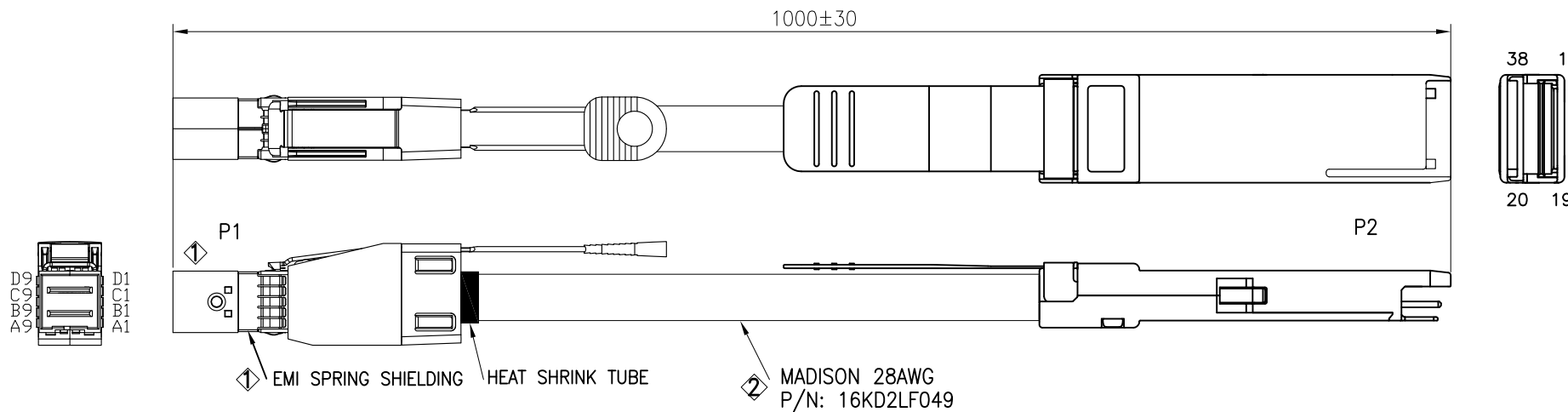


1	2	3	4	5	6	7	8	9
REV.	REMARK			DATE		SIGN.		
①	CHANGE CONNECTOR & PCB			01/31/'13		Sino		
②	CHANGE CABLE			04/07/'14		Sino		
③	REVISE PCB P/N, UPGRADE FOR SAS 12G, USE AT24C02D EEPROM			11/05/'19		Sino		

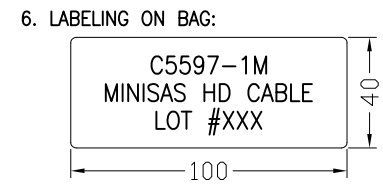
RoHS



MATERIAL RoHS COMPLIANT:

1. CABLE:
- ① CONDUCTOR: 28AWG SOLID SILVER PLATED COPPER.
 - INSULATION: FOAM POLYOLEFIN.
 - PAIR: 2 SINGLES LAID FLAT AND PARALLEL.
 - CORE: 8 PAIRS
 - PAIR DRAIN WIRE: 30AWG SOLID TIN PLATED COPPER.
 - PAIR SHIELD: ALUMINUM/POLYESTER TAPE. ALUMINUM SIDE FACING IN, 25% OVERLAP.
 - INNER SHIELD: ALUMINUM/POLYESTER TAPE, ALUMINUM SIDE FACING OUT, 25% OVERLAP.
 - OUTER SHIELD: 38AWG TIN PLATED COPPER BRAID, 85% COVERAGE.
 - JACKET: FLEXIBLE PVC, COLOR - BLACK.
 - DIAMETER: 7.88±0.25mm
 - PRINT LEGEND: "MADISON CABLE {Mfg. Location Code} (UL) TYPE CL2 75°C 28AWG CSA AWM II A/B 75°C 30V FT4 TurboTwin™ SUBSTANCE COMPLIANT 2011/65/EU {D/C}"
 - DIFFERENTIAL IMPEDANCE: 100±5 OHMS @TDR
 - UL LISTING: TYPE CL2 AS SPECIFIED IN ARTICLE 725 OF THE NATIONAL ELECTRICAL CODE.

2. CONNECTOR:
- P1: Mini SAS HD 4x CABLE PLUG (SFF-8644)
- ③ ② ① (1) P.C.B: 4 LAYERS, GOLD PLATING ON CONTACT PADS (P/N: MPCB-040091LF REV.F / SPCB-040092A REV.F)
 - (2) LATCH: STAINLESS STEEL
 - (3) BACKSHELL: ZINC DIE CASTING HOOD/ NICKEL PLATING
 - (4) PULL TAB: NYLON UL94V-0, COLOR: BLUE.
 - ① (5) EMI SPRING SHIELDING
- P2: 4x-Pluggable-QSFP(SFF-8436)
- (1) P.C.B: 4 LAYERS, GOLD PLATING ON CONTACT PADS.(SPCB-040078A, AC Coupling)
 - (2) LATCH: STAINLESS STEEL WITH PULL TAB.
 - (3) BACKSHELL: ZINC DIE CASTING HOOD/ NICKEL PLATING
- ③ 3. Mini SAS HD 4x TWO-WIRED SERIAL MEMORY: ATMEL AT24C02D EEPROM (256 BYTES).
- ③ 4. QSFP TWO-WIRED SERIAL MEMORY: ATMEL AT24C02D EEPROM (256 BYTES), DIGITAL MONITORING, CONTROL FUNCTION AND MEMORY PAGE NOT SUPPORTED.
- ③ 5. FOR SAS 12.0 Gbps.



Data Storage Cables		DESC.	Mini SAS HD 4x to QSFP CABLE ASS'Y		APPROVED	CHECKED	DESIGNED	TOLERANCE	SCALE	*	UNIT	mm	①
P/N	C5597-1M	CUSTOMER P/N	C5597-1M				Sino		DATE	11/05/'19	DWG NO:		

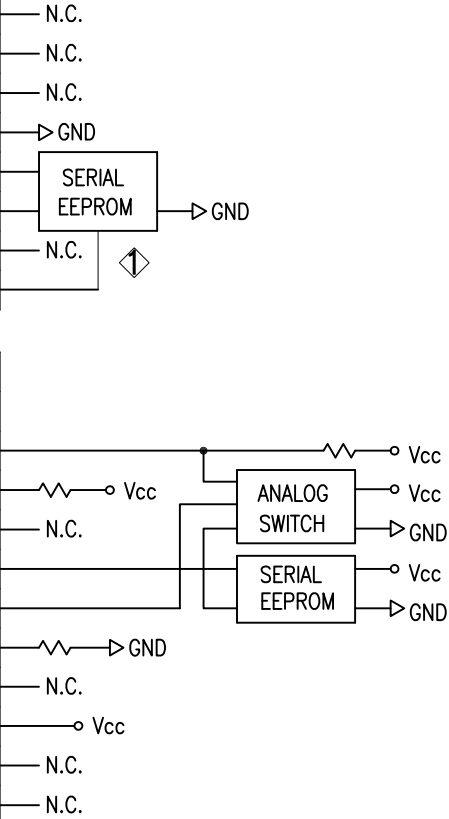
1	2	3	4	5	6	7	8	9
REV.	REMARK		DATE	SIGN.				
⬆	REVISE P1 LOW SPEED SIGNAL & POWER		04/07/'14	Sino				

WIRING DIAGRAM

HIGH SPEED SIGNAL			
P1(Mini SAS HD 4x Plug)		P2(4x-Pluggable-QSFP)	
PIN	SIGNAL	PAD	SIGNAL
A4	RX1+	03	TX2p
A5	RX1-	02	TX2n
A7	RX3+	06	TX4p
A8	RX3-	05	TX4n
B4	RX0+	36	TX1p
B5	RX0-	37	TX1n
B7	RX2+	33	TX3p
B8	RX2-	34	TX3n
C4	TX1+	22	RX2p
C5	TX1-	21	RX2n
C7	TX3+	25	RX4p
C8	TX3-	24	RX4n
D4	TX0+	17	RX1p
D5	TX0-	18	RX1n
D7	TX2+	14	RX3p
D8	TX2-	15	RX3n
GND GROUP	GND	GND GROUP	GND
GND GROUP A3,A6,A9,B3,B6,B9 C3,C6,C9,D3,D6,D9		GND GROUP 01,04,07,13,16,19 20,23,26,32,35,38	
Connector Shell		Connector Shell	

LOW SPEED SIGNAL & POWER	
P1(Mini SAS HD 4x Plug)	
PAD	SIGNAL
A1	Reserved
A2	IntL
B1	Vact
B2	ModPrsL
C1	SCL
C2	SDA
D1	Vact
D2	Vman

P2(4x-Pluggable-QSFP)	
PAD	SIGNAL
08	ModSelL
09	ResetL
10	VccRx
11	SCL
12	SDA
27	ModPrsL
28	IntL
29	VccTx
30	Vcc1
31	LPMode



*DC BLOCKING CAPS ON P2 RX END.

Data Storage Cables	DESC.	Mini SAS HD 4x to QSFP CABLE ASS'Y			APPROVED	CHECKED	DESIGNED	TOLERANCE	SCALE	*	UNIT	mm	DWG NO:
	P/N	C5597-1M	CUSTOMER P/N				Sino	*	DATE	04/07/'14			