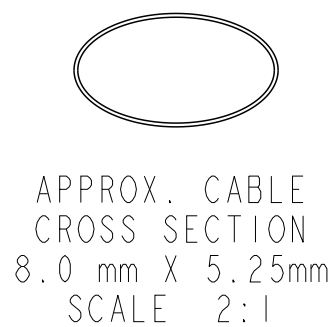
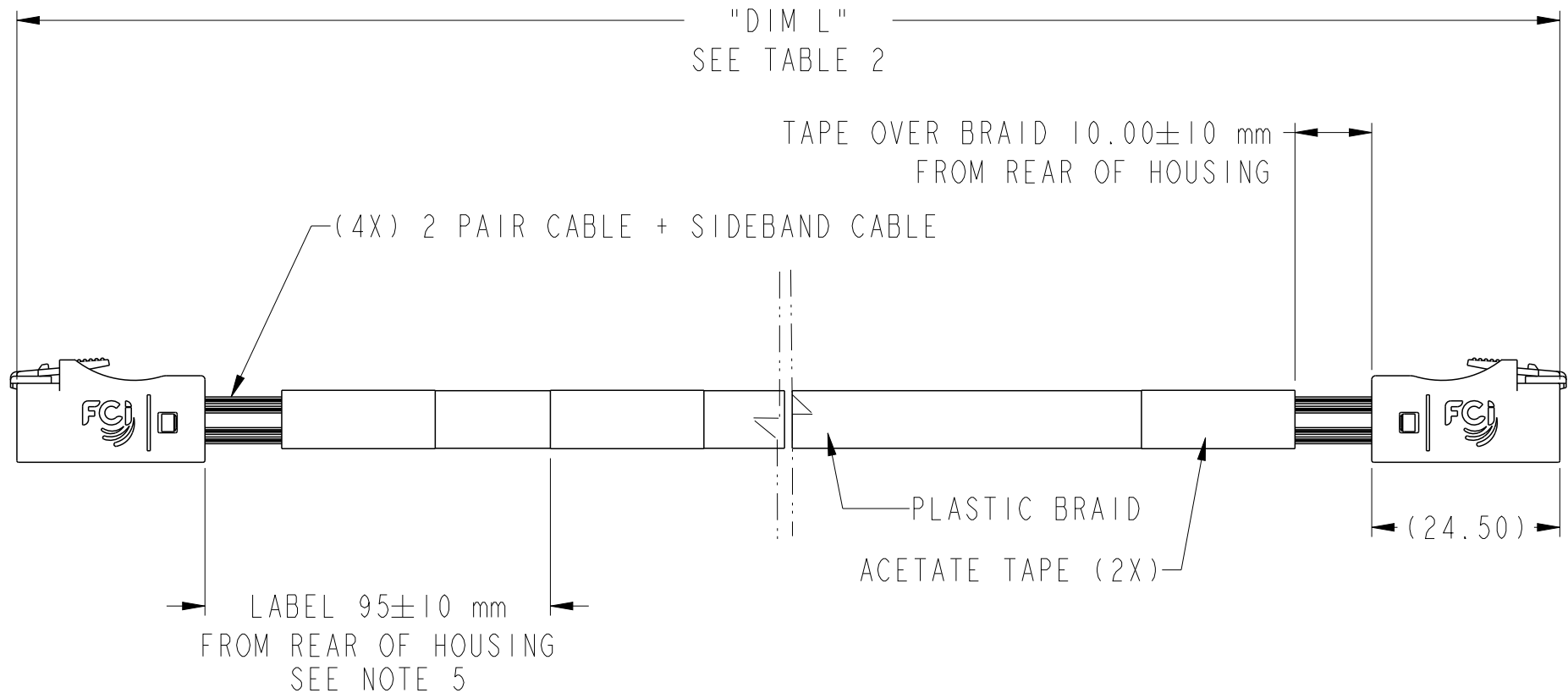
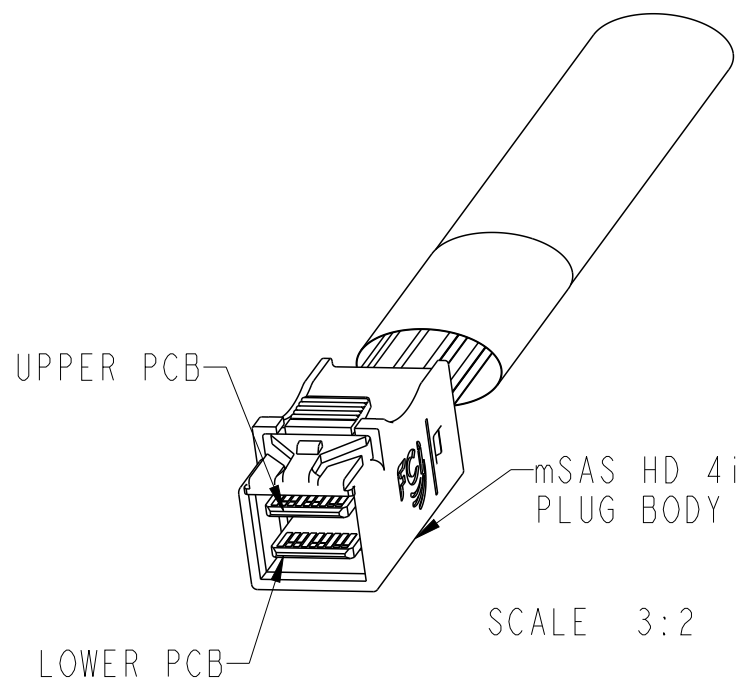


| FCI PART NUMBER | DESCRIPTION                            | NOTES       |
|-----------------|----------------------------------------|-------------|
| 10120086-XXXXLF | CONTROLLER TO CONTROLLER CONFIGURATION | SEE TABLE 1 |



|               |  |                                                                                       |  |        |  |                                                                                       |  |             |  |                       |  |                                                                                       |  |                                                                                       |  |                |  |               |  |       |  |     |  |      |  |       |  |
|---------------|--|---------------------------------------------------------------------------------------|--|--------|--|---------------------------------------------------------------------------------------|--|-------------|--|-----------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|----------------|--|---------------|--|-------|--|-----|--|------|--|-------|--|
| spec ref      |  | -                                                                                     |  | dr     |  | David Lord                                                                            |  | 2012/02/16  |  | projection            |  |  |  | mm                                                                                    |  | size           |  | A3            |  | scale |  | 1:1 |  |      |  |       |  |
| tolerance std |  | TOLERANCES UNLESS OTHERWISE SPECIFIED                                                 |  |        |  | eng                                                                                   |  | Andy Wu     |  | 2013/01/31            |  |  |  |  |  | ecn no         |  | ELX-N-13965-1 |  |       |  |     |  |      |  |       |  |
| ISO 406       |  |                                                                                       |  |        |  | chr                                                                                   |  | -           |  | -                     |  |                                                                                       |  |                                                                                       |  | rel level      |  | Released      |  |       |  |     |  |      |  |       |  |
| ISO 1101      |  |                                                                                       |  |        |  | appr                                                                                  |  | Roger Cheng |  | 2013/02/01            |  |                                                                                       |  |                                                                                       |  | product family |  | -             |  |       |  |     |  |      |  |       |  |
| surface       |  |  |  | linear |  |  |  | title       |  | mSAS HD INTERNAL (4i) |  | dwg no                                                                                |  | 10120086                                                                              |  | rev            |  | B             |  |       |  |     |  |      |  |       |  |
|               |  |                                                                                       |  |        |  |                                                                                       |  |             |  |                       |  |                                                                                       |  |                                                                                       |  |                |  |               |  |       |  |     |  | 0.X  |  | ±0.3  |  |
|               |  |                                                                                       |  |        |  |                                                                                       |  |             |  |                       |  |                                                                                       |  |                                                                                       |  |                |  |               |  |       |  |     |  | 0.XX |  | ±0.10 |  |
| ISO 1302      |  | angular                                                                               |  | 0°     |  | ±2°                                                                                   |  | www.fci.com |  | cat. no.              |  | -                                                                                     |  | Product - Customer Drw                                                                |  | sheet 1 of 4   |  |               |  |       |  |     |  |      |  |       |  |

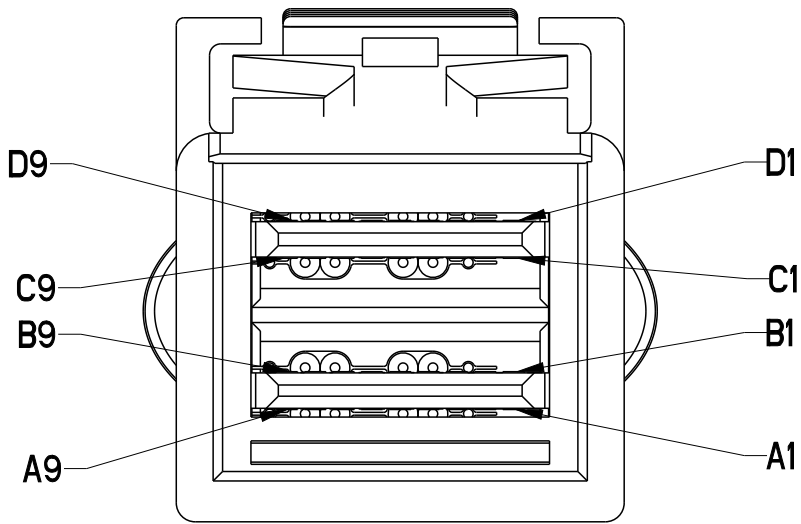
|                 |                                        |             |
|-----------------|----------------------------------------|-------------|
| FCI PART NUMBER | DESCRIPTION                            | NOTES       |
| 10120086-XXXXLF | CONTROLLER TO CONTROLLER CONFIGURATION | SEE TABLE 1 |

| TABLE 1 - CABLE PART NUMBER LIST |                               |     |                                                                                                 |
|----------------------------------|-------------------------------|-----|-------------------------------------------------------------------------------------------------|
| PART NUMBER                      | "DIM L" CABLE LENGTH (METERS) | AWG | NOTES                                                                                           |
| 10120086-2030LF                  | 0.3                           | 30  | CONTROLLER TO CONTROLLER WIRING CONFIGURATION (SHEET 2)<br>-----<br>(SEE SHEET 3 FOR ALL NOTES) |
| 10120086-2040LF                  | 0.4                           | 30  |                                                                                                 |
| 10120086-2050LF                  | 0.5                           | 30  |                                                                                                 |
| 10120086-2060LF                  | 0.6                           | 30  |                                                                                                 |
| 10120086-2070LF                  | 0.7                           | 30  |                                                                                                 |
| 10120086-2080LF                  | 0.8                           | 30  |                                                                                                 |
| 10120086-2090LF                  | 0.9                           | 30  |                                                                                                 |
| 10120086-2100LF                  | 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.

|                                                                                               |  |                                       |  |       |  |             |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                        |  |                |  |     |  |           |  |          |  |
|-----------------------------------------------------------------------------------------------|--|---------------------------------------|--|-------|--|-------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|------------------------|--|----------------|--|-----|--|-----------|--|----------|--|
| spec ref                                                                                      |  | -                                     |  | dr    |  | David Lord  |  | 2012/02/16                                                                            |  | projection                                                                            |  |  |  | mm                     |  | size           |  | A3  |  | scale     |  | 1:1      |  |
| tolerance std                                                                                 |  | TOLERANCES UNLESS OTHERWISE SPECIFIED |  | eng   |  | Andy Wu     |  | 2013/01/31                                                                            |  |  |  |  |  | ecn no                 |  | ELX-N-13965-1  |  |     |  |           |  |          |  |
| ISO 406                                                                                       |  |                                       |  | chr   |  | -           |  | -                                                                                     |  |                                                                                       |  |                                                                                       |  |                        |  |                |  |     |  |           |  |          |  |
| ISO 1101                                                                                      |  |                                       |  | appr  |  | Roger Cheng |  | 2013/02/01                                                                            |  |                                                                                       |  |                                                                                       |  |                        |  | product family |  | -   |  | rel level |  | Released |  |
| surface  |  | linear                                |  | 0.X   |  | ±0.3        |  |  |  | title                                                                                 |  | mSAS HD INTERNAL (4i)                                                                 |  | dwg no                 |  | 10120086C      |  | rev |  | B         |  |          |  |
|                                                                                               |  |                                       |  | 0.XX  |  | ±0.10       |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                        |  |                |  |     |  |           |  |          |  |
|                                                                                               |  |                                       |  | 0.XXX |  | ±0.005      |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                        |  |                |  |     |  |           |  |          |  |
| ISO 1302                                                                                      |  | angular                               |  | 0°    |  | ±2°         |  | www.fci.com                                                                           |  | cat. no.                                                                              |  | -                                                                                     |  | Product - Customer Drw |  | sheet 2 of 4   |  |     |  |           |  |          |  |

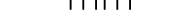
|                 |                                        |             |
|-----------------|----------------------------------------|-------------|
| FCI PART NUMBER | DESCRIPTION                            | NOTES       |
| 10120086-XXXXLF | CONTROLLER TO CONTROLLER CONFIGURATION | SEE TABLE 1 |



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         |  | Andy Wu    |  | 2013/01/31                                                                            |  |  |  |  |  | ecn no                 |  | ELX-N-13965-1 |  |       |  |     |  |
| chr           |  |                                       |  | -           |  | -          |  | rel level                                                                             |  |                                                                                       |  |                                                                                       |  | Released               |  |               |  |       |  |     |  |
| appr          |  |                                       |  | Roger Cheng |  | 2013/02/01 |  | product family                                                                        |  |                                                                                       |  |                                                                                       |  | -                      |  |               |  |       |  |     |  |
| surface       |  | linear                                |  | 0.X         |  | ±0.3       |  |  |  | title                                                                                 |  | mSAS HD INTERNAL (4i)                                                                 |  | dwg no                 |  | 10120086      |  | rev   |  | B   |  |
|               |  |                                       |  | 0.XX        |  | ±0.10      |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                        |  |               |  |       |  |     |  |
|               |  |                                       |  | 0.XXX       |  | ±0.005     |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                        |  |               |  |       |  |     |  |
| ISO 1302      |  | angular                               |  | 0°          |  | ±2°        |  | www.fci.com                                                                           |  | cat. no.                                                                              |  | -                                                                                     |  | Product - Customer Drw |  | sheet 3 of 4  |  |       |  |     |  |

|                 |                                        |             |
|-----------------|----------------------------------------|-------------|
| FCI PART NUMBER | DESCRIPTION                            | NOTES       |
| 10120086-XXXXLF | CONTROLLER TO CONTROLLER CONFIGURATION | SEE TABLE 1 |

- 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.
16. THIS PRODUCT CONFORMS TO THE SAS 2.1 SPECIFICATION.

|                                                                                               |  |                                       |  |       |  |             |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                        |  |                |  |       |  |           |  |
|-----------------------------------------------------------------------------------------------|--|---------------------------------------|--|-------|--|-------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|------------------------|--|----------------|--|-------|--|-----------|--|
| spec ref                                                                                      |  | -                                     |  | dr    |  | David Lord  |  | 2012/02/16                                                                            |  | projection                                                                            |  | mm                                                                                    |  | size                   |  | A3             |  | scale |  | 2:1       |  |
| tolerance std                                                                                 |  | TOLERANCES UNLESS OTHERWISE SPECIFIED |  | eng   |  | Andy Wu     |  | 2013/01/31                                                                            |  |  |  |  |  | ecn no                 |  | ELX-N-13965-1  |  |       |  |           |  |
| ISO 406                                                                                       |  |                                       |  | chr   |  | -           |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                        |  |                |  |       |  |           |  |
| ISO 1101                                                                                      |  |                                       |  | appr  |  | Roger Cheng |  | 2013/02/01                                                                            |  |                                                                                       |  |                                                                                       |  |                        |  | product family |  | -     |  | rel level |  |
| surface  |  | linear                                |  | 0.X   |  | ±0.3        |  |  |  | title                                                                                 |  | mSAS HD INTERNAL (4i)                                                                 |  | dwg no                 |  | 10120086       |  | rev   |  | B         |  |
|                                                                                               |  |                                       |  | 0.XX  |  | ±0.10       |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                        |  |                |  |       |  |           |  |
|                                                                                               |  |                                       |  | 0.XXX |  | ±0.005      |  |                                                                                       |  |                                                                                       |  |                                                                                       |  |                        |  |                |  |       |  |           |  |
| ISO 1302                                                                                      |  | angular                               |  | 0°    |  | ±2°         |  | www.fci.com                                                                           |  | cat. no.                                                                              |  | -                                                                                     |  | Product - Customer Drw |  | sheet 4 of 4   |  |       |  |           |  |