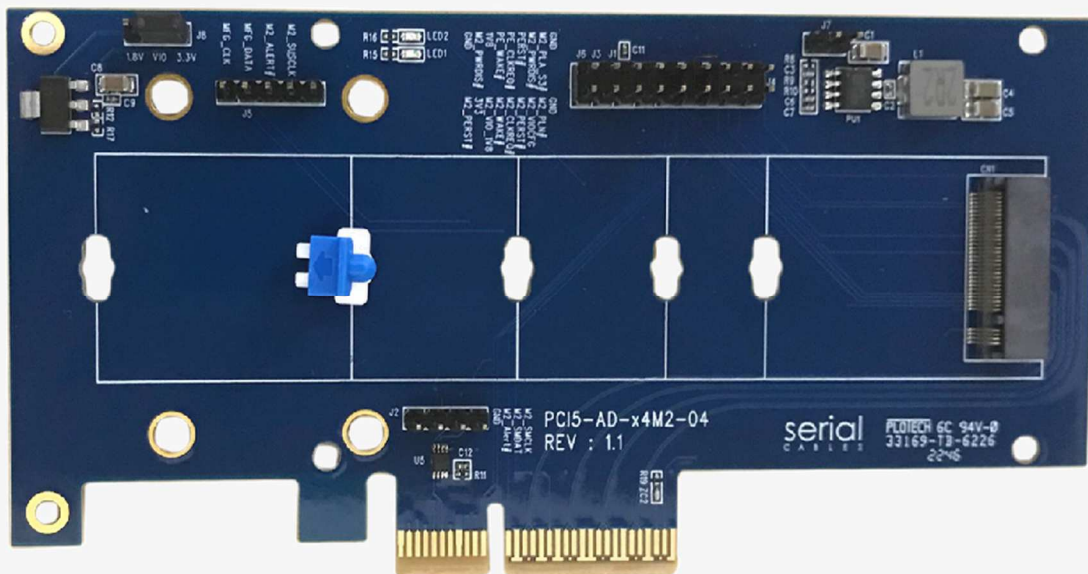




serial
C A B L E S

PCIe Gen5 X4 Slot To M.2 Adapter Card

Part Number: PCI5-AD-x4M2-04



User's Manual

REV: 1.2

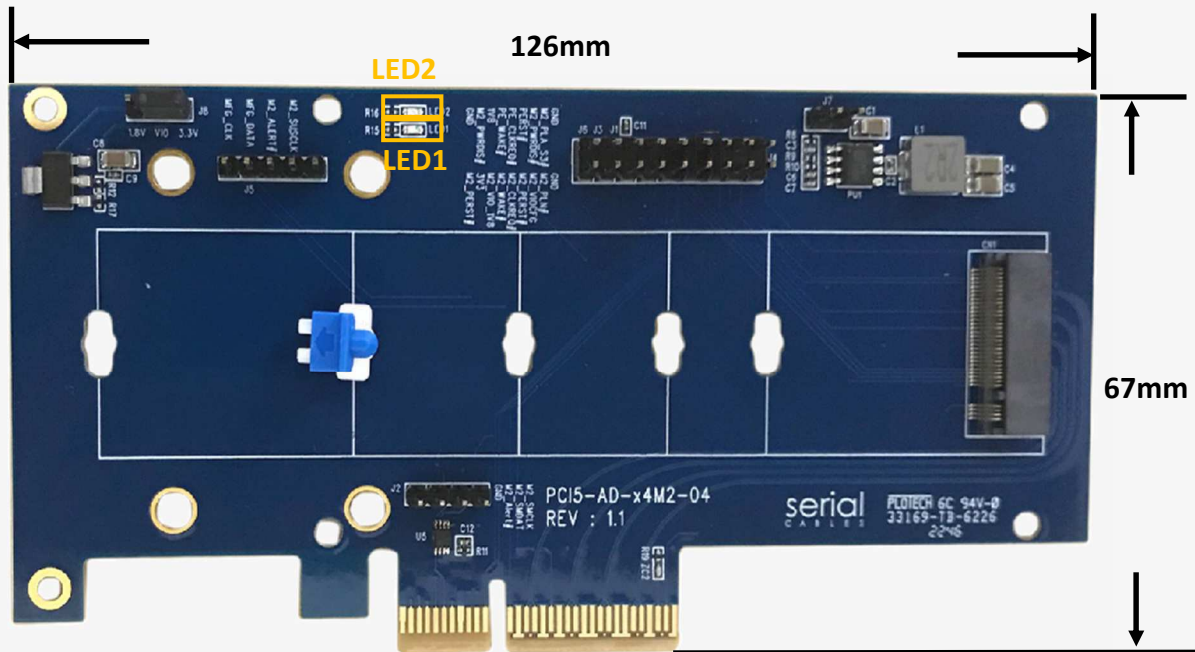
April. 2024



Change history

REV	Change history	Date of Release
1.0	New created	Dec. 2022
1.1	Updated the default jumper setting	Aug.2023
1.2	Added descriptions for pin headers	Apr. 2024

Product Brief

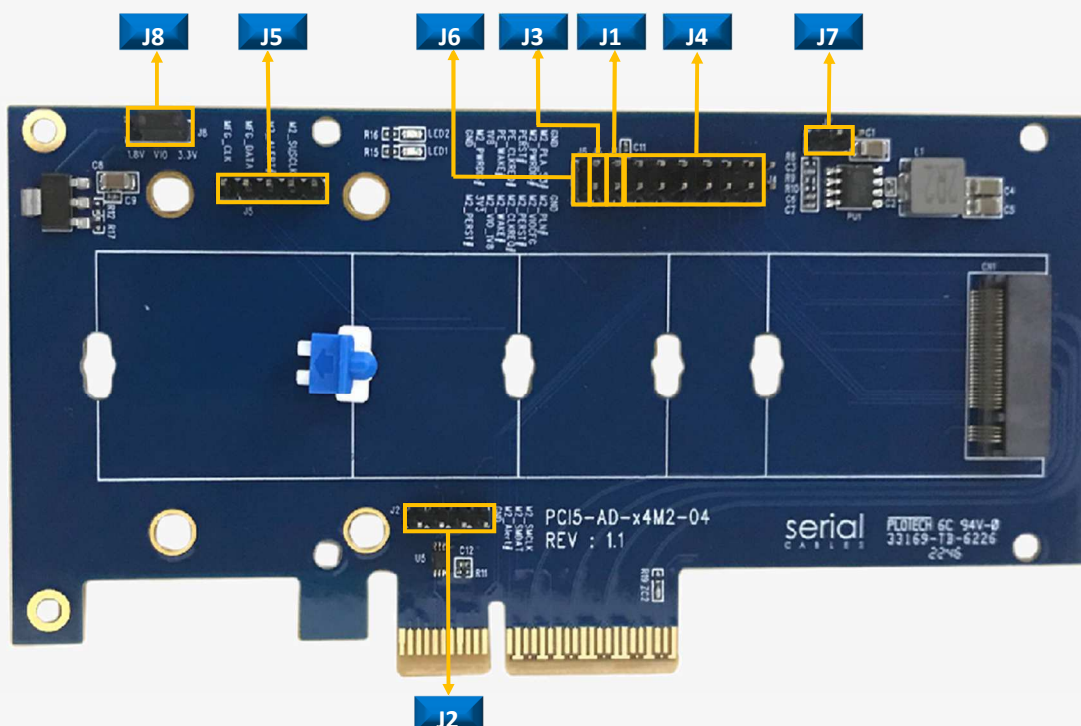


Hardware Specification

Model	PCI5-AD-x4M2-04
PCBA Physical Dimension	67mm(H) x 126mm(L). PCI Express add-in card standard, Thickness .063" +/- 0.008" (1.6mm +/- 0.2mm)
LEDs	LED1: Blue, Power LED. LED2: Green, M.2 Activity LED.
M.2 support	2230/2242/2260/2280/22110



Functions of Headers



Headers	Descriptions			
J8	Pin1*2 ON: Set the pull up to be 1.8V for M.2 side-band signals. Pin2*3 ON: Set the pull up to be 3.3V for M.2 side-band signals. Note: Side-band signals include M2_WAKE# and M2_PERST#.	Pins in Header	Signals	
		1	1.8V	
		2	M2_VIO	
		3	3.3V	
J5	<u>For M.2 MFG SMBus accessing.</u>			
	Pins in Header	Signals	Pins in M.2 connector	
	1	MFG_CLK	58	
	2	MFG_DATA	56	
	3	M2_ALERT#	44	
	4	M2_SUSCLK	68	
	5	GND		
J6	ON: Assert M.2 PERST# signal. OFF: De-assert M.2 PERST# signal.	Pins in Header	Signals	Pins in M.2 connector
		2	GND	
		1	M2_PERST#	50
J3	ON: Force M.2 power disable. OFF: Force M.2 power enable.	Pins in Header	Signals	Pins in M.2 connector
		2	GND	
		1	M2_PWRDIS	6



Headers	Descriptions																																												
J1	ON: Provide 1.8V to M.2 VIO 1.8V OFF: M.2 VIO 1.8V to be floating	<table><tr><th>Pins in Header</th><th>Signals</th><th>Pins in M.2 connector</th></tr><tr><td>1</td><td>1.8V</td><td></td></tr><tr><td>2</td><td>M2_VIO1V8</td><td>22</td></tr></table>	Pins in Header	Signals	Pins in M.2 connector	1	1.8V		2	M2_VIO1V8	22																																		
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2	M2_VIO1V8	22																																											
J4	<table><tr><th>Pins in Header</th><th>Signals</th><th>Pins in M.2 connector</th></tr><tr><td>1</td><td>M2_WAKE#</td><td>M2_54</td></tr><tr><td>3</td><td>M2_CLKREQ#</td><td>M2_52</td></tr><tr><td>5</td><td>M2_PERST#</td><td>M2_50</td></tr><tr><td>7</td><td>M2_VIOCFG</td><td>M2_73</td></tr><tr><td>9</td><td>M2_PLN#</td><td>M2_8</td></tr><tr><td>11</td><td>GND</td><td></td></tr></table> <table><tr><th>Pins in Header</th><th>Signals</th><th>Pins in Golden finger or M.2 connector</th></tr><tr><td>2</td><td>PE_WAKE#</td><td>GF_B11</td></tr><tr><td>4</td><td>PE_CLKREQ#</td><td>GF_B12</td></tr><tr><td>6</td><td>PERST#</td><td>GF_A11</td></tr><tr><td>8</td><td>M2_PWRDIS</td><td>M2_6</td></tr><tr><td>10</td><td>M2_PLA_S3#</td><td>M2_30</td></tr><tr><td>12</td><td>GND</td><td></td></tr></table> Pin1&2 ON: connect the WAKE# signals between host and M.2. Pin3&4 ON: connect the CLKREQ# signals between host and M.2. Note: There is a signal buffer between Pin5(M2_PERST#) and Pin6(PERST#) of J4. Can't have jumper short on Pin5 and Pin6, otherwise, M2_PERST# signal will be latch off.			Pins in Header	Signals	Pins in M.2 connector	1	M2_WAKE#	M2_54	3	M2_CLKREQ#	M2_52	5	M2_PERST#	M2_50	7	M2_VIOCFG	M2_73	9	M2_PLN#	M2_8	11	GND		Pins in Header	Signals	Pins in Golden finger or M.2 connector	2	PE_WAKE#	GF_B11	4	PE_CLKREQ#	GF_B12	6	PERST#	GF_A11	8	M2_PWRDIS	M2_6	10	M2_PLA_S3#	M2_30	12	GND	
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J2	<u>For M.2 SMBus accessing.</u> <table><tr><th>Pins in Header</th><th>Signals</th><th>Pins in M.2 connector</th></tr><tr><td>1</td><td>GND</td><td></td></tr><tr><td>2</td><td>M2_ALERT#</td><td>44</td></tr><tr><td>3</td><td>M2_SMDAT</td><td>42</td></tr><tr><td>4</td><td>M2_SMCLK</td><td>40</td></tr></table> Note: There is a I2C level shifter to translate the 3.3V SMBus which sending from golden finger to 1.8V SMBus in M.2 connector. M.2 ALERT# is 1.8V signal level also.			Pins in Header	Signals	Pins in M.2 connector	1	GND		2	M2_ALERT#	44	3	M2_SMDAT	42	4	M2_SMCLK	40																											
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J7	ON: Disable 12V to 3.3V switching power for M.2 OFF: Enable 12V to 3.3V switching power for M.2																																												