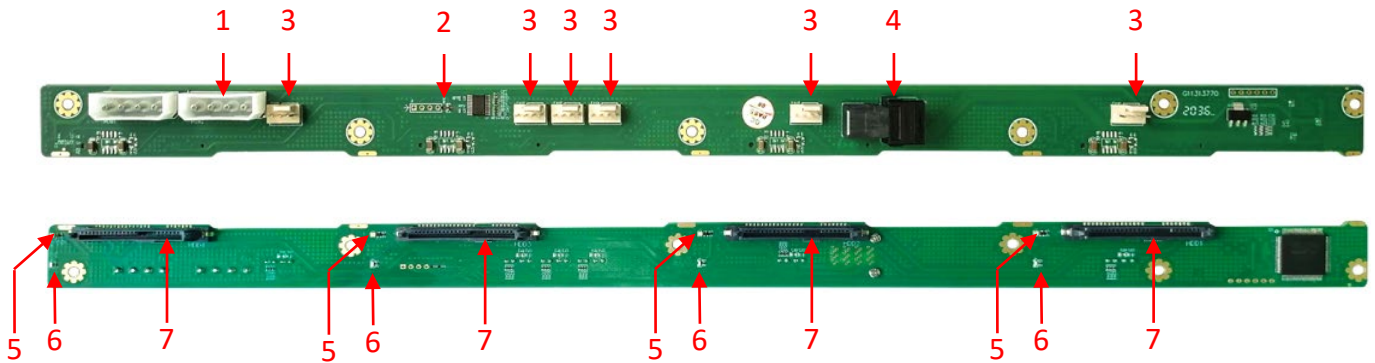


RM22-308/RM22-312

4-bay SAS/SATA to SFF8643 12Gbps backplane User Guide

1. Dimensions: 424 * 23.1 * 2.4mm

2. PCB LAYOUT:



Item	Parts	item	Parts
1	Peripheral (Molex) 4P power connector x2*	5	Green/Red Bi-color LED x4, Green : Read/Write, Red : Error/indicator
2	Thermal sensor x1	6	Yellow LED x4, HDD Power LED
3	PWM FAN connector x6	7	SAS III (12G)/SATA III HDD connector x4
4	SFF-8643 connector x1		

*Limited to use standalone peripheral (Molex) 4pin cable to connect to each peripheral (Molex) 4pin port from PSU ◦

3. LED status description

Status	Yellow(Power)	Green(Read/Write)	Red(Error)
N/A HDD	OFF	OFF	OFF
Plug in HDD	Solid bright	OFF	OFF
Detect HDD	Solid bright	Blinking	Blinking
HDD error	Solid bright	OFF	Solid bright
HDD indicator	Solid bright	OFF	Slow blinking
Disk array fail	Solid bright	Blinking	OFF
Disk array fail locator	Solid bright	OFF	Solid bright

Green light (read/write) blinking signal comes from HDD's SATA power pin 11 and it depends on whether the HDD has reserved this signal or not. The red light LED signal is controlled by SFF-8643 host end.

4.PWM fan control description

- 4-1. First 5 seconds of booting - PWM duty cycle @ 80% output
- 4-2. After 5 seconds of booting – controlled by thermal sensor temperature.
- 4-3. Temperature < 25°C , PWM duty cycle @ 30% output
- 4-4. Temperature > 45°C ,PWM duty cycle @ 99% output
- 4-5. Temperature 25°C ~45°C ,PWM duty cycle @ 30%~99% linear output
- 4-6. The number of fans is automatically detected when power on. When a fan is detected to be non-rotating (failure or hot-swappable and replaced) during operation, other fans will automatically run at full speed. Temperature control operation will resume after restarting.

DUTY & SPEED

