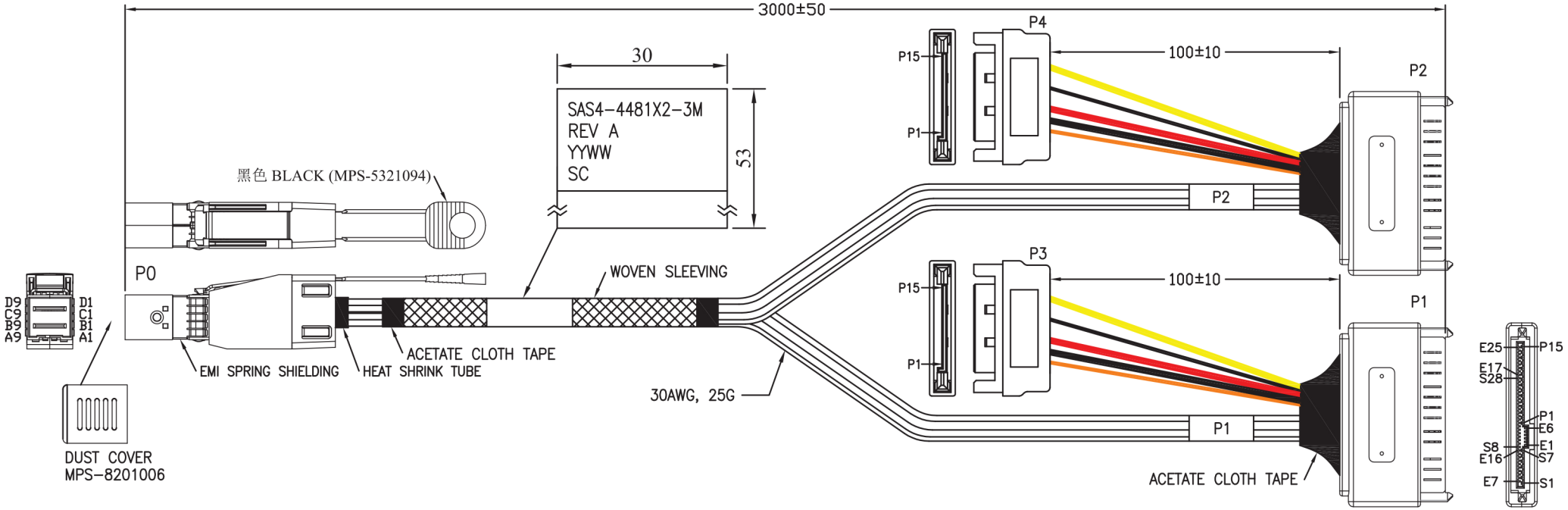
REV.	REMARK	DATE	SIGN.

RoHS



MATERIAL RoHS COMPLIANT:

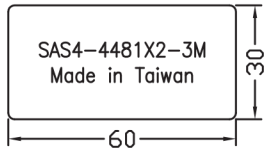
1.CABLE:
- CONDUCTOR: 30AWG SOLID SILVER PLATED COPPER.
- INSULATION: FOAM POLYOLEFIN.
- PAIR: 2 SINGLES LAID FLAT AND PARALLEL.
- DRAIN WIRE: 30AWG SOLID SILVER PLATED COPPER.
- PAIR SHIELD: METALLIC TAPE
- INNER SHIELD: ALUMINUM/POLYESTER TAPE, ALUMINUM SIDE FACING OUT, 25% OVERLAP.
- DIFFERENTIAL IMPEDANCE: 100±5 Ohms @TDR
- UL LISTING: TYPE CL2 AS SPECIFIED IN ARTICLE 725 OF THE NATIONAL ELECTRICAL CODE.
- RoHS II MATERIAL COMPLIANCE

2.CONNECTOR:
- P0: Mini SAS HD 4x CABLE PLUG.(SFF-8674)
  - (1) P.C.B: 4 LAYERS, GOLD PLATING ON CONTACT PADS (P/N: SPCB-040167C / SPCB-040168A)
  - (2) LATCH: STAINLESS STEEL
  - (3) BACKSHELL: ZINC DIE CASTING HOOD/ NICKEL PLATING
  - (4) PULL TAB: NYLON UL94V-0, COLOR: BLACK.(MPS-5321094)
  - (5) EMI SPRING SHIELDING
- P1,P2: U.3 CONNECTOR.(SFF-8681)
  - (1) P.C.B: 4 LAYERS, GOLD PLATING ON CONTACT PADS.(P/N: SPCB-040193H)
  - (2) HOUSING: ABS, BLACK.
  - (3) WITHOUT EARS NOR SCREWS.
- P3,P4: SATA 15P POWER PLUG
  - (1) POWER CABLE: UL 1007 18AWG*3 80°C 300V
  - (2) POWER CABLE: UL 1007 24AWG*2 80°C 300V

3.FOR SAS4.0 USE.

4.TWO-WIRED SERIAL MEMORY: ATMEL AT24C02D EEPROM (256 BYTES).

5.LABELING ON BAG:



serial CABLES

DESC.	Mini SAS HD 4x TO SFF-8681 REC. WITH POWER CABLE ASS'Y-SAS4.0	APPROVED	CHECKED	DESIGNED	TOLERANCE	SCALE	*	UNIT	mm
P/N	B-7178	CUSTOMER P/N	SAS4-4481X2-3M			Sino		DATE	08/20/'20	DWG NO:	DWG\B\7178

REV.	REMARK	DATE	SIGN.

WIRING DIAGRAM

P0: SFF-8674 PLUG SAS4.0			U.3 REC. SFF-8681	
PAD	SIGNAL		PAD	SIGNAL
B4	RX0+	P1	S6	TX0+
B5	RX0−		S5	TX0−
D5	TX0−		S3	RX0−
D4	TX0+		S2	RX0+
GND GROUP			GND GROUP	
A4	RX1+		S13	TX1+
A5	RX1−		S12	TX1−
C5	TX1−		S10	RX1−
C4	TX1+		S9	RX1+
GND GROUP			GND GROUP	
			P13,P14,P15	+12V
			P10,P11P12	GND
			P7,P8,P9	+5V
			P4,P5,P6	GND
			P1,P2−SHORT	
B7	RX2+	P2	S6	TX0+
B8	RX2−		S5	TX0−
D8	TX2−		S3	RX0−
D7	TX2+		S2	RX0+
GND GROUP			GND GROUP	
A7	RX3+		S13	TX1+
A8	RX3−		S12	TX1−
C8	TX3−		S10	RX1−
C7	TX3+		S9	RX1+
GND GROUP			GND GROUP	
			P13,P14,P15	+12V
			P10,P11P12	GND
			P7,P8,P9	+5V
			P4,P5,P6	GND
			P1,P2−SHORT	

P0: SFF-8674 PLUG SAS4.0		
PAD	SIGNAL	
A1	Reserved	N.C.
A2	IntL	N.C.
B1	Vact	N.C.
B2	ModPrsL	GND
C1	SCL	SERIAL EEPROM
C2	SDA	SERIAL EEPROM
D1	Vact	N.C.
D2	Vman	

SERIAL EEPROM → GND

P3: SATA 15P POWER PLUG			
SIGNAL	PIN	COLOR	AWG
+12V	P13,P14,P15	YELLOW	18AWG
GND	P10,P11P12	BLACK	24AWG
+5V	P7,P8,P9	RED	18AWG
GND	P4,P5,P6	BLACK	18AWG
+3.3V	P1,P2,P3	ORANGE	24AWG

U.3 REC. SFF-TA-1001 Rev 1.1	
PAD	SIGNAL
P10	PRSNT#
P4	IfDet#
E6	IfDet2#
P3	PWRDIS
S15	HPT0
E16	HPT1
E25	DualPortEN
E3	3.3Vaux

3.3Vaux, 5.1K, 5.1K, OPEN, OPEN, OPEN, 0, 100K

OPEN=N.C. SPCB-040193H

P4: SATA 15P POWER PLUG			
SIGNAL	PIN	COLOR	AWG
+12V	P13,P14,P15	YELLOW	18AWG
GND	P10,P11P12	BLACK	24AWG
+5V	P7,P8,P9	RED	18AWG
GND	P4,P5,P6	BLACK	18AWG
+3.3V	P1,P2,P3	ORANGE	24AWG

U.3 REC. SFF-TA-1001 Rev 1.1	
PAD	SIGNAL
P10	PRSNT#
P4	IfDet#
E6	IfDet2#
P3	PWRDIS
S15	HPT0
E16	HPT1
E25	DualPortEN
E3	3.3Vaux

3.3Vaux, 5.1K, 5.1K, OPEN, OPEN, OPEN, 0, 100K

OPEN=N.C. SPCB-040193H

P0: GND GROUP: A3,A6,A9,B3,B6,B9,C3,C6,C9,D3,D6,D9
P1,P2,: GND GROUP: S1,S4,S7,S8,S11,S14,S16,S19,S22,S25,S28,E9,E12,E15,E19,E22

serial CABLES

DESC.	Mini SAS HD 4x TO SFF-8681 REC. WITH POWER CABLE ASS'Y-SAS4.0	APPROVED	CHECKED	DESIGNED	TOLERANCE	SCALE	*	UNIT	mm
P/N	B-7178	CUSTOMER P/N	SAS4-4481X2-3M			Sino		DATE	08/20/'20	DWG NO:	DWG\B\7178