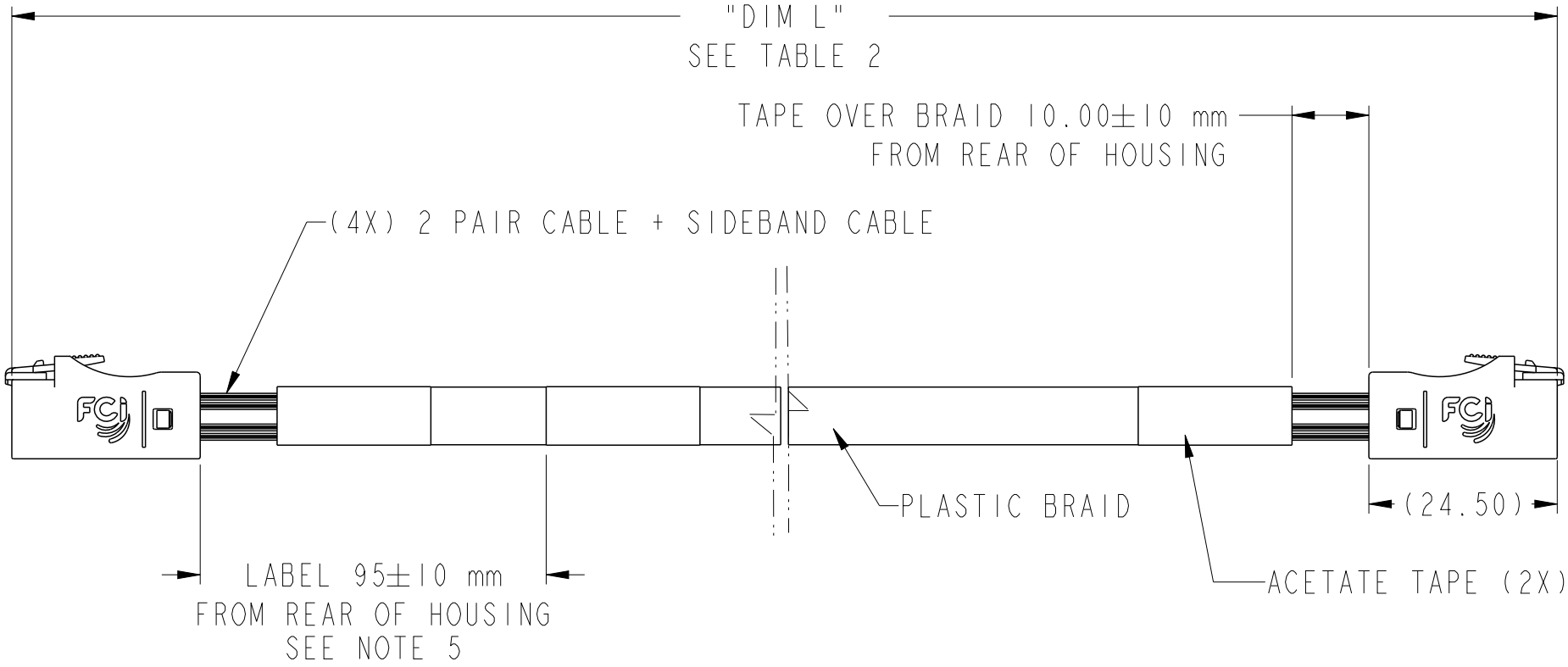
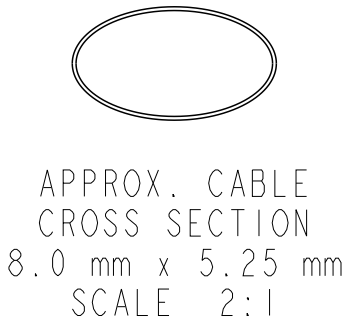
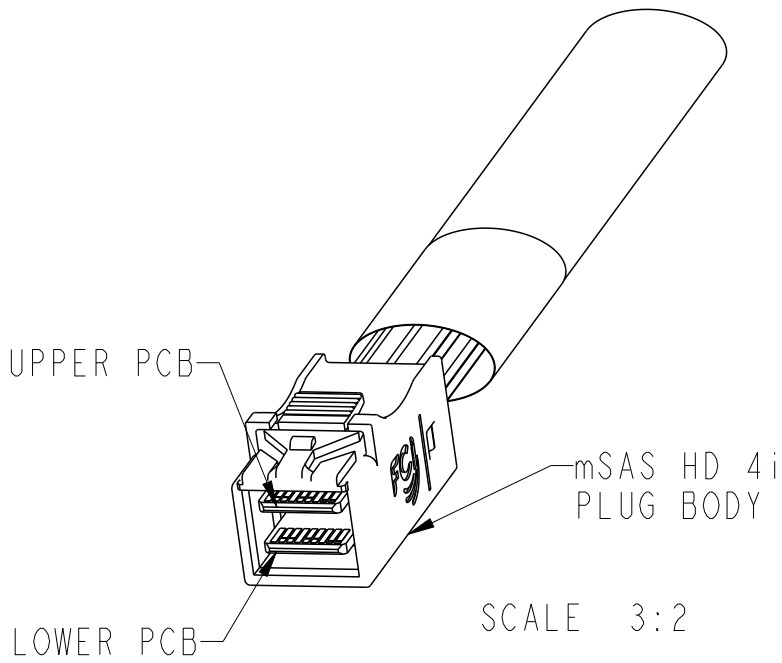


| FCI PART NUMBER | DESCRIPTION                            | NOTES       |
|-----------------|----------------------------------------|-------------|
| 10120087-XXXXLF | CONTROLLER TO CONTROLLER CONFIGURATION | SEE TABLE 1 |



|               |                     |        |             |             |                |           |                         |              |               |     |
|---------------|---------------------|--------|-------------|-------------|----------------|-----------|-------------------------|--------------|---------------|-----|
| spec ref      | -                   | dr     | David Lord  | 2012/02/16  | projection     | mm        | size                    | A3           | scale         | 1:1 |
| tolerance std | ISO 406<br>ISO 1101 | eng    | Jason Gu    | 2013/05/16  | chr            | Kevin Bai | 2013/05/16              | ecn no       | ELX-N-14781-1 |     |
|               |                     | appr   | Roger Cheng | 2013/05/16  | product family | -         | rel level               | Released     |               |     |
| surface       | ✓                   | linear | 0.X         | ±0.3        | FCI            | title     | mSAS HD INTERNAL (4i)   | dwg no       | 10120087      | rev |
|               |                     |        | 0.XX        | ±0.10       |                |           | CABLE ASSEMBLY- 12 Gb/s |              |               | C   |
|               |                     |        | 0.XXX       | ±0.005      |                |           |                         |              |               |     |
| ISO 1302      | angular             | 0°     | ±2°         | www.fci.com | cat. no.       | -         | Product - Customer Drw  | sheet 1 of 4 |               |     |



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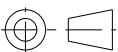
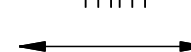
|                 |                                        |             |
|-----------------|----------------------------------------|-------------|
| FCI PART NUMBER | DESCRIPTION                            | NOTES       |
| 10120087-XXXXLF | CONTROLLER TO CONTROLLER CONFIGURATION | SEE TABLE 1 |

TABLE 2- CABLE PART NUMBER LIST

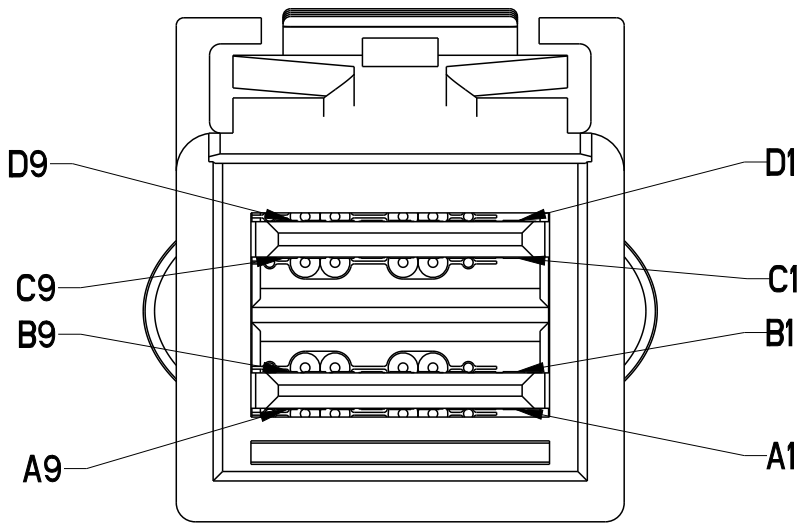
| PART NUMBER     | "DIM L" CABLE LENGTH (METERS) | AWG | NOTES                                                                                          |
|-----------------|-------------------------------|-----|------------------------------------------------------------------------------------------------|
| 10120087-2030LF | 0.3                           | 30  | CONTROLLER TO CONTROLLER WIRING CONFIGURATION (SHEET 2)<br>----<br>(SEE SHEET 4 FOR ALL NOTES) |
| 10120087-2040LF | 0.4                           | 30  |                                                                                                |
| 10120087-2050LF | 0.5                           | 30  |                                                                                                |
| 10120087-2060LF | 0.6                           | 30  |                                                                                                |
| 10120087-2070LF | 0.7                           | 30  |                                                                                                |
| 10120087-2080LF | 0.8                           | 30  |                                                                                                |
| 10120087-2090LF | 0.9                           | 30  |                                                                                                |
| 10120087-2100LF | 1.0                           | 30  |                                                                                                |

NOTE:

1. ALL CABLE PERFORMANCE COMPLIANCE SAS3.0  $\triangle C$
2. CABLE MORE THAN 1.0 METER COULD NOT MEET SAS3.0 INSERTION LOSS -11dB MAX.  $\triangle C$

|                                                                                                           |                                       |       |        |                                                                                       |                                                        |            |  |                                                                                       |                                                                                       |                      |           |
|-----------------------------------------------------------------------------------------------------------|---------------------------------------|-------|--------|---------------------------------------------------------------------------------------|--------------------------------------------------------|------------|--|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------|-----------|
| spec ref -                                                                                                |                                       |       |        | dr David Lord                                                                         |                                                        | 2012/02/16 |  |  |  | size A3              | scale 1:1 |
| tolerance std<br>ISO 406<br>ISO 1101                                                                      | TOLERANCES UNLESS OTHERWISE SPECIFIED |       |        | eng Jason Gu                                                                          |                                                        | 2013/05/16 |  |                                                                                       |                                                                                       | ecn no ELX-N-14781-1 |           |
|                                                                                                           |                                       |       |        | chr Kevin Bai                                                                         |                                                        | 2013/05/16 |  |                                                                                       |                                                                                       | rel level Released   |           |
|                                                                                                           |                                       |       |        | appr Roger Cheng                                                                      |                                                        | 2013/05/16 |  | product family -                                                                      |                                                                                       |                      |           |
| surface <br>ISO 1302 | linear                                | 0.X   | ±0.3   |  | title mSAS HD INTERNAL (4i)<br>CABLE ASSEMBLY- 12 Gb/s |            |  |                                                                                       | dwg no 10120087                                                                       | rev C                |           |
|                                                                                                           |                                       | 0.XX  | ±0.10  |                                                                                       |                                                        |            |  |                                                                                       |                                                                                       |                      |           |
|                                                                                                           |                                       | 0.XXX | ±0.005 |                                                                                       |                                                        |            |  |                                                                                       |                                                                                       |                      |           |
| angular 0° ±2°                                                                                            |                                       |       |        | www.fci.com                                                                           |                                                        | cat. no. - |  | Product - Customer Drw                                                                |                                                                                       | sheet 2 of 4         |           |

|                 |                                        |             |
|-----------------|----------------------------------------|-------------|
| FCI PART NUMBER | DESCRIPTION                            | NOTES       |
| 10120087-XXXXLF | CONTROLLER TO CONTROLLER CONFIGURATION | SEE TABLE 1 |



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          |  | David Lord |  | 2012/02/16 |  | projection             |  |                       |  | mm     |  | size          |  | A3        |  | scale    |  | 2:1 |  |
| tolerance std |  | TOLERANCES UNLESS OTHERWISE SPECIFIED |  | eng         |  | Jason Gu   |  | 2013/05/16 |  |                        |  |                       |  | ecn no |  | ELX-N-14781-1 |  | rel level |  | Released |  |     |  |
| ISO 406       |  |                                       |  |             |  |            |  |            |  |                        |  |                       |  |        |  |               |  |           |  |          |  |     |  |
| ISO 1101      |  |                                       |  |             |  |            |  |            |  |                        |  |                       |  |        |  |               |  |           |  |          |  |     |  |
| surface       |  | linear                                |  | 0.X         |  | ±0.3       |  |            |  | title                  |  | mSAS HD INTERNAL (4i) |  | dwg no |  | 10120087      |  | rev       |  | C        |  |     |  |
| ISO 1302      |  |                                       |  |             |  |            |  |            |  |                        |  |                       |  |        |  |               |  |           |  |          |  |     |  |
| angular       |  |                                       |  |             |  |            |  |            |  |                        |  |                       |  |        |  |               |  |           |  |          |  |     |  |
| 0°            |  | ±2°                                   |  | www.fci.com |  | cat. no.   |  | -          |  | Product - Customer Drw |  | sheet 3 of 4          |  |        |  |               |  |           |  |          |  |     |  |

| FCI PART NUMBER | DESCRIPTION                            | NOTES       |
|-----------------|----------------------------------------|-------------|
| 10120087-XXXXLF | CONTROLLER TO CONTROLLER CONFIGURATION | SEE TABLE I |

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 = ±25mm  
"DIM L" 1 METER TO 10 METERS = ± 2% OF "DIM L"
5. UNLESS OTHERWISE SPECIFIED LABEL POSITION IS TO BE 95mm FROM REAR OF PI 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.
15. THIS PRODUCT CONFORMS TO THE MECHANICAL DIMENSIONING AND ELECTRICAL REQUIREMENTS OF THE SFF-8643 SPECIFICATION.



|               |  |                                       |  |                                                                                       |  |            |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                        |  |                       |  |        |  |          |  |
|---------------|--|---------------------------------------|--|---------------------------------------------------------------------------------------|--|------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|------------------------|--|-----------------------|--|--------|--|----------|--|
| spec ref      |  | -                                     |  | dr                                                                                    |  | David Lord |  | 2012/02/16                                                                            |  | projection                                                                            |  | mm                                                                                    |  | size                   |  | A3                    |  | scale  |  | 2:1      |  |
| tolerance std |  | TOLERANCES UNLESS OTHERWISE SPECIFIED |  | eng                                                                                   |  | Jason Gu   |  | 2013/05/16                                                                            |  |  |  |  |  | ecn no                 |  | ELX-N-14781-1         |  |        |  |          |  |
| chr           |  |                                       |  | Kevin Bai                                                                             |  | 2013/05/16 |  | rel level                                                                             |  |                                                                                       |  |                                                                                       |  | Released               |  |                       |  |        |  |          |  |
| appr          |  |                                       |  | Roger Cheng                                                                           |  | 2013/05/16 |  | product family                                                                        |  |                                                                                       |  |                                                                                       |  | -                      |  |                       |  |        |  |          |  |
| surface       |  |                                       |  |  |  | linear     |  |  |  |                                                                                       |  |                                                                                       |  | title                  |  | mSAS HD INTERNAL (4i) |  | dwg no |  | 10120087 |  |
| ISO 406       |  |                                       |  |                                                                                       |  |            |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                        |  |                       |  |        |  |          |  |
| ISO 1101      |  |                                       |  |                                                                                       |  |            |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                        |  |                       |  |        |  |          |  |
| ISO 1302      |  | angular                               |  | 0°                                                                                    |  | ±2°        |  | www.fci.com                                                                           |  | cat. no.                                                                              |  | -                                                                                     |  | Product - Customer Drw |  | sheet 4 of 4          |  |        |  |          |  |