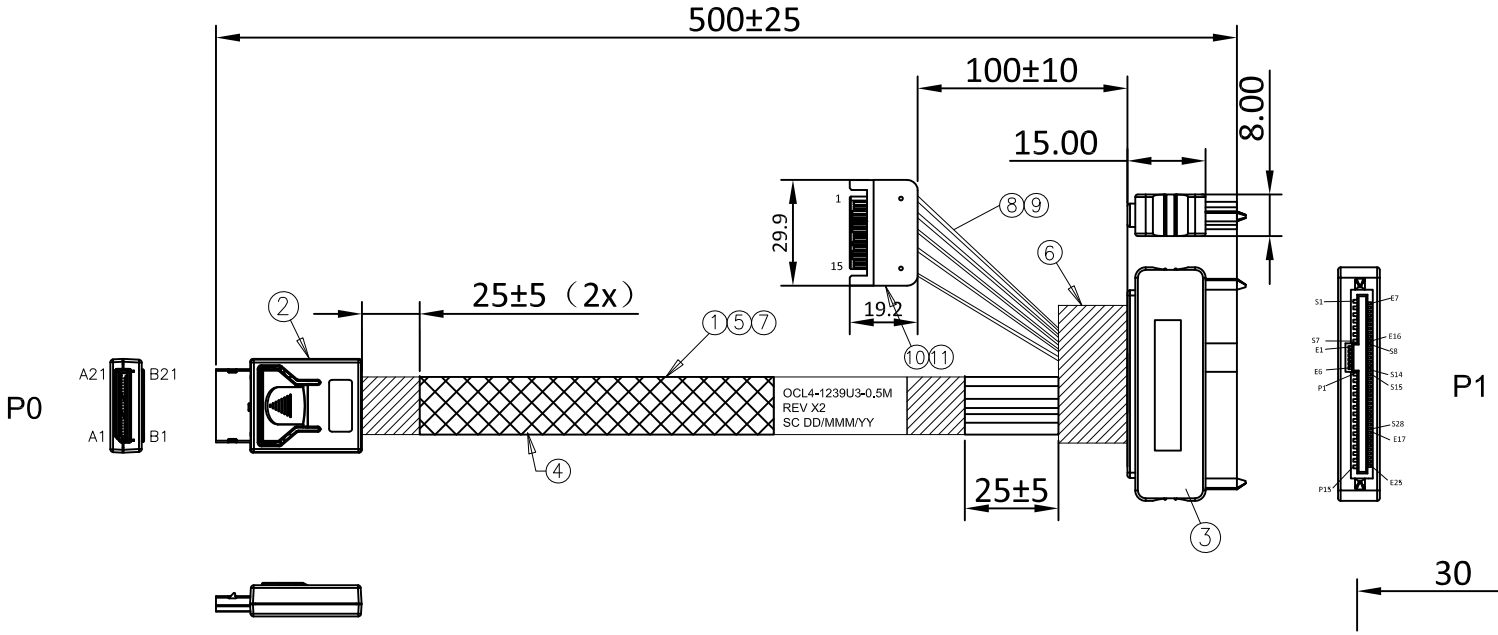
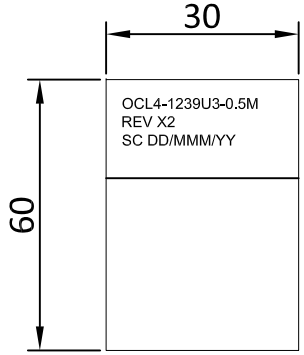
PROPRIETARY INFORMATION
COMPANY CONFIDENTIAL

REV.	ECN. NO.	DESCRIPTION	ENG	DATE
X1		ISSUED	JORDAN	03/12/20'
X2		UPDATE U.3 PCBA SCHEMATIC	JORDAN	04/08/20'



TEST CONDITIONS:

1. 100% OPEN & SHORT & MISS-WIRING & INTERMITTENCE TEST.
2. CONDUCTIVE RESISTANCE: 3Ω MAX.
3. INSULATION RESISTANCE: 10 MΩ
4. HI-POT TEST: 300VDC FOR 10ms.
5. THIS PRODUCT MEETS PCIe 4.0



LABEL DETAIL

ITEM	DESCRIPTION	QTY
11	PVC,45P,V1,BLACK	A/R
10	SATA CONN:15P,M,BLK	1
9	WIRE:18AWG	A/R
8	WIRE,24AWG	A/R
7	WIRE,30AWG	A/R
6	TAPE:ACETATE CLOTH INSULATION,BLK,HF	A/R
5	EXPANDO TUBE:OD=**8MM**,**GREEN**,VW-1,HF	A/R
4	LABEL: **30*60** MM,WHT,BLANK,HF	1
3	PCIE 68POS CONN,STR,BLACK,Au15u",85ohms	1
2	OCulink 4i STR with Active Latch,Black,85ohms	1
1	SAS CBL:UL20744,30#2C+2D+A+HM,Silvered,85ohm,BLU	A/R

RoHS Compliant

GENERAL TOLERANCE	X ± / .X ± 0.40 / .XX ± 0.30 / .XXX ± 0.20
ANGLE TOLERANCE	X°± 5.0° / .X°± 3.0° / .XX°± 2.0° / .XXX°± 1.0°
MATL	SEE BOM
FINISH	SEE BOM
SCALE	N/A
UNIT	mm
SHEET	1 OF 2
DRAWN	DATE
CHECKED	DATE
APPROVED	DATE
TITLE.	OCULINK 4X STR TO 8639 U.3 WITH SATA 15P
PART NUMBER.	OCL4-1239U3-0.5M
DRAWING NO.	10-3224110008-01
SIZE	A4
REV.	X2

PROPRIETARY INFORMATION
COMPANY CONFIDENTIAL

REV.	ECN. NO.	DESCRIPTION	ENG	DATE
–		SEE SHEET 1	–	–

WIRING DIAGRAM

HIGH SPEED SIGNAL

OCuLink STRAIGHT(HOST) P0		SFF-8639 REC.(TARGET) P1	
PAD	SIGNAL	PAD	SIGNAL
A3	PERp0	S6	PERp0
A4	PERn0	S5	PERn0
A6	PERp1	S13	PERp1
A7	PERn1	S12	PERn1
A15	PERp2	S21	PERp2
A16	PERn2	S20	PERn2
A18	PERp3	S27	PERp3
A19	PERn3	S26	PERn3
B3	PETp0	S2	PETp0
B4	PETn0	S3	PETn0
B6	PETp1	S9	PETp1
B7	PETn1	S10	PETn1
B15	PETp2	S17	PETp2
B16	PETn2	S18	PETn2
B18	PETp3	S23	PETp3
B19	PETn3	S24	PETn3
A2,A5,A8,A11 A14,A17,A20 B2,B5,B8,B11 B14,B17,B20	GND	S1,S4,S7,S8 S11,S14,S16 S19,S22,S25 S28 S15 E9,E12,E15, E19,E22	GND
		P13,P14,P15	+12V
		P12	GND
		P7,P8,P9	+5V
		P5,P6	GND
B9	SMCLK	E23	
B10	SMDAT	E24	

LOW SPEED SIGNAL & POWER

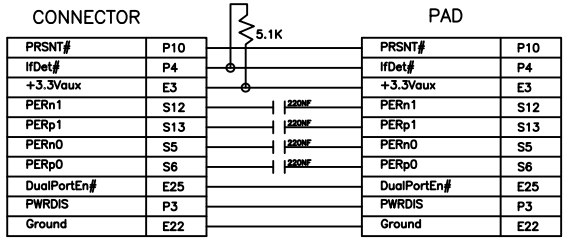
X2

OCuLink STRAIGHT(HOST) P0		SFF-8639 REC.(TARGET) P1	
PAD	SIGNAL	PAD	SIGNAL
A12	REFCLK+	E7	REFCLK+
A13	REFCLK–	E8	REFCLK–
B12	PERST#	E5	PERST#
A10	CWAKE#	P1	WAKE#
		E3	3.3Vaux
		E25	Dual Port EN#
B13	CPRSNT#	P4	IfDet#
		E16	HPT1 → OPEN
		P3	PWRDIS

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

X2

8639 U3 PCBA SCHEMATIC
(THE OTHERS IS PIN TO PIN)



RoHS Compliant

GENERAL TOLERANCE	ANGLE TOLERANCE	DRAWN	DATE
X ±	X°± 5.0°		
.X ± 0.40	.X°± 3.0°		
.XX ± 0.30	.XX°± 2.0°	CHECKED	DATE
.XXX ± 0.20	.XXX°± 1.0°		
MATL SEE BOM		APPROVED	DATE
FINISH SEE BOM			
SCALE N/A	UNIT mm		
SHEET 2 OF 2			

TITLE.
OCULINK 4X STR TO 8639 U.3 WITH SATA 15P

PART NUMBER.
OCL4-1239U3-0.5M

DRAWING NO. 10-3224110008-01 SIZE A4 REV. X2