

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



| | | | | | | | | | |
|-------------|----------------|------------------------|----------------------------------|--------------|-----------|---------------|-------|----------|---|
| 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 | | | | | |

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| 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 | - | - | | | product family | C&A | rel level | Released | |
| appr | Roger Cheng | 2014/01/07 | www.fci.com | | title | MINI SAS HD 8X TO 2 MINI SAS 2.1 TRAINED UNIVERSAL FINAL ASSEMBLY (6Gb/s) | | rev | D |
| cat. no. | | - | | Product - Customer Drw | | | 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 | projection  | size A3 | scale 1:1 |
| eng | Tommy Lin | 2014/01/06 | | | |
| chr | - | - | | | |
| appr | Roger Cheng | 2014/01/07 | | | |
| product family | | | C&A | ecn no | ELX-N-16648-1 |
| rel level | | | Released | | |
|  | | 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 | | |



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| 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 | | | END P2 (MINI SAS) | |
| SIGNAL | PIN# | CONDUCTOR # | 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 | NO THRU CONNECTION | B13 | GND |
| N/C | A1 | | | |
| 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 | NO THRU CONNECTION | B10 | GND |
| N/C | B1 | | | |
| Mod_PRS_L (GND) | B2 | | | |
| GND | C9 | PAIR 2 | A7 | GND |
| TX 1- | C5 | | 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 | NO THRU CONNECTION | A13 | GND |
| SCL | C1 | | | |
| SDA | C2 | | | |
| GND | D9 | PAIR 1 | | GND |
| TX 0- | D5 | | 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 | NO THRU CONNECTION | A10 | GND |
| N/C | D1 | | | |
| V+3.3 for EEPROM | D2 | | | |
| SHELL | | BRAID | | SHELL |

SHIELD-----SHIELD

| WIRING LIST (SEE NOTE 7) | | | | |
|---------------------------|------|--------------------|----------------------|--------|
| END P1 (A) MINI SAS HD | | | END P3 (MINI SAS) | |
| SIGNAL | PIN# | CONDUCTOR # | 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 | NO THRU CONNECTION | B13 | GND |
| N/C | A1 | | | |
| 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 | NO THRU CONNECTION | B10 | GND |
| N/C | B1 | | | |
| Mod_PRS_L (GND) | B2 | | | |
| GND | C9 | PAIR 2 | A7 | GND |
| TX 1- | C5 | | 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 | NO THRU CONNECTION | A13 | GND |
| SCL | C1 | | | |
| SDA | C2 | | | |
| GND | D9 | PAIR 1 | | GND |
| TX 0- | D5 | | 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 | NO THRU CONNECTION | A10 | GND |
| N/C | D1 | | | |
| 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 |
| chr | - | - | product family | C&A | rel level | | | Released |
| appr | Roger Cheng | 2014/01/07 | | | | | | |
| | | MINI SAS HD 8X TO 2 MINI SAS 2.1 | | dwg no | | 10117947 | | rev |
| 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:

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 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 |

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

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 2.1 GS-12-548

5. 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"

6. LABEL DETAILS:

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

FONT SHALL BE CLEARLY VISIBLE AND BLACK IN COLOR

△ LABEL EXAMPLE

FCI CHINA
 10117947-5020LF
 REV.D
 CN1323HG205L0001

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



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

10. THIS DIMENSION IS A FINISHED PRODUCT LENGTH.

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. MEETS ELECTRICAL PERFORMANCE REQUIREMENTS OF SAS 2.1.

13. MATES 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.



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 | 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 | - | | |
| www.fci.com | | | cat. no. | - | Product - Customer Drw | sheet 5 of 5 | | |
| FCI | | | MINI SAS HD 8X TO 2 MINI SAS 2.1 | dwg no | 10117947 | rev | D | |
| | | | TRAINED UNIVERSAL FINAL ASSEMBLY (6Gb/s) | | | | | |



Стандарт Электрон Связь

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

Наши контакты:

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Электронная почта: sales@st-electron.ru

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Промышленная ул, дом № 19, литера Н,
помещение 100-Н Офис 331