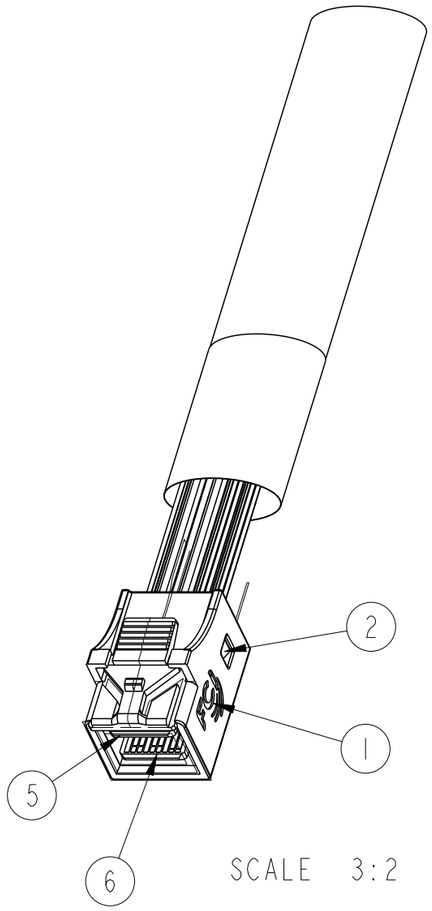
FCI PART NUMBER	DESCRIPTION	NOTES
10123416-XXXXLF	CONTROLLER TO CONTROLLER CONFIGURATION	SEE TABLE 2



SCALE 3:2

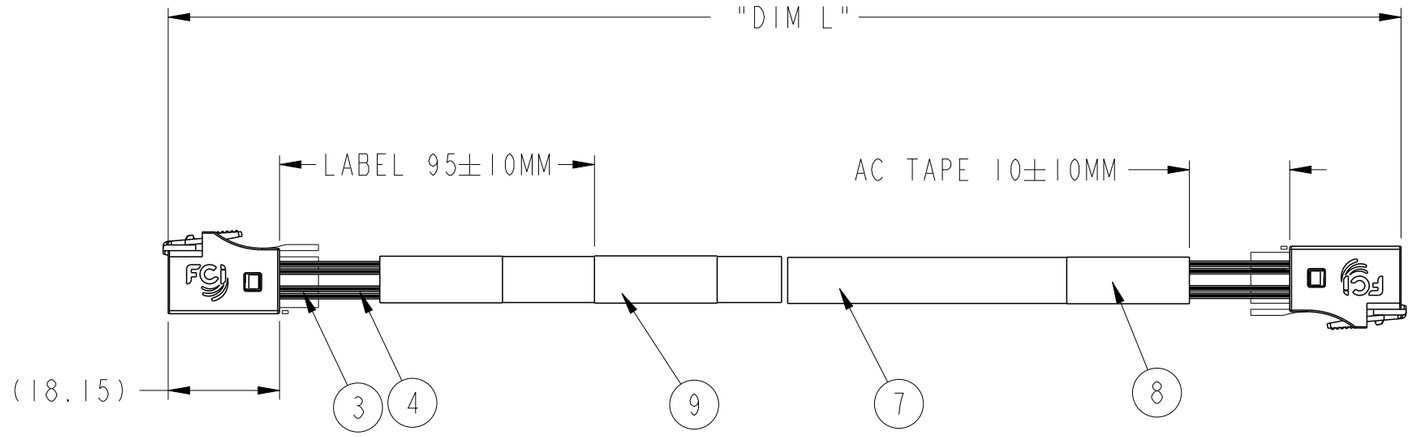


TABLE 1 - BILL OF MATERIALS

ITEM	DESCRIPTION	QTY	NOTES
1	mSAS HD INTERNAL HOUSING- SHORT	2	
2	mSAS HD INTERNAL PCB INSERT- SHORT	2	
3	FLAT RIBBON CABLE GPPG (30 AWG)	A/R	SEE TABLE 2
4	SIDE BAND FLAT RIBBON CABLE (30 AWG)	A/R	
5	mSAS HD INTERNAL LOWER (A-B) PCB	2	
6	mSAS HD INTERNAL UPPER (C-D) PCB	2	
7	PLASTIC BRAID	A/R	
8	ACETATE TAPE 20mm BLACK	A/R	
9	LABEL	1	SEE NOTE 5
10	3525 LOCTITE	A/R	NOT SHOWN

spec ref	-		dr	Andy Wu	2013/01/03	projection	mm
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Andy Wu	2013/01/17		
			chr	-	-		
			appr	Roger Cheng	2013/01/20	product family	-
surface - ISO 1302	linear	0.X ±0.3	FCI www.fci.com	title	mSAS HD INTERNAL (4i) CABLE ASSEMBLY- 6 Gb/s, short type	dwg no	10123416
		0.XX ±0.10					
		0.XXX ±0.005					
	angular	0° ±2°		cat. no.	-	Product - Customer Drw	

size	scale	rev
A3	1:1	B

ecn no ELX-N-13885-1

rel level **Released**

sheet 1 of 4

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PDS: Rev :B STATUS:Released Printed: Jan 21, 2013

FCI PART NUMBER	DESCRIPTION	NOTES
10123416-XXXXLF	CONTROLLER TO CONTROLLER CONFIGURATION	SEE TABLE 2

TABLE 2- CABLE PART NUMBER LIST

PART NUMBER	"DIM L" CABLE LENGTH (METERS)	AWG	NOTES
10123416-2030LF	0.3	30	CONTROLLER TO CONTROLLER WIRING CONFIGURATION (SHEET 2) ---- (SEE SHEET 4 FOR ALL NOTES)
10123416-2040LF	0.4	30	
10123416-2050LF	0.5	30	
10123416-2060LF	0.6	30	
10123416-2070LF	0.7	30	
10123416-2080LF	0.8	30	
10123416-2090LF	0.9	30	
10123416-2100LF	1.0	30	

NOTE:
1. ALL CABLE PERFORMANCE COMPLIANCE SAS2.1
2. CABLE MORE THAN 1.0 METER COULD NOT MEET SAS2.1 INSERTION LOSS -6dB MAX.

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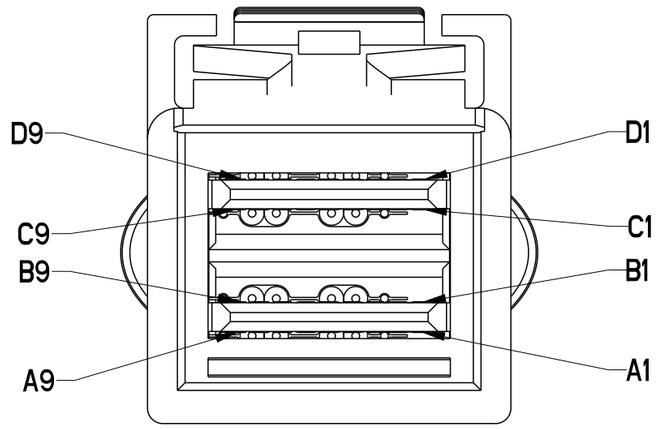
spec ref	-			dr	Andy Wu	2013/01/03	projection	mm
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Andy Wu	2013/01/17		
				chr	-	-		
				appr	Roger Cheng	2013/01/20	product family	-
surface - ISO 1302	linear	0.X	±0.3	www.fci.com	title	mSAS HD INTERNAL (4i)	dwg no	10123416
		0.XX	±0.10			CABLE ASSEMBLY- 6 Gb/s, short type		
		0.XXX	±0.005		cat. no.	-	Product - Customer Drw	
	angular	0°	±2°					

size	scale	rev
A3	1:2	B

ecn no ELX-N-13885-1
rel level Released
sheet 2 of 4

FCI PART NUMBER	DESCRIPTION	NOTES
10123416-XXXXLF	CONTROLLER TO CONTROLLER CONFIGURATION	SEE TABLE 2



SCALE 5:1

LEGEND

	HIGH-SPEED SERIAL DIFFERENTIAL PAIRS
	SIGNAL RETURN
	SIDEBAND SIGNAL

WIRING LIST (CONTROLLER TO CONTROLLER)

END P1 (CONTROLLER)			END P2 (CONTROLLER)	
POSITION	SYMBOL		POSITION	SYMBOL
D9	GROUND	---------	B9	GROUND
D8	Tx2-	--------->	B8	Rx2-
D7	Tx2+	--------->	B7	Rx2+
D6	GROUND	---------	B6	GROUND
D5	Tx0-	--------->	B5	Rx0-
D4	Tx0+	--------->	B4	Rx0+
D3	GROUND	---------	B3	GROUND
D2	SIDEBAND 6	<-------->	B2	SIDEBAND 1
D1	SIDEBAND 5	<-------->	C2	SIDEBAND 2
C1	SIDEBAND 4	<-------->	B1	SIDEBAND 3
C2	SIDEBAND 2	<-------->	D1	SIDEBAND 5
C3	GROUND	---------	A3	GROUND
C4	Tx1+	--------->	A4	Rx1+
C5	Tx1-	--------->	A5	Rx1-
C6	GROUND	---------	A6	GROUND
C7	Tx3+	--------->	A7	Rx3+
C8	Tx3-	--------->	A8	Rx3-
C9	GROUND	---------	A9	GROUND
B9	GROUND	---------	D9	GROUND
B8	Rx2-	<---------	D8	Tx2-
B7	Rx2+	<---------	D7	Tx2+
B6	GROUND	---------	D6	GROUND
B5	Rx0-	<---------	D5	Tx0-
B4	Rx0+	<---------	D4	Tx0+
B3	GROUND	---------	D3	GROUND
B2	SIDEBAND 1	<-------->	D2	SIDEBAND 6
B1	SIDEBAND 3	<-------->	C1	SIDEBAND 4
A1	SIDEBAND 7	<-------->	A2	SIDEBAND 0
A2	SIDEBAND 0	<-------->	A1	SIDEBAND 7
A3	GROUND	---------	C3	GROUND
A4	Rx1+	<---------	C4	Tx1+
A5	Rx1-	<---------	C5	Tx1-
A6	GROUND	---------	C6	GROUND
A7	Rx3+	<---------	C7	Tx3+
A8	Rx3-	<---------	C8	Tx3-
A9	GROUND	---------	C9	GROUND

spec ref	-		dr	Andy Wu	2013/01/03	projection	mm
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Andy Wu	2013/01/17		
			chr	-	-		
			appr	Roger Cheng	2013/01/20	product family	-
surface - ISO 1302	linear	0.X	±0.3				
		0.XX	±0.10				
		0.XXX	±0.005				
	angular	0°	±2°				

size A3	scale 1:1			
ecn no	ELX-N-13885-1			
rel level	Released			
www.fci.com	title: mSAS HD INTERNAL (4i) CABLE ASSEMBLY- 6 Gb/s, short type	dwg no 10123416	rev B	
cat. no. -	Product - Customer Drw	sheet 3 of 4		

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PDS: Rev :B STATUS:Released Printed: Jan 21, 2013

NOTES:

1. MATERIAL:
   HOUSINGS: MODIFIED POLYPHENYLENE ETHER
   PADDLE CARD: PRINTED CIRCUIT SUBSTRATE
   HEAT SHRINK TUBE: POLYOLEFIN
   EPOXY LOCTITE

2. THIS PRODUCT MEETS THE RESTRICTION OF HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT (RoHS) DIRECTIVE (2002/95/EC)

3. THIS DIMENSION IS A FINISHED PRODUCT LENGTH.

4. UNLESS OTHERWISE SPECIFIED ASSEMBLED LENGTH TOLERANCE IS TO BE:
   "DIM L" < 1 METER = ±15mm
   "DIM L" 1 METER TO 10 METERS = ± 2% OF "DIM L"

5. UNLESS OTHERWISE SPECIFIED LABEL POSITION IS TO BE 95mm FROM REAR OF P1 CONNECTOR.
   LABEL DETAILS:
   MANUFACTURER CODE OR NAME COUNTRY OF ORIGIN
   CUSTOMER P/N OR FCI P/N
   REVISION
   DATE CODE (YYYY/MM/DD FORMAT) - SERIAL NUMBER

   FONT SHALL BE CLEARLY VISIBLE AND BLACK IN COLOR.

6. ALL CABLE ASSEMBLIES SHALL BE 100% TESTED FOR CONTINUITY AS DEFINED IN WIRING LIST.

7. ALL CABLE ASSEMBLIES SHALL BE 100% HI-POT TESTED BH APPLYING 300V DC FOR A MINUMUM OF 10ms.

8. IMPEDANCE: 100Ω DIFFERENTIAL.

9. OTHER TESTING PERFORMED AS REQUIRED BY PRODUCT SPECIFICATION: GS-12-650.

10. PACKAGE AND LABEL CABLE ASSEMBLIES PER GS-14-1272.

11. A "△-" SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION. THE CURRENT REVISION WILL BE SHOWN IN THE SYMBOL.

12. "HLF" PRODUCT NUMBERS DESIGNATE THE USE OF HALOGEN FREE RAW CABLE.

13. HALOGEN FREE RAW CABLE CAN BE USED AS A SUBSTITUTE ON NON-HF PRODUCT NUMBERS.

14. PART NUMBER/SUPPLIER SUBSTITUTION IS NOT ALLOWED.

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spec ref	-			dr	Andy Wu	2013/01/03	projection	mm	size A3 / scale 1:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Andy Wu	2013/01/17			ecn no ELX-N-13885-1
				chr	-	-			
				appr	Roger Cheng	2013/01/20	product family -		rel level Released
surface - ISO 1302	linear	0.X	±0.3	FCI www.fci.com	title: mSAS HD INTERNAL (4i) CABLE ASSEMBLY- 6 Gb/s, short type		dwg no 10123416		rev B
		0.XX	±0.10						
		0.XXX	±0.005						
	angular	0°	±2°		cat. no. -		Product - Customer Drw		sheet 4 of 4