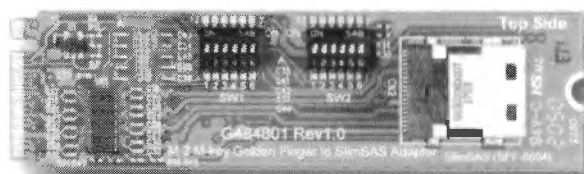
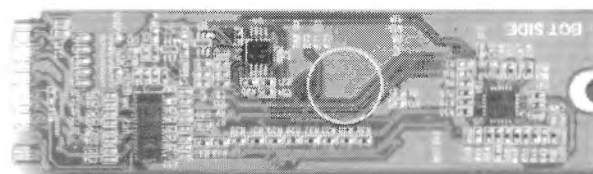


## M.2 M-key PCIe Gen4 with ReDriver to SlimSAS 4i (SFF-8654) Adapter



Top side



Bottom side

### Features

- ※ SlimSAS 4i (SFF-8654) to PCI Express 4.0 convert
- ※ Built- in SFF-8654 connector, pin-out defined by SFF-9402 Rev1.1
- ※ Built- in PCIe ReDriver to extend PCIe Gen4, 16GT/s differential pair signals
- ※ Built- in PCIe 100MHz Clock buffer to drive longer trace lengths and longer cable
- ※ Built- in SMBCLK, SMBDAT bidirectional buffer repeater
- ※ Built- in PERST# Bus Buffer Gate to be used over longer trace lengths and over longer cable
- ※ Built- in WAKE# Bus Buffer Gate to be used over longer trace lengths and over longer cable
- ※ Built- in CLKREQ# Bus Buffer Gate to be used over longer trace lengths and longer over cable

### Specifications

- ※ PCI Express Base Specification Rev 4.0
- ※ PCIe\_CEM\_SPEC\_R4\_V1\_0\_08072019\_NCB
- ※ Support SSD\_Form\_Factor\_Version1\_a
- ※ Compliant with SFF-8654 Specification Version 1.2
- ※ Compliant with SFF-9402 Specification Version 1.1
- ※ PCI Express M.2 Spec Rev4.0 Ver1.0 11052020 NCB

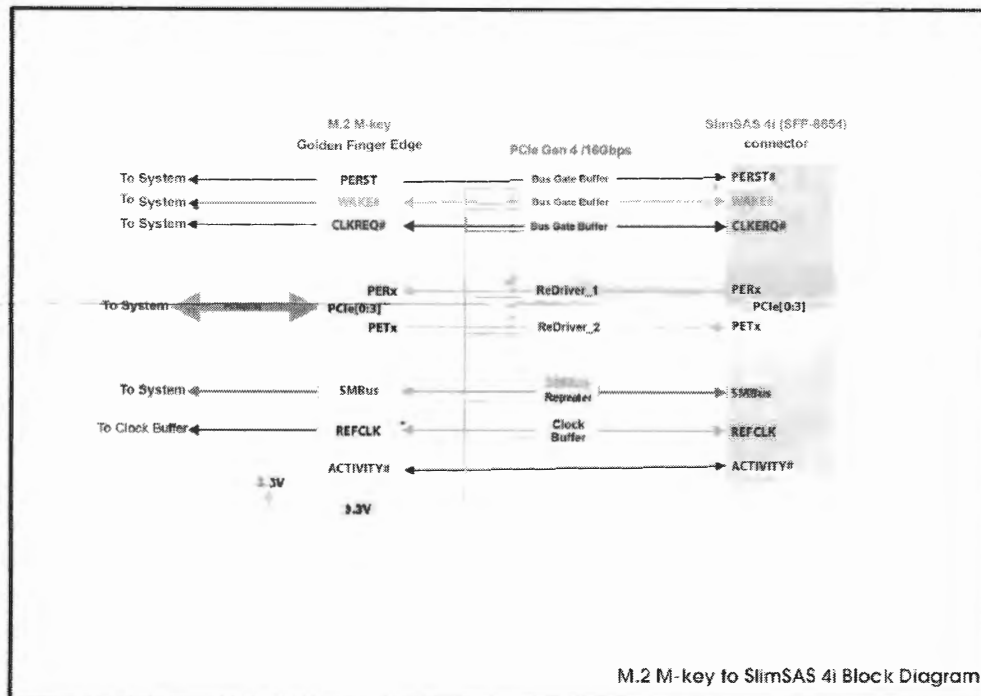
### Operating system support

- ※ Windows 7
- ※ Windows 8 & 8.1
- ※ Windows 10
- ※ UEFI 2.3.1 or later

### Applications

- ※ Rack server
- ※ Microserver and Tower server
- ※ High performance computing
- ※ Hardware accelerator
- ※ Storage Controller HBA(Host Bus Adapter)
- ※ Desktop PC/motherboard

## M.2 M-key PCIe Gen4 with ReDriver to SlimSAS 4i (SFF-8654) Adapter



M.2 M-key to SlimSAS 4i Block Diagram

The switch settings are as follows

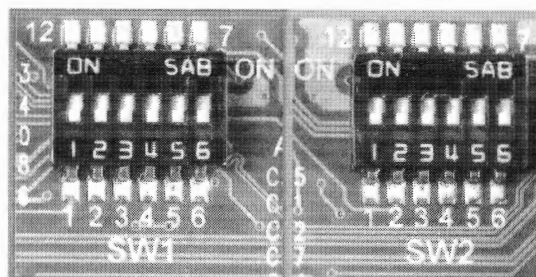
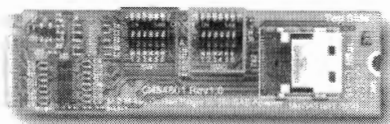
SW1	1-12	Output Swing Setting	on	0
	2-11	Flat Gain Setting	off	1
	FG0		on	0
	3-10		off	1
	FG1		on	0
	4-5	Equalization Setting	off	1
	EQ0		on	0
	5-8		off	1
	EQ1		on	0
	6-7		off	1
	EQ2		on	0

800 mVp-p  
1200 mVp-p

Flat Gain Setting		
FG1	FG0	dB
0	0	-3.5
0	1	-2
1	0	-0.5
1	1	1

Equalizer Setting (dB)						
EQ2	EQ1	EQ0	@1.25GHz	@2.5GHz	@4GHz	@8GHz
0	0	0	0.2	1.0	2.3	5.6
0	0	1	0.2	1.1	2.6	6.2
0	1	0	1.8	2.7	3.9	7.0
0	1	1	2.1	3.3	4.8	8.5
1	0	0	3.0	4.2	5.8	9.4
1	0	1	3.2	4.6	6.5	10.4
1	1	0	4.3	5.8	7.8	11.7
1	1	1	4.5	6.5	8.8	13.0

M.2 Golden finger with Redriver to SlimSAS 4i Adapter



SW2	1-12	Output Swing Setting	on	0
	2-11	Flat Gain Setting	off	1
	FG0_1		on	0
	3-10		off	1
	FG1_1		on	0
	4-9	Equalization Setting	off	1
	EQ0_1		on	0
	5-8		off	1
	EQ1_1		on	0
	6-7		off	1
	EQ2_1		on	0

800 mVp-p  
1200 mVp-p

Flat Gain Setting		
FG1	FG0	dB
0	0	-3.5
0	1	-2
1	0	-0.5
1	1	1

Equalizer Setting (dB)						
EQ2	EQ1	EQ0	@1.25GHz	@2.5GHz	@4GHz	@8GHz
0	0	0	0.2	1.0	2.3	5.6
0	0	1	0.2	1.1	2.6	6.2
0	1	0	1.8	2.7	3.9	7.0
0	1	1	2.1	3.3	4.8	8.5
1	0	0	3.0	4.2	5.8	9.4
1	0	1	3.2	4.6	6.5	10.4
1	1	0	4.3	5.8	7.8	11.7
1	1	1	4.5	6.5	8.8	13.0