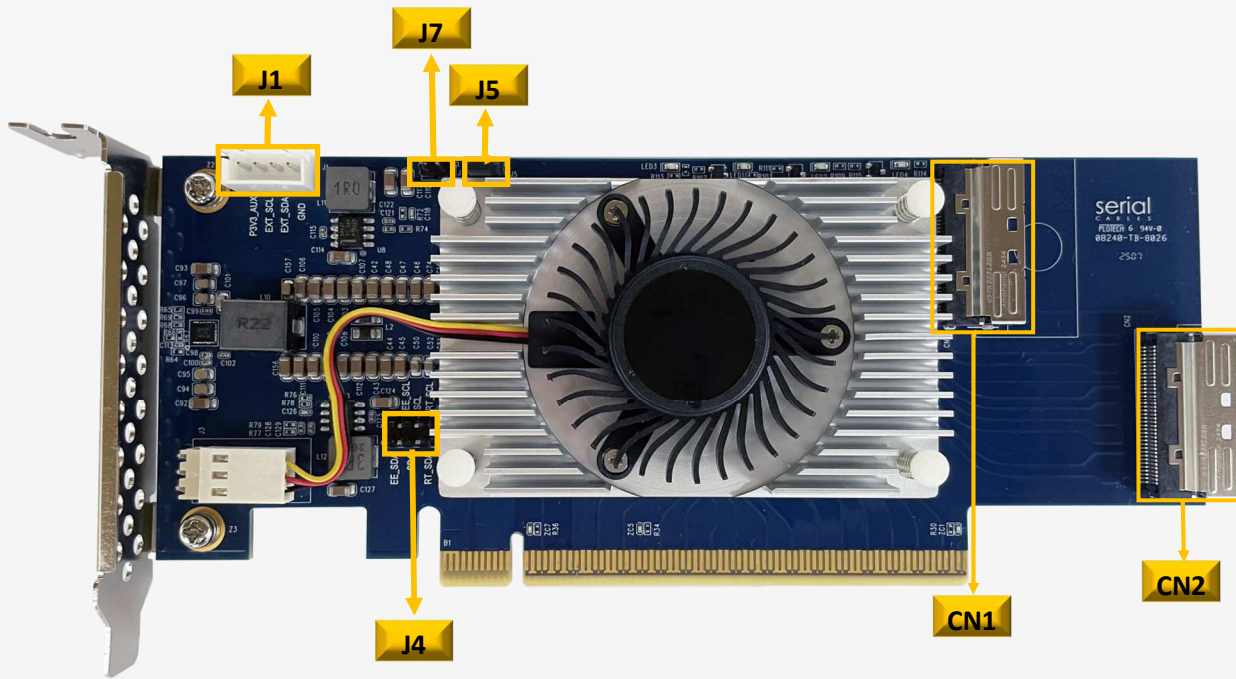
User's Manual

REV: 1.0

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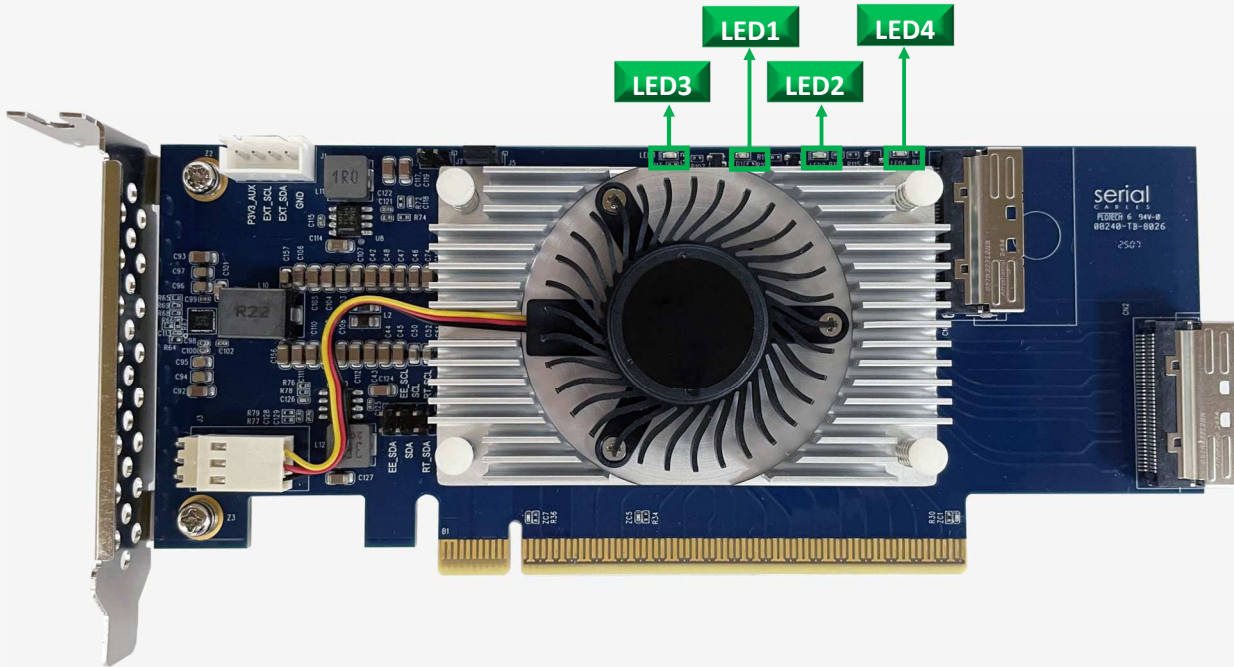
Function Description For Headers And Connectors



Headers	Descriptions															
J5/J7	<p>Have Jumper ON in</p> <p>J7 only=Retimer supports 4x4 bifurcations in two x8 MCIO connectors.</p> <p>J5 only= Retimer supports 8x2 bifurcations in two x8 MCIO connectors.</p>															
J4	<p>SMBus accessing selection.</p> <p>Pin 1&3_2&4 ON=To select the SMBus from J1 to connect to RETIMER IC(DEFAULT).</p> <p>Pin 3&5_4&6 ON=To select the SMBus from J1 to connect to EEPROM of RETIMER IC.</p> <table border="1" style="margin-left: 20px;"> <tr> <td>Pins in Header</td> <td>5</td> <td>3</td> <td>1</td> </tr> <tr> <td rowspan="2">Signals</td> <td>EE_SCL</td> <td>SCL</td> <td>RT_SCL</td> </tr> <tr> <td>EE_SDA</td> <td>SDA</td> <td>RT_SDA</td> </tr> <tr> <td>Pins in Header</td> <td>6</td> <td>4</td> <td>2</td> </tr> </table>	Pins in Header	5	3	1	Signals	EE_SCL	SCL	RT_SCL	EE_SDA	SDA	RT_SDA	Pins in Header	6	4	2
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Signals	EE_SCL	SCL	RT_SCL													
	EE_SDA	SDA	RT_SDA													
Pins in Header	6	4	2													
CN1/CN2	Vertical type MCIO x8 74Pins connectors															
J1	<p>External SMBus Interface</p> <table border="1" style="margin-left: 20px;"> <tr> <td>Signals</td> <td>P3V3_AUX</td> <td>EXT_SCL</td> <td>EXT_SDA</td> <td>GND</td> </tr> <tr> <td>Pins in Header</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table>	Signals	P3V3_AUX	EXT_SCL	EXT_SDA	GND	Pins in Header	1	2	3	4					
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Function Description For LEDs



Location	Color	Description
LED3	Red	<u>Retimer fault LED</u> Lights if any error detected in retimer IC.
LED1	Blue	<u>Retimer card power good LED</u> Lights to indicate all of power rails in retimer host card output correctly.
LED2	Green	<u>Retimer card heartbeat LED</u> <u>Blinking as heartbeat for retimer FW.</u>
LED4	Blue	<u>Retimer EEPROM read done LED</u> Lights to indicate retimer IC reading FW from EEPROM completed and successfully.



MCIO Pin Definition



		2	3	5	6	8	9	
CN1	A	B_PERN7	B_PERP7	B_PERN6	B_PERP6	NC	NC	
	B	A_PETN7	A_PETP7	A_PETN6	A_PETP6	MCIO_SCL_A0	MCIO_SDA_A0	
			14	15	17	18	11	12
	A	B_PERN5	B_PERP5	B_PERN4	B_PERP4	MCIO_CLKA_P0	MCIO_CLKA_N0	
	B	A_PETN5	A_PETP5	A_PETN4	A_PETP4	RT_PERST#	NC	
			20	21	23	24	26	27
	A	B_PERN3	B_PERP3	B_PERN2	B_PERP2	NC	NC	
	B	A_PETN3	A_PETP3	A_PETN2	A_PETP2	MCIO_SCL_B0	MCIO_SDA_B0	
			32	33	35	36	29	30
	A	B_PERN1	B_PERP1	B_PERN0	B_PERP0	MCIO_CLKB_P0	MCIO_CLKB_N0	
	B	A_PETN1	A_PETP1	A_PETN0	A_PETP0	RT_PERST#	NC	

		2	3	5	6	8	9	
CN2	A	B_PERN15	B_PERP15	B_PERN14	B_PERP14	NC	NC	
	B	A_PETN15	A_PETP15	A_PETN14	A_PETP14	MCIO_SCL_A1	MCIO_SDA_A1	
			14	15	17	18	11	12
	A	B_PERN13	B_PERP13	B_PERN12	B_PERP12	MCIO_CLKA_P1	MCIO_CLKA_N1	
	B	A_PETN13	A_PETP13	A_PETN12	A_PETP12	RT_PERST#	NC	
			20	21	23	24	26	27
	A	B_PERN11	B_PERP11	B_PERN10	B_PERP10	NC	NC	
	B	A_PETN11	A_PETP11	A_PETN10	A_PETP10	MCIO_SCL_B1	MCIO_SDA_B1	
			32	33	35	36	29	30
	A	B_PERN9	B_PERP9	B_PERN8	B_PERP8	MCIO_CLKB_P1	MCIO_CLKB_N1	
	B	A_PETN9	A_PETP9	A_PETN8	A_PETP8	RT_PERST#	NC	

Note: The pinout in MCIO connector followed SFF9402 spec