

PRODUCT NUMBER	DESCRIPTION	NOTES
10117947-XXXXLF	NON-HF	SEE SHT. 3
10117947-XXXXHLF	HALOGEN FREE (H)	SEE SHT. 3



CABLE TIE
COLOR: BLACK
SEE NOTE 14



SECTION C-C
Mini SAS
CABLE ORIENTATION ONLY
END P2 & END P3

dr	Deborah Ingram	2011/05/23	projection	mm	size	A3	scale	1:1	
eng	Tommy Lin	2014/01/06			ecn no	ELX-N-16648-1			
chr	-	-			rel level	Released			
appr	Roger Cheng	2014/01/07	product family	MiniSAS/SATA	rev	D			
		title	MINI SAS HD 8X TO 2 MINI SAS 2.1		dwg no	10117947		cat. no.	-
www.fci.com		Product - Customer Drw		sheet 1 of 5					

PRODUCT NUMBER	DESCRIPTION	NOTES
10117947-XXXXLF	NON-HF	SEE SHT. 3
10117947-XXXXHLF	HALOGEN FREE (H)	SEE SHT. 3



END P1
MINI SAS HD 8X
ISOMETRIC VIEW



END P2 & END P3
MINI SAS
ISOMETRIC VIEW



KEY 3 & KEY SLOT 2, 4 & 6
○◇ UNIVERSAL PORT

END P2 & END P3
MINI SAS

dr	Deborah Ingram	2011/05/23	projection 	mm 	size	A3	scale	4:5	
eng	Tommy Lin	2014/01/06			ecn no	ELX-N-16648-1			
chr	-	-			rel level	Released			
appr	Roger Cheng	2014/01/07	product family	C&A					
		title		MINI SAS HD 8X TO 2 MINI SAS 2.1		dwg no	10117947		
www.fci.com		cat. no.		-		Product - Customer Drw		rev	D
				sheet 2 of 5					



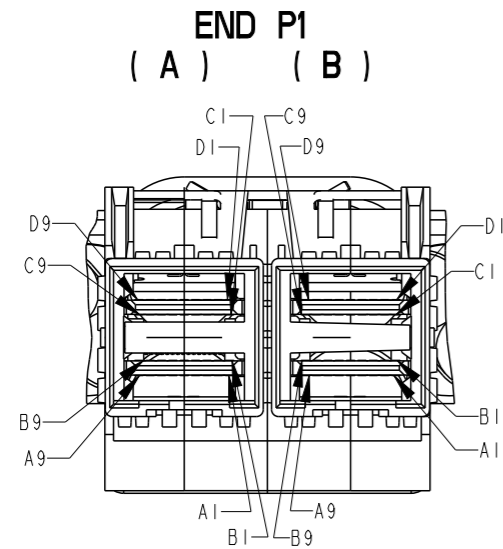
PRODUCT NUMBER	DESCRIPTION	NOTES
10117947-XXXXLF	NON-HF	SEE SHT. 3
10117947-XXXXHLF	HALOGEN FREE (H)	SEE SHT. 3

PRODUCT NUMBER (NON-HALOGEN FREE) SEE NOTE 16	AWG	"DIM L" LENGTH (Meters)	"DIM M" HEIGHT (mm)
10117947-5020LF	24 AWG	2 M	(20.1)
10117947-5030LF	24 AWG	3 M	(20.1)
10117947-5040LF	24 AWG	4 M	(20.1)
10117947-5050LF	24 AWG	5 M	(20.1)
10117947-5060LF	24 AWG	6 M	(20.1)
10117947-5070LF	24 AWG	7 M	(20.1)
10117947-5080LF	24 AWG	8 M	(20.1)
10117947-5090LF	24 AWG	9 M	(20.1)
10117947-5100LF	24 AWG	10 M	(20.1)
10117947-4020LF	26 AWG	2 M	(20.1)
10117947-4030LF	26 AWG	3 M	(20.1)
10117947-4040LF	26 AWG	4 M	(20.1)
10117947-4050LF	26 AWG	5 M	(20.1)
10117947-4060LF	26 AWG	6 M	(20.1)
10117947-4070LF	26 AWG	7 M	(20.1)
10117947-4080LF	26 AWG	8 M	(20.1)
10117947-3010LF	28 AWG	1 M	(17.3)
10117947-3020LF	28 AWG	2 M	(17.3)
10117947-3030LF	28 AWG	3 M	(17.3)
10117947-3040LF	28 AWG	4 M	(17.3)
10117947-3050LF	28 AWG	5 M	(17.3)
10117947-3060LF	28 AWG	6 M	(17.3)
10117947-2005LF	30 AWG	0.5 M	(17.3)
10117947-2010LF	30 AWG	1 M	(17.3)
10117947-2020LF	30 AWG	2 M	(17.3)
10117947-2030LF	30 AWG	3 M	(17.3)
10117947-2040LF	30 AWG	4 M	(17.3)

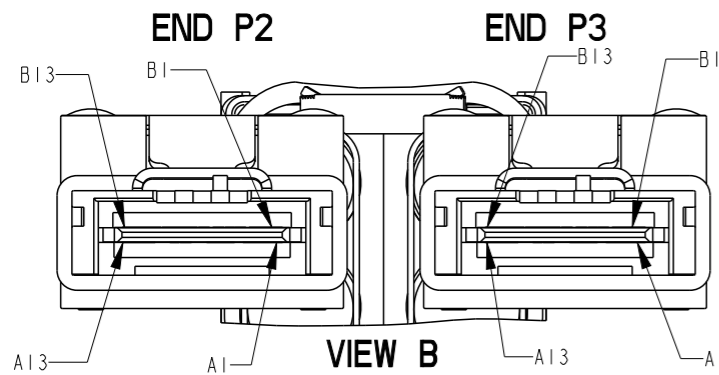
PRODUCT NUMBER (HALOGEN FREE) SEE NOTE 9 AND 16	AWG	"DIM L" LENGTH (Meters)	"DIM M" HEIGHT (mm)
10117947-5020HLF	24 AWG	2 M	(20.1)
10117947-5030HLF	24 AWG	3 M	(20.1)
10117947-5040HLF	24 AWG	4 M	(20.1)
10117947-5050HLF	24 AWG	5 M	(20.1)
10117947-5060HLF	24 AWG	6 M	(20.1)
10117947-5070HLF	24 AWG	7 M	(20.1)
10117947-5080HLF	24 AWG	8 M	(20.1)
10117947-5090HLF	24 AWG	9 M	(20.1)
10117947-5100HLF	24 AWG	10 M	(20.1)
10117947-4020HLF	26 AWG	2 M	(20.1)
10117947-4030HLF	26 AWG	3 M	(20.1)
10117947-4040HLF	26 AWG	4 M	(20.1)
10117947-4045HLF	26 AWG	5 M	(20.1)
10117947-4060HLF	26 AWG	6 M	(20.1)
10117947-4070HLF	26 AWG	7 M	(20.1)
10117947-4080HLF	26 AWG	8 M	(20.1)
10117947-3010HLF	28 AWG	1 M	(17.3)
10117947-3020HLF	28 AWG	2 M	(17.3)
10117947-3030HLF	28 AWG	3 M	(17.3)
10117947-3040HLF	28 AWG	4 M	(17.3)
10117947-3050HLF	28 AWG	5 M	(17.3)
10117947-3060HLF	28 AWG	6 M	(17.3)
10117947-2005HLF	30 AWG	0.5 M	(17.3)
10117947-2010HLF	30 AWG	1 M	(17.3)
10117947-2020HLF	30 AWG	2 M	(17.3)
10117947-2030HLF	30 AWG	3 M	(17.3)
10117947-2040HLF	30 AWG	4 M	(17.3)

dr	Deborah Ingram	2011/05/23		mm	size	A3	scale	1:1
eng	Tommy Lin	2014/01/06			ecn no	ELX-N-16648-1		
chr	-	-			rel level	Released		
appr	Roger Cheng	2014/01/07			product family	C&A		
		title MINI SAS HD 8X TO 2 MINI SAS 2.1 TRAINED UNIVERSAL FINAL ASSEMBLY (6Gb/s)		dwg no 10117947	rev D			
www.fci.com		cat. no.	-	Product - Customer Drw		sheet 3 of 5		

PRODUCT NUMBER	DESCRIPTION	NOTES
10117947-XXXXLF	NON-HF	SEE SHT. 3
10117947-XXXXHLF	HALOGEN FREE (H)	SEE SHT. 3

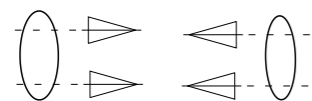


VIEW A
SCALE: 2:1

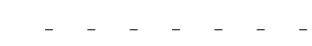


VIEW B
SCALE: 2:1

LEGEND:



HIGH-SPEED SERIAL DIFFERENTIAL PAIRS



SIGNAL RETURN



POWER AND MANAGEMENT INTERFACE

WIRING LIST (SEE NOTE 7)

END P1 (B) MINI SAS HD		CONDUCTOR #	END P2 (MINI SAS)	
SIGNAL	PIN#		PIN#	SIGNAL
GND	A9	PAIR 2	B7	GND
Rx 1-	A5		B6	Tx 1-
Rx 1+	A4		B5	Tx 1+
GND	A3	PAIR 4	B4	GND
Rx 3-	A8		B12	Tx 3-
Rx 3+	A7		B11	Tx 3+
GND	A6		B13	GND
N/C	A1	NO THRU CONNECTION		
Interrupt	A2			
GND	B9	PAIR 1		GND
RX 0-	B5		B3	TX 0-
RX 0+	B4		B2	TX 0+
GND	B3	PAIR 3	B1	GND
RX 2-	B8		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	PAIR 4	A4	GND
TX 3-	C8		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	PAIR 3	A1	GND
TX 2-	D8		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 LIST (SEE NOTE 7)

END P1 (A) MINI SAS HD		CONDUCTOR #	END P3 (MINI SAS)	
SIGNAL	PIN#		PIN#	SIGNAL
GND	A9	PAIR 2	B7	GND
Rx 1-	A5		B6	Tx 1-
Rx 1+	A4		B5	Tx 1+
GND	A3	PAIR 4	B4	GND
Rx 3-	A8		B12	Tx 3-
Rx 3+	A7		B11	Tx 3+
GND	A6		B13	GND
N/C	A1	NO THRU CONNECTION		
Interrupt	A2			
GND	B9	PAIR 1		GND
RX 0-	B5		B3	TX 0-
RX 0+	B4		B2	TX 0+
GND	B3	PAIR 3	B1	GND
RX 2-	B8		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	PAIR 4	A4	GND
TX 3-	C8		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	PAIR 3	A1	GND
TX 2-	D8		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	2011/05/23	projection	mm	size	A3	scale	1:2
eng	Tommy Lin	2014/01/06			ecn no	ELX-N-16648-1	rel level	Released
chr	-	-						
appr	Roger Cheng	2014/01/07	product family	C&A				
			MINI SAS HD 8X TO 2 MINI SAS 2.1		dwg no		10117947	
www.fci.com			cat. no.		-		Product - Customer Drw	
			sheet 4 of 5					

PRODUCT NUMBER	DESCRIPTION	NOTES
10117947-XXXXLF	NON-HF	SEE SHT. 3
10117947-XXXXHLF	HALOGEN FREE (H)	SEE SHT. 3

NOTES:

- 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

- ELECTRICAL PERFORMANCE PER CURRENT REVISION: T10/SAS-2.1

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

- PRODUCT SPECIFICATIONS: Mini SAS HD GS-12-651, MINI SAS 2.1 GS-12-548

- UNLESS OTHERWISE SPECIFIED ASSEMBLED LENGTH TOLERANCE IS TO BE:
 "DIM L" < 1 METERS = ±25mm
 "DIM L" 1 METER TO 10 METER = 2% OF "DIM L"

- LABEL DETAILS:

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

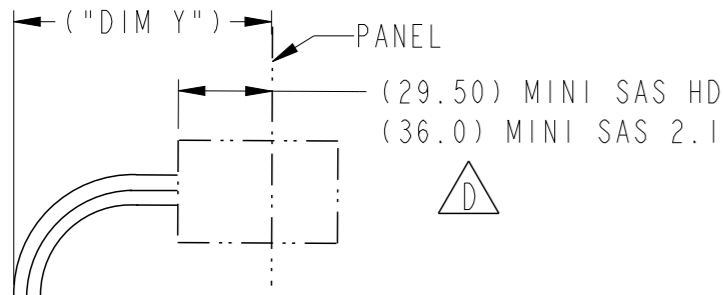
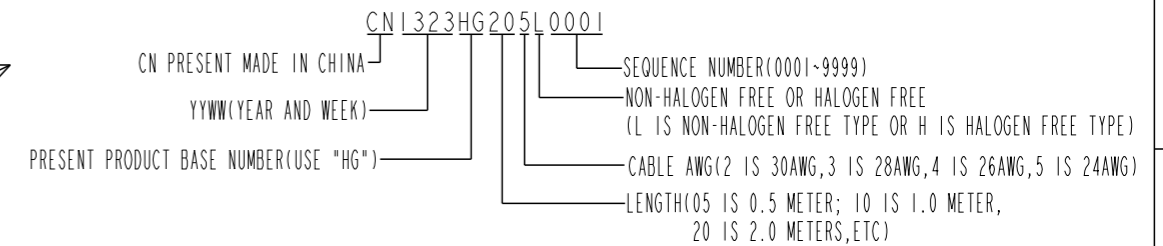
FONT SHALL BE CLEARLY VISIBLE AND BLACK IN COLOR

- ALL CABLE ASSEMBLIES SHALL BE 100% TESTED FOR CONTINUITY AS DEFINED IN WIRING LIST.
- 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.
- "H" PRODUCT NUMBERS DESIGNATE THE USE OF HALOGEN FREE RAW CABLE.
- THIS DIMENSION IS A FINISHED PRODUCT LENGTH.
- 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.
- MEETS ELECTRICAL PERFORMANCE REQUIREMENTS OF SAS 2.1.
- MATES WITH SERIES: MINI SAS HS - 100112627 or 10112628
 MINI SAS 2.1 - BOARD CONNECTOR 100988870 AND CAGE 10098872
- 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
 10117947-5020LF
 REV.D
 CN1323HG205L0001

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



PEND RADIUS
 TOP VIEW OF CONNECTOR

MINI 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



NOTES CONTINUED

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

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

dr	Deborah Ingram	2011/05/23	projection	mm	size	A3	scale	1:1	
eng	Tommy Lin	2014/01/06			ecn no				
chr	-	-			ELX-N-16648-1				
appr	Roger Cheng	2014/01/07	product family	-	rel level				
www.fci.com					MINI SAS HD 8X TO 2 MINI SAS 2.1 TRAINED UNIVERSAL FINAL ASSEMBLY (6Gb/s)		cat. no. -	Product - Customer Drw	sheet 5 of 5



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

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