

Excellent Integrated System Limited

Stocking Distributor

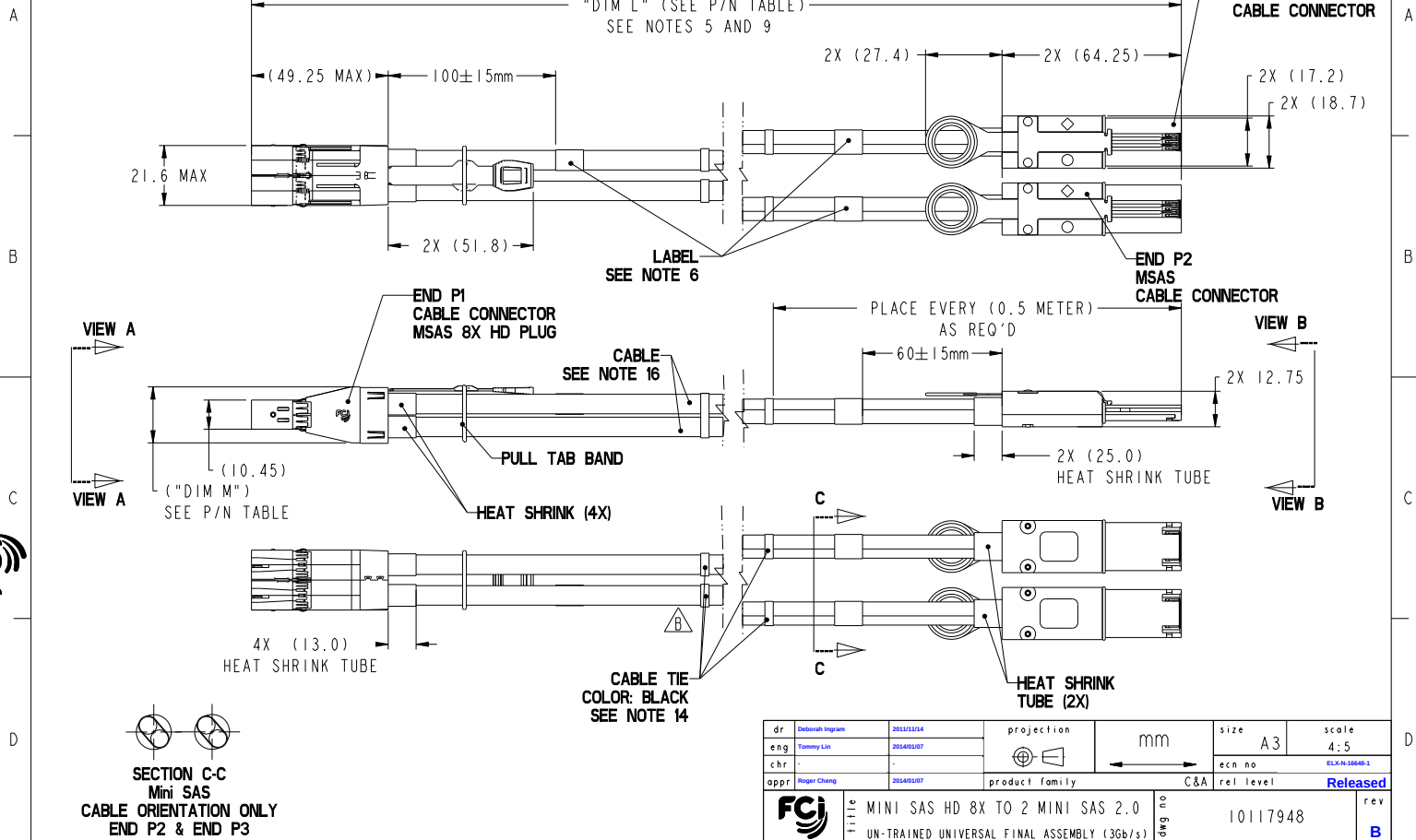
Click to view price, real time Inventory, Delivery & Lifecycle Information:

[FCI](#)
[10117948-4030HLF](#)

For any questions, you can email us directly:

sales@integrated-circuit.com

PRODUCT NUMBER	DESCRIPTION	NOTES
10117948-XXXXLF	NON-HF	SEE SHT. 3
10117948-XXXXHLF	HALOGEN FREE (H)	SEE SHT. 3



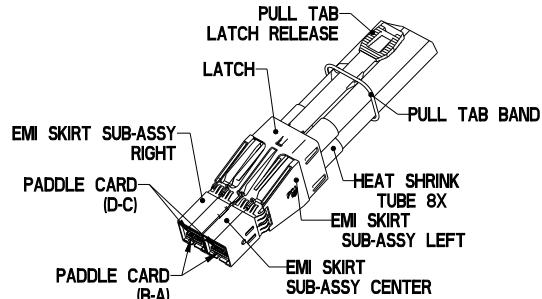
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eng	Tommy Lin	201402007			ecm no		ELX-N-28648-1	
chr					rel level		Released	
appr	Roger Cheng	201402007	product family	C&A				
FCI		title	MINI SAS HD 8X TO 2 MINI SAS 2.0		dwg no	10117948		rev
www.fci.com		cat. no.	UN-TRAINED UNIVERSAL FINAL ASSEMBLY (3Gb/s)			Product - Customer Drw		sheet 1 of 5

PDS: Rev B

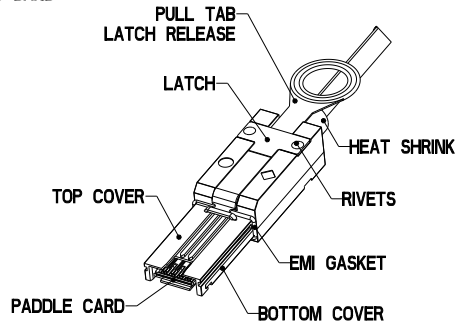
STATUS: Released

Printed: Jan 07, 2014

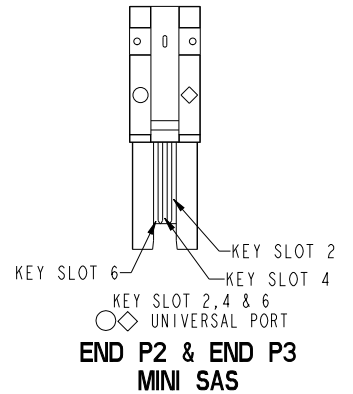
PRODUCT NUMBER	DESCRIPTION	NOTES
10117948-XXXXLF	NON-HF	SEE SHT. 3
10117948-XXXXHLF	HALOGEN FREE (H)	SEE SHT. 3



END P1
MINI SAS HD 8X
ISOMETRIC VIEW



END P2 & END P3
MINI SAS
ISOMETRIC VIEW



dr	Deborah Ingram	20121224	projection	mm	size	A3	scale	4:5
eng	Tommy Lin	20140207			ecn no	ELX-N-28648-1		
chr	-	-			rel level	Released		
appr	Roger Cheng	20140207	product family	C&A				
FCI		title	MINI SAS HD 8X TO 2 MINI SAS 2.0		dwg no	10117948		rev
www.fci.com		cat. no.	UN-TRAINED UNIVERSAL FINAL ASSEMBLY (3Gb/s)					B
			Product - Customer Drw		sheet 2 of 5			

PRODUCT NUMBER	DESCRIPTION	NOTES
10117948-XXXXLF	NON-HF	SEE SHT. 3
10117948-XXXXHLF	HALOGEN FREE (H)	SEE SHT. 3

PRODUCT NUMBER HALOGEN FREE SEE NOTE 11 & 16	AWG	"DIM L" LENGTH (Meters)	"DIM M" HIEGHT (mm)
10117948-5030HLF	24 AWG	3 M	(20.1)
10117948-5040HLF	24 AWG	4 M	(20.1)
10117948-5050HLF	24 AWG	5 M	(20.1)
10117948-5060HLF	24 AWG	6 M	(20.1)
10117948-5070HLF	24 AWG	7 M	(20.1)
10117948-5080HLF	24 AWG	8 M	(20.1)
10117948-5090HLF	24 AWG	9 M	(20.1)
10117948-5100HLF	24 AWG	10 M	(20.1)
10117948-4020HLF	26 AWG	2 M	(20.1)
10117948-4030HLF	26 AWG	3 M	(20.1)
10117948-4040HLF	26 AWG	4 M	(20.1)
10117948-4045HLF	26 AWG	5 M	(20.1)
10117948-4060HLF	26 AWG	6 M	(20.1)
10117948-4070HLF	26 AWG	7 M	(20.1)
10117948-4080HLF	26 AWG	8 M	(20.1)
10117948-3010HLF	28 AWG	1 M	(17.3)
10117948-3020HLF	28 AWG	2 M	(17.3)
10117948-3030HLF	28 AWG	3 M	(17.3)
10117948-3040HLF	28 AWG	4 M	(17.3)
10117948-3050HLF	28 AWG	5 M	(17.3)
10117948-3060HLF	28 AWG	6 M	(17.3)
10117948-2005HLF	30 AWG	0.5 M	(17.3)
10117948-2010HLF	30 AWG	1 M	(17.3)
10117948-2020HLF	30 AWG	2 M	(17.3)
10117948-2030HLF	30 AWG	3 M	(17.3)
10117948-2040HLF	30 AWG	4 M	(17.3)

PRODUCT NUMBER (NON-HALOGEN FREE) SEE NOTE 16	AWG	"DIM L" LENGTH (Meters)	"DIM M" HIEGHT (mm)
10117948-5030LF	24 AWG	3 M	(20.1)
10117948-5040LF	24 AWG	4 M	(20.1)
10117948-5050LF	24 AWG	5 M	(20.1)
10117948-5060LF	24 AWG	6 M	(20.1)
10117948-5070LF	24 AWG	7 M	(20.1)
10117948-5080LF	24 AWG	8 M	(20.1)
10117948-5090LF	24 AWG	9 M	(20.1)
10117948-5100LF	24 AWG	10 M	(20.1)
10117948-4020LF	26 AWG	2 M	(20.1)
10117948-4030LF	26 AWG	3 M	(20.1)
10117948-4040LF	26 AWG	4 M	(20.1)
10117948-4050LF	26 AWG	5 M	(20.1)
10117948-4060LF	26 AWG	6 M	(20.1)
10117948-4070LF	26 AWG	7 M	(20.1)
10117948-4080LF	26 AWG	8 M	(20.1)
10117948-3010LF	28 AWG	1 M	(17.3)
10117948-3020LF	28 AWG	2 M	(17.3)
10117948-3030LF	28 AWG	3 M	(17.3)
10117948-3040LF	28 AWG	4 M	(17.3)
10117948-3050LF	28 AWG	5 M	(17.3)
10117948-3060LF	28 AWG	6 M	(17.3)
10117948-2005LF	30 AWG	0.5 M	(17.3)
10117948-2010LF	30 AWG	1 M	(17.3)
10117948-2020LF	30 AWG	2 M	(17.3)
10117948-2030LF	30 AWG	3 M	(17.3)
10117948-2040LF	30 AWG	4 M	(17.3)

dr Deborah Ingram	20121214	projection	mm	size A3	scale 1:1
eng Tommy Lin	20140207		C&A	ecn no	ELX-N-2048-1
chr -	-			rel level	Released
appr Roger Cheng	20140207	product family		10117948	
		MINI SAS HD 8X TO 2 MINI SAS 2.0 UN-TRAINED UNIVERSAL FINAL ASSEMBLY (3Gb/s)		cat. no.	rev B
www.fci.com		Product - Customer Drw		sheet 3 of 5	

Prod File - REV C - 2009-04-09

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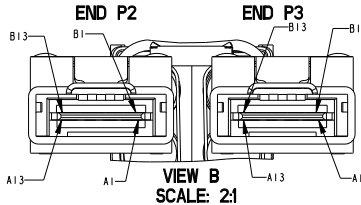
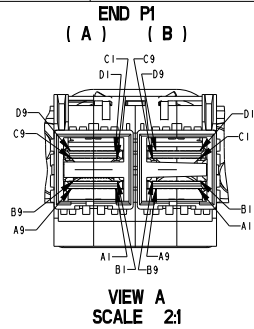
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PDS: Rev B

STATUS: Released

Printed: Jan 07, 2014

PRODUCT NUMBER	DESCRIPTION	NOTES
10117948-XXXXLF	NON-HF	SEE SHT. 3
10117948-XXXXHLF	HALOGEN FREE (H)	SEE SHT. 3



LEGEND:

	HIGH-SPEED SERIAL DIFFERENTIAL PAIRS
	SIGNAL RETURN
	POWER AND MANAGEMENT INTERFACE

WIRING DIAGRAM (SEE NOTE 7)

END P1 (B) MINI SAS HD			END P2 (MINI SAS)	
SIGNAL	PIN#	CONDUCTOR #	PIN#	SIGNAL
GND	A9		B7	GND
Rx 1-	A5	PAIR 2	B6	Tx 1-
Rx 1+	A4		B5	Tx 1+
GND	A3		B4	GND
Rx 3-	A8	PAIR 4	B12	Tx 3-
Rx 3+	A7		B11	Tx 3+
GND	A6		B13	GND
N/C	A1	NO THRU CONNECTION		
Interrupt	A2			
GND	B9			GND
RX 0-	B5	PAIR 1	B3	TX 0-
RX 0+	B4		B2	TX 0+
GND	B3		B1	GND
RX 2-	B8	PAIR 3	B9	TX 2-
RX 2+	B7		B8	TX 2+
GND	B6		B10	GND
N/C	B1	NO THRU CONNECTION		
Mod.PRS.L (GND)	B2			
GND	C9		A7	GND
TX 1-	C5	PAIR 2	A6	RX 1-
TX 1+	C4		A5	RX 1+
GND	C3		A4	GND
TX 3-	C8	PAIR 4	A12	RX 3-
TX 3+	C7		A11	RX 3+
GND	C6		A13	GND
SCL	C1	NO THRU CONNECTION		
SDA	C2			
GND	D9			GND
TX 0-	D5	PAIR 1	A3	RX 0-
TX 0+	D4		A2	RX 0+
GND	D3		A1	GND
TX 2-	D8	PAIR 3	A9	RX 2-
TX 2+	D7		A8	RX 2+
GND	D6		A10	GND
N/C	D1	NO THRU CONNECTION		
V+3.3 for EEPROM	D2			
SHELL		BRAID	SHELL	

SHIELD-----SHIELD

WIRING DIAGRAM (SEE NOTE 7)

END P1 (A) MINI SAS HD			END P3 (MINI SAS)	
SIGNAL	PIN#	CONDUCTOR #	PIN#	SIGNAL
GND	A9		B7	GND
Rx 1-	A5	PAIR 2	B6	Tx 1-
Rx 1+	A4		B5	Tx 1+
GND	A3		B4	GND
Rx 3-	A8	PAIR 4	B12	Tx 3-
Rx 3+	A7		B11	Tx 3+
GND	A6		B13	GND
N/C	A1	NO THRU CONNECTION		
Interrupt	A2			
GND	B9			GND
RX 0-	B5	PAIR 1	B3	TX 0-
RX 0+	B4		B2	TX 0+
GND	B3		B1	GND
RX 2-	B8	PAIR 3	B9	TX 2-
RX 2+	B7		B8	TX 2+
GND	B6		B10	GND
N/C	B1	NO THRU CONNECTION		
Mod.PRS.L (GND)	B2			
GND	C9		A7	GND
TX 1-	C5	PAIR 2	A6	RX 1-
TX 1+	C4		A5	RX 1+
GND	C3		A4	GND
TX 3-	C8	PAIR 4	A12	RX 3-
TX 3+	C7		A11	RX 3+
GND	C6		A13	GND
SCL	C1	NO THRU CONNECTION		
SDA	C2			
GND	D9			GND
TX 0-	D5	PAIR 1	A3	RX 0-
TX 0+	D4		A2	RX 0+
GND	D3		A1	GND
TX 2-	D8	PAIR 3	A9	RX 2-
TX 2+	D7		A8	RX 2+
GND	D6		A10	GND
N/C	D1	NO THRU CONNECTION		
V+3.3 for EEPROM	D2			
SHELL		BRAID	SHELL	

SHIELD-----SHIELD

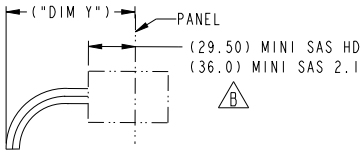
dr	Deborah Ingram	20121214	projection	mm	size	A3	scale	1:2
eng	Tomy Lin	20140207			ecn no			
chr	-	-			rel level			
appr	Roger Cheng	20140207	product family	C&A				
FCI		title	MINI SAS HD 8X TO 2 MINI SAS 2.0		dwg no	10117948		rev
www.fci.com		UN-TRAINED UNIVERSAL FINAL ASSEMBLY (3Gb/s)		Product - Customer Drw		sheet 4 of 5		B

PRODUCT NUMBER	DESCRIPTION	NOTES
10117948-XXXXLF	NON-HF	SEE SHT. 3
10117948-XXXXHLF	HALOGEN FREE (H)	SEE SHT. 3

NOTES:

1. MATERIALS MINI SAS HD (END P1)
BACK SHELLS: ZINC DIE CAST/ COPPER UNDER PLATE/NICKEL OVER PLATE
PULL TAB: THERMOPLASTIC POLYMER
LATCH: STAINLESS STEEL
FERRULE: BRASS
EMI GASKETS: STAINLESS STEEL
LOCTITE
HEAT SHRINK: HIGH POLYMER
PADDLE CARD: PRINTED CIRCUIT SUBSTRATE

MATERIALS MINI SAS (END P2 & END P3)
BACK SHELLS: ZINC DIE CAST
PULL TAB: THERMOPLASTIC POLYMER
LATCH: STAINLESS STEEL
JET MELT: POLYAMIDE POLYMER
HEAT SHRINK: POLYOLEFIN
PADDLE CARD: PRINTED CIRCUIT SUBSTRATE

PEND RADIUS
TOP VIEW OF CONNECTORMINI SAS HD P1
MINIMUM CABLE BEND TABLE

CABLE	("DIM Y") HF	("DIM Y") NON-HF
24 AWG	101.1	100.6
26 AWG	100.0	99.7
28 AWG	99.1	98.7
30 AWG	98.5	97.9

MINI SAS 2.1 P2 & P3
MINIMUM CABLE BEND TABLE
PER CONNECTOR

CABLE	("DIM Y") HF	("DIM Y") NON-HF
24 AWG	90.6	88.3
26 AWG	85.3	82.9
28 AWG	79.3	76.9
30 AWG	75.7	72.1

2. ELECTRICAL PERFORMANCE PER CURRENT REVISION: T10/SAS-2.0

3. THIS PRODUCT MEETS THE RESTRICTION OF HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT (RoHS) DIRECTIVE (2011/65/EU)

4. PRODUCT SPECIFICATIONS: Mini SAS HD GS-12-651, MINI SAS 2.0 GS-12-548

5. UNLESS OTHERWISE SPECIFIED ASSEMBLED LENGTH TOLERANCE IS TO BE:
"DIM L" < 1 METERS = $\pm 25\text{mm}$
"DIM L" 1 METER TO 10 METER = 2% OF "DIM L"

6. LABEL DETAILS:

FCI CHINA FCI P/N FCI CUSTOMER DRAWING REVISION FCI SERIAL NUMBER
--

FONT SHALL BE CLEARLY VISIBLE AND BLACK IN COLOR

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

8. PACKAGING OF LEAD FREE PRODUCTS MEETS LABELING AND PACKAGING PER SPECIFICATION GS-14-920.
PACKAGE CABLE ASSEMBLIES PER GS-14-1272. DUST COVER IS TO BE APPLIED TO MINI SAS HD CONNECTOR PRIOR TO SHIPPING. FCI PACKAGE TRACKING BAG LABEL IS ONLY FOR REFERENCE.

9. THIS DIMENSION IS A FINISHED PRODUCT LENGTH.

10. 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.

11. "H" PRODUCT NUMBERS DESIGNATE THE USE OF HALOGEN FREE RAW CABLE.

12. MEETS ELECTRICAL PERFORMANCE REQUIREMENTS OF SAS 2.0.

13. MATE WITH SERIES: MINI SAS HS - 100112627 or 10112628
MINI SAS 2.1 - BOARD CONNECTOR 100988870 AND CAGE 10098872

14. PLACE A CABLE TIE EVERY 0.5 METERS ON ASSEMBLIES. IN THE CASE OF A 0.5 METER CABLE LENGTH, PLACE THE CABLE TIE MIDWAY BETWEEN CONNECTORS.

LABEL EXAMPLE

FCI CHINA 10117948-2005LF REV.B CN1352HJ052L0001

FCI SERIAL NUMBER IS ONLY FOR TRACKING PRODUCT, DEFINED AS BELOW:

CN PRESENT MADE IN CHINA
YYMMYYEAR AND WEEK
SEQUENCE NUMBER(0001-9999)
NON-HALOGEN FREE OR HALOGEN FREE
(L IS NON-HALOGEN FREE TYPE OR H IS HALOGEN FREE TYPE)
CABLE AWG(2 IS 30AWG, 3 IS 28AWG, 4 IS 26AWG, 5 IS 24AWG)
LENGTH(05 IS 0.5 METER; 10 IS 1.0 METER, 20 IS 2.0 METERS, ETC)

NOTES CONTINUED

15. EEPROM INFORMATION OF MSHD SIDE REFER TO FCI LATEST PRODUCT SPEC. GS-12-651

16. CABLE IS OPTIONAL, WHICH HAD BEEN QUALIFIED BY FCI AND MEET FCI PRODUCT SPEC. GS-12-651/548

dr	Deborah Ingram	2012121214	projection	mm	size	A3	scale	1:1
eng	Tomy Lin	20140207			ecn no			ELX-N-20048-1
chr					rel level			Released
appr	Roger Cheng	20140207	product family					
www.fci.com	cat. no.		Product - Customer Drw	sheet 5 of 5				

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