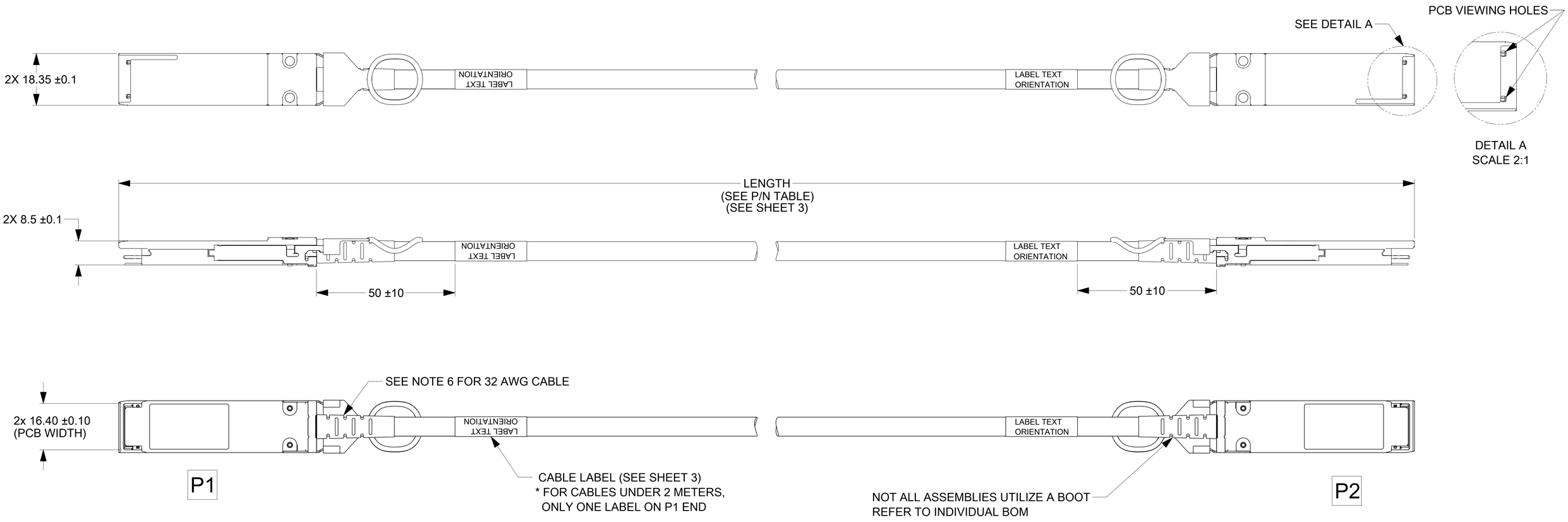
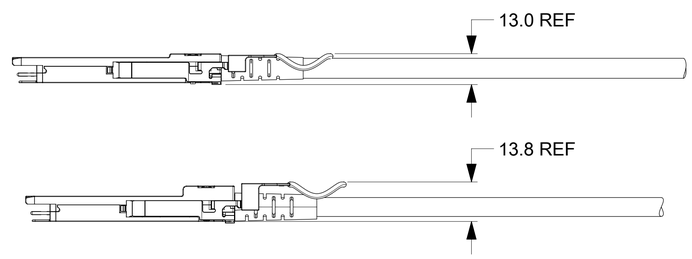



NOTES:

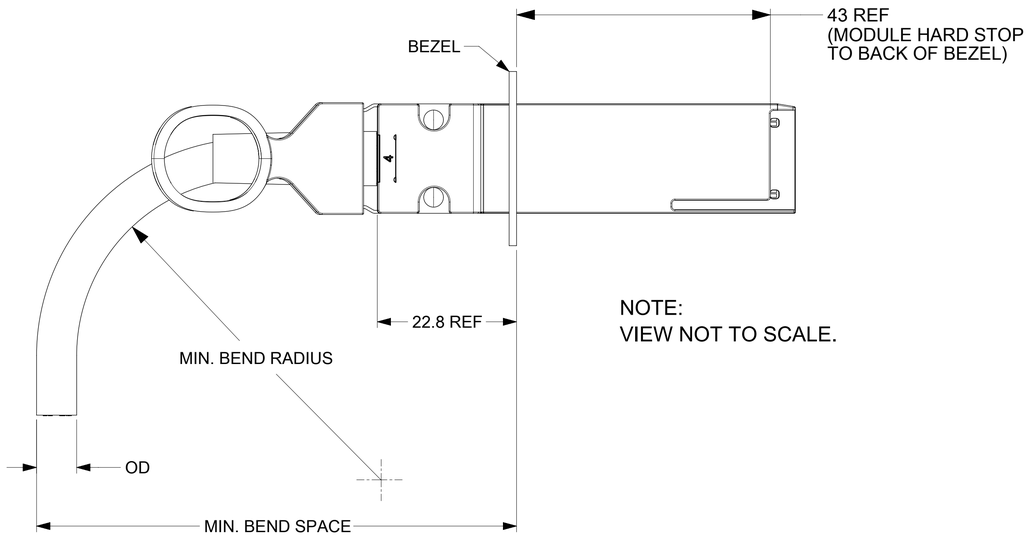
1. CABLE LENGTH DEPENDS ON WIRE GAUGE, DATA RATE, AND HOST BOARD DRIVER CAPABILITIES
2. MATERIALS:
   - BACKSHELLS - ZINC DIE CAST WITH BRIGHT NICKEL PLATING
   - DELATCH - STAINLESS STEEL WITH OVERMOLDED NYLON
   - PCB - HALOGEN FREE
   - RIVETS - STAINLESS STEEL
3. IMPEDANCE - 100 OHMS DIFFERENTIAL
4. CABLE ASSEMBLY IS UL RECOGNIZED
5. RoHS COMPLIANT, NO EXEMPTIONS
6. ACETATE CLOTH TAPE TO BE PLACED 3 MM REF FROM BACKSHELL CABLE EXIT AREA

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DOCUMENT STATUS | P1 | RELEASE DATE | 2022/06/30 10:21:00 | | | | |

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| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FUNCTIONAL SYMBOLS: FA = 0; FC = 0; FP = 0 | DIMENSION UNITS: mm | SCALE: 1.5:1 | CURRENT REV DESC: SHEET 3 : ADDED NEW PN 1002973451 IN PN TABLE | molex | | | | | |
| | GENERAL TOLERANCES (UNLESS SPECIFIED) | | | ZQSFP+ TO ZQSFP+ QSFP28 PASSIVE CABLE ASSEMBLY | | | | | |
| | ANGULAR TOL ± 1.0 ° | | EC NO: 712440 | | | | | | |
| | 4 PLACES ± | | DRWN: CHETAB3 2022/06/01 | PRODUCT CUSTOMER DRAWING | | | | | |
| DIVISIONAL SYMBOLS | 3 PLACES ± | | CHK'D: VITTAD 2022/06/29 | | | | | | |
| | 2 PLACES ± 0.13 | | APPR: SCHANNARAYAN 2022/06/30 | DOCUMENT NUMBER | DOC TYPE | DOC PART | REVISION | | |
| | 1 PLACE ± 0.25 | | INITIAL REVISION: | 1002970001 | PSD | 000 | U | | |
| | 0 PLACES ± | | DRWN: KNAGANNA 2016/09/12 | | | | | | |
| | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | APPR: ARAYBURN 2016/09/22 | THIRD ANGLE PROJECTION | DRAWING | SERIES | MATERIAL NUMBER | CUSTOMER | SHEET NUMBER |
| | | | | | D-SIZE | 100297 | SEE P/N TABLE | GENERAL MARKET | 1 OF 3 |

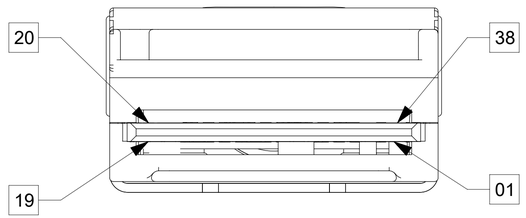
## CABLE BEND RADIUS




NOTE:
VIEW NOT TO SCALE.

| CABLE AWG | OD (mm) | MIN BEND RADIUS (mm) | MIN BEND SPACE (mm) |
|---|---|---|---|
| 26 | 9.53 | 48 | 80 |
| 30 | 6.35 | 32 | 61 |
| 32 | 4.95 | 25 | 53 |

## PINOUT




SCALE 6:1

| WIRING DIAGRAM | | | | |
|---|---|---|---|---|
| P1 END | | | P2 END | |
| PAD | SIGNAL | | PAD | SIGNAL |
| 01 | GND (TX) | | 20 | GND (RX) |
| 02 | TX2n | → | 21 | RX2n |
| 03 | TX2p | → | 22 | RX2p |
| 04 | GND (TX) | | 23 | GND (RX) |
| 05 | TX4n | → | 24 | RX4n |
| 06 | TX4p | → | 25 | RX4p |
| 07 | GND (TX) | | 26 | GND (RX) |
| 13 | GND (RX) | | 32 | GND (TX) |
| 14 | RX3p | ← | 33 | TX3p |
| 15 | RX3n | ← | 34 | TX3n |
| 16 | GND (RX) | | 35 | GND (TX) |
| 17 | RX1p | ← | 36 | TX1p |
| 18 | RX1n | ← | 37 | TX1n |
| 19 | GND (RX) | | 38 | GND (TX) |
| 20 | GND (RX) | | 01 | GND (TX) |
| 21 | RX2n | ← | 02 | TX2n |
| 22 | RX2p | ← | 03 | TX2p |
| 23 | GND (RX) | | 04 | GND (TX) |
| 24 | RX4n | ← | 05 | TX4n |
| 25 | RX4p | ← | 06 | TX4p |
| 26 | GND (RX) | | 07 | GND (TX) |
| 32 | GND (TX) | | 13 | GND (RX) |
| 33 | TX3p | → | 14 | RX3p |
| 34 | TX3n | → | 15 | RX3n |
| 35 | GND (TX) | | 16 | GND (RX) |
| 36 | TX1p | → | 17 | RX1p |
| 37 | TX1n | → | 18 | RX1n |
| 38 | GND (TX) | | 19 | GND (RX) |

| LOW SPEED SIGNALS P1 & P2 | |
|---|---|
| PAD | SIGNAL |
| 08 | ModSelL |
| 09 | ResetL |
| 10 | VccRx |
| 11 | SCL |
| 12 | SDA |
| 27 | ModPrsL |
| 28 | IntL |
| 29 | VccTx |
| 30 | Vcc1 |
| 31 | LPMode |

NOTES:
1. DC BLOCKING CAPS ON RECEIVE SIDE ONLY
2. CABLE COILED AND PACKAGED IN BEST FIT ESD BAG AND SEALED WITH ESD LABEL FOR SHIPPING

| DOCUMENT STATUS | P1 | RELEASE DATE | 2022/06/30 10:21:00 |
|---|---|---|---|

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FUNCTIONAL SYMBOLS
FA = 0
FC = 0
FP = 0

DIVISIONAL SYMBOLS

DIMENSION UNITS: mm
SCALE: 1.5:1

GENERAL TOLERANCES (UNLESS SPECIFIED)
ANGULAR TOL ± 1.0 °
4 PLACES ±
3 PLACES ±
2 PLACES ± 0.13
1 PLACE ± 0.25
0 PLACES ±
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: SHEET 3 : ADDED NEW PN 1002973451 IN PN TABLE

EC NO: 712440
DRWN: CHETAB3 2022/06/01
CHK'D: VITTAD 2022/06/29
APPR: SCHANNARAYAN 2022/06/30

INITIAL REVISION:
DRWN: KNAGANNA 2016/09/12
APPR: ARAYBURN 2016/09/22

THIRD ANGLE PROJECTION | DRAWING: D-SIZE | SERIES: 100297

molex

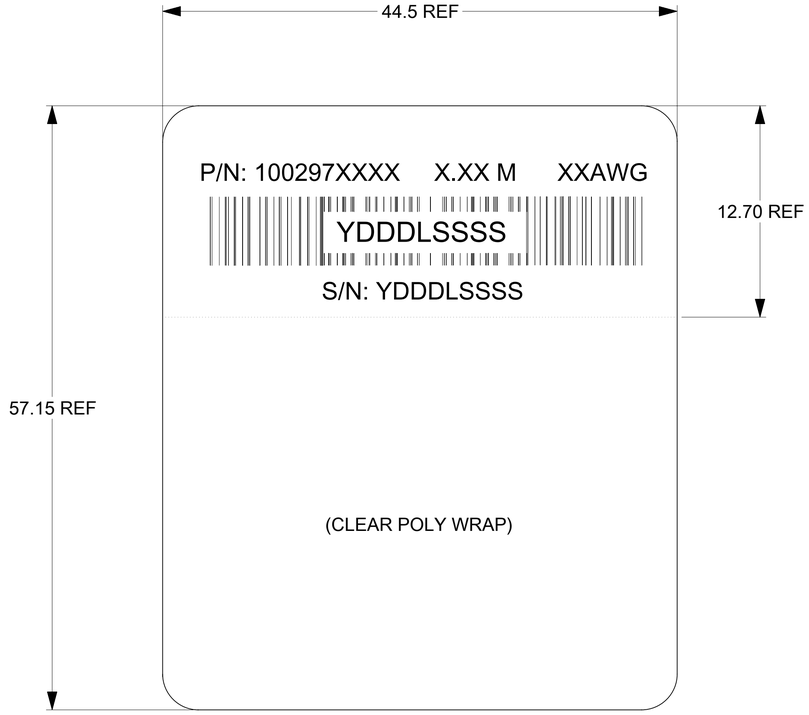
ZQSFP+ TO ZQSFP+
QSFP28 PASSIVE CABLE ASSEMBLY

PRODUCT CUSTOMER DRAWING

| DOCUMENT NUMBER | DOC TYPE | DOC PART | REVISION |
|---|---|---|---|
| 1002970001 | PSD | 000 | U |

| MATERIAL NUMBER | CUSTOMER | SHEET NUMBER |
|---|---|---|
| SEE P/N TABLE | GENERAL MARKET | 2 OF 3 |

## LABEL DETAILS




P/N: 100297XXXX - MOLEX PART NUMBER (SEE P/N TABLE)

X.XX M - CABLE LENGTH IN METERS (EXAMPLES - 0.5M, 1.0M, 1.5M)
SEE P/N TABLE FOR THE NUMBER OF DIGITS

XXAWG - CABLE SIZE IN AWG

S/N: YDDDLSSSS - SERIAL NUMBER
Y = YEAR, THE LAST DIGIT OF YEAR
DDD = DAY OF THE YEAR
L = LOCATION
1 - USA
2 - MEXICO
3 - CHINA
4 - PHILIPPINES
SSSS = SERIAL NUMBER (0001-9999)

## PART NUMBER TABLE

| MOLEX P/N | LENGTH (M) | AWG |
|---|---|---|
| 1002971321 | 0.32M ± 0.02M | 32 |
| 1002971015 | 0.5M ± 0.05M | 32 |
| 1002971001 | 1.0M ± 0.05M | 32 |
| 1002971215 | 1.5M ± 0.08M | 32 |
| 1002971002 | 2.0M ± 0.08M | 32 |
| 1002971031 | 0.3M ± 0.02M | 30 |
| 1002971051 | 0.5M ± 0.05M | 30 |
| 1002971071 | 0.75 ± 0.05M | 30 |
| 1002971101 | 1.0M ± 0.05M | 30 |
| 1002971132 | 1.25M ± 0.05M | 30 |
| 1002971151 | 1.5M ± 0.08M | 30 |
| 1002971201 | 2.0M ± 0.08M | 30 |
| 1002971251 | 2.5M ± 0.08M | 30 |
| 1002971301 | 3.0M ± 0.08M | 30 |
| 1002971401 | 4.0M ± 0.08M | 30 |
| 1002973051 | 0.5M ± 0.05M | 26 |
| 1002973071 | 0.75M ± 0.05M | 26 |
| 1002973101 | 1.0M ± 0.05M | 26 |
| 1002973151 | 1.5M ± 0.08M | 26 |
| 1002973201 | 2.0M ± 0.08M | 26 |
| 1002973251 | 2.5M ± 0.08M | 26 |
| 1002973301 | 3.0M ± 0.08M | 26 |
| 1002973351 | 3.5M ± 0.08M | 26 |
| 1002973401 | 4.0M ± 0.08M | 26 |
| 1002973451 | 4.5M ± 0.08M | 26 |
| 1002973501 | 5.0M ± 0.08M | 26 |

ZQSFP+ CABLES BELOW 1M DOES NOT MEET ALL IEEE 802.3bj PARAMETERS

FUNCTIONAL SYMBOLS
FA = 0
FC = 0
FP = 0
DIVISIONAL SYMBOLS

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| DIMENSION UNITS | SCALE |
|---|---|
| mm | 1.5:1 |

GENERAL TOLERANCES (UNLESS SPECIFIED)

| | | |
|---|---|---|
| ANGULAR TOL | ± | 1.0 ° |
| 4 PLACES | ± | |
| 3 PLACES | ± | |
| 2 PLACES | ± | 0.13 |
| 1 PLACE | ± | 0.25 |
| 0 PLACES | ± | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: SHEET 3 : ADDED NEW PN 1002973451 IN PN TABLE

EC NO: 712440

| | | |
|---|---|---|
| DRWN: | CHETAB3 | 2022/06/01 |
| CHK'D: | VITTAD | 2022/06/29 |
| APPR: | SCHANNARAYAN | 2022/06/30 |

INITIAL REVISION:

| | | |
|---|---|---|
| DRWN: | KNAGANNA | 2016/09/12 |
| APPR: | ARAYBURN | 2016/09/22 |

molex

ZQSFP+ TO ZQSFP+
QSFP28 PASSIVE CABLE ASSEMBLY

PRODUCT CUSTOMER DRAWING

| DOCUMENT NUMBER | DOC TYPE | DOC PART | REVISION |
|---|---|---|---|
| 1002970001 | PSD | 000 | U |

| THIRD ANGLE PROJECTION | DRAWING | SERIES | MATERIAL NUMBER | CUSTOMER | SHEET NUMBER |
|---|---|---|---|---|---|
| | D-SIZE | 100297 | SEE P/N TABLE | GENERAL MARKET | 3 OF 3 |

| DOCUMENT STATUS | P1 | RELEASE DATE | 2022/06/30 10:21:00 |
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