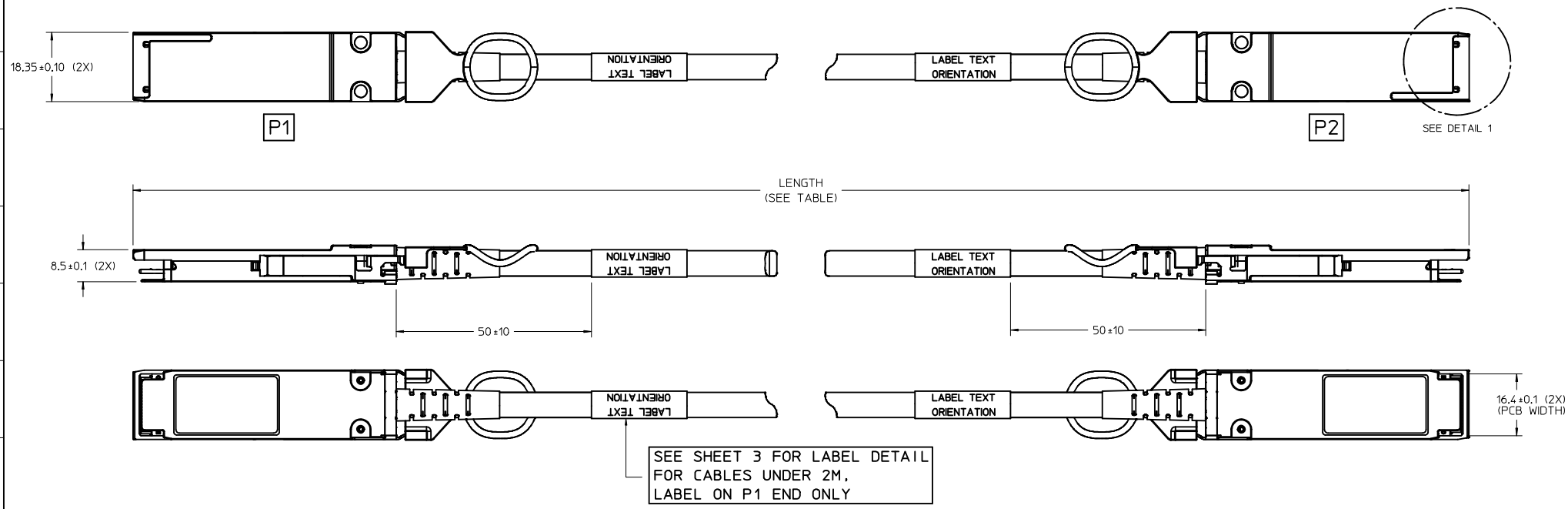
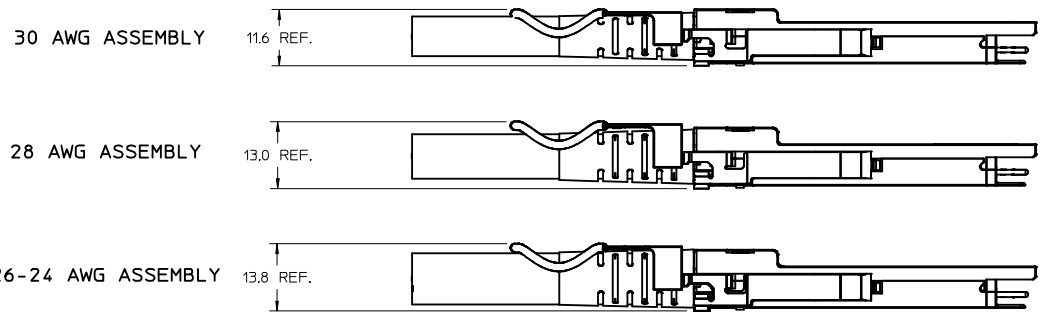
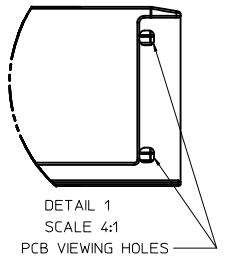




SEE SHEET 3 FOR P/N TABLE



NOTES:
1. CABLE DISTANCE 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 - FR4
   - RIVETS - STAINLESS STEEL
3. IMPEDANCE - 100 OHMS DIFFERENTIAL
4. RoHS COMPLIANT, NO EXEMPTIONS

REV	DESCRIPTION
H	ADDED P/N 111040255 EC NO: CPG2017-0314 DRWN:CKUMARR 2016/08/24 CHKD:KNAGANNA 2016/08/26 APPR:ARAYBURN 2016/08/26

QUALITY SYMBOLS: ▽=0 (4 PLACES), ▽=0 (3 PLACES), ▽=0 (2 PLACES), ▽=0 (1 PLACE), 0 PLACE

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.13	± ---
1 PLACE	± 0.25	± ---
0 PLACE	±	±
ANGULAR	±---°	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

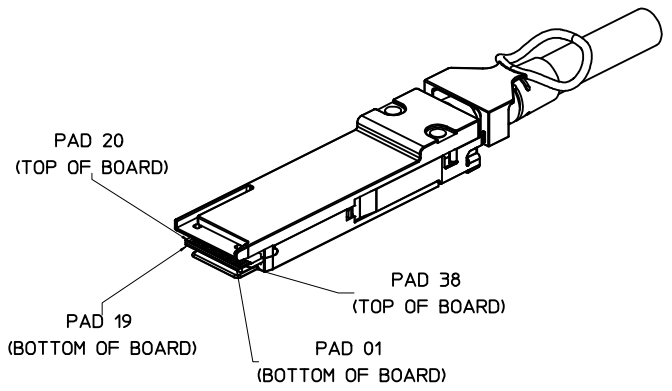
DIMENSION STYLE	MM ONLY
SCALE	2:1
DESIGN UNITS	METRIC
	THIRD ANGLE PROJECTION
DRAWN BY	JENGRAVE
DATE	2014/10/20
CHECKED BY	RAGYEI
DATE	2015/01/30
APPROVED BY	ARAYBURN
DATE	2014/11/11
MATERIAL NO.	SEE P/N TABLE
TITLE	QSFP+ COPPER PATCH CABLE ASSEMBLY
DOCUMENT NO.	SD-111040-0005
SHEET NO.	1 OF 3
SIZE	D

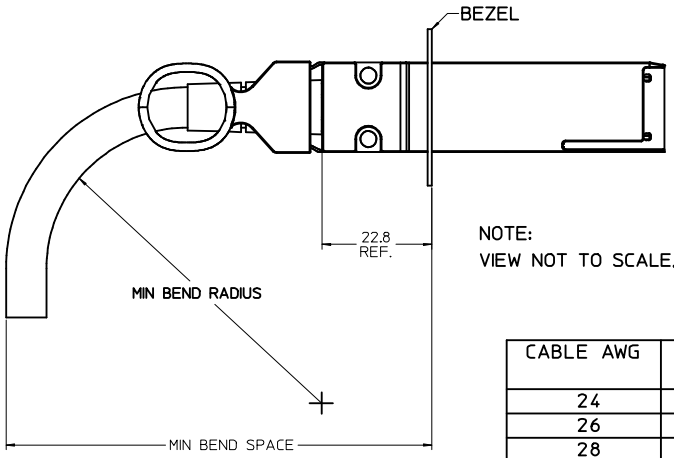
molex

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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)
08	ModSelL	■ ■	27	ModPrsL
09	ResetL	■ ■	28	IntL
10	VccRx	■ ■	29	VccTx
11	SCL	■ NC	30	Vcc1
12	SDA	■ ■	31	LPMode
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)
27	ModPrsL	■ ■	08	ModSelL
28	IntL	■ ■	09	ResetL
29	VccTx	■ ■	10	VccRx
30	Vcc1	NC ■	11	SCL
31	LPMode	■ ■	12	SDA
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)

LEGEND:
---- = THRU LINES
---> = TRANSMIT TO RECEIVE ON HIGH SPEED CIRCUITS
C = COMMON GROUND CONNECTION
NC = NOT CONNECTED
■ = CONNECTION TO A DEVICE ON THE PCB





CABLE BEND RADIUS

NOTE:
VIEW NOT TO SCALE.

CABLE AWG	MIN BEND RADIUS (mm)	MIN BEND SPACE (mm)
24	50	83
26	44	76
28	39	69
30	33	62

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

ADDED P/N 111040255
EC NO: CPS2017-0314
DRWN:CKUMARR 2016/08/24
CH'KD:KNAGANNA 2016/08/26
APPR:ARAYBURN 2016/08/26
DESCRIPTION
REV: H

QUALITY SYMBOLS
▽=0
▽=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.13	± ---
1 PLACE	± 0.25	± ---
0 PLACE	±	±
ANGULAR	±---°	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

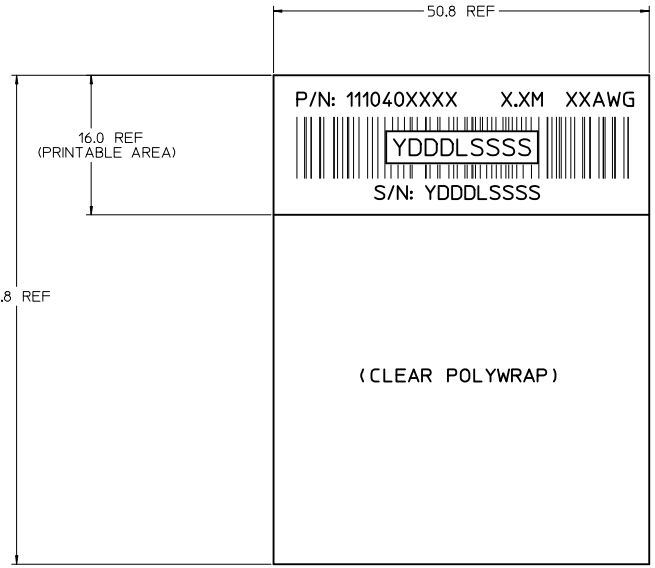
DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION
DRAWN BY: JENGRAVE DATE: 2014/10/20
CHECKED BY: RAGYEI DATE: 2015/01/30
APPROVED BY: ARAYBURN DATE: 2014/11/11
MATERIAL NO.: SEE P/N TABLE
TITLE: QSFP+ COPPER PATCH CABLE ASSEMBLY
molex
DOCUMENT NO.: SD-111040-0005
SHEET NO.: 2 OF 3
SIZE: D

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

PART NUMBER TABLE

MOLEX P/N	LENGTH (M)	LENGTH TOLERANCE (mm)	AWG
1110401045	0.35	±30	30
1110401055	0.5	±30	30
1110401075	0.75	±30	30
1110401105	1.0	±50	30
1110401155	1.5	±50	30
1110401205	2.0	±50	30
1110401255	2.5	±50	30
1110401305	3.0	±50	30
1110401325	3.2	±50	30
1110401405	4.0	±50	30
1110401505	5.0	±80	30
1110401705	7.0	±80	30
1110402055	0.5	±30	28
1110402105	1.0	±50	28
1110402205	2.0	±50	28
1110402255	2.5	±50	28
1110402305	3.0	±50	28
1110401358	3.5	±50	28
1110402405	4.0	±50	28
1110402505	5.0	±80	28
1110402605	6.0	±80	28
1110402705	7.0	±80	28
1110403055	0.5	±30	26
1110403105	1.0	±50	26
1110403205	2.0	±50	26
1110403305	3.0	±50	26
1110403405	4.0	±50	26
1110403505	5.0	±80	26
1110403605	6.0	±80	26
1110403705	7.0	±80	26
1110404055	0.5	±30	24
1110404105	1.0	±50	24
1110404205	2.0	±50	24
1110404305	3.0	±50	24
1110404405	4.0	±50	24
1110404505	5.0	±80	24
1110404605	6.0	±80	24
1110404705	7.0	±80	24

LABEL DETAIL



P/N: SEE TABLE
S/N: Y = YEAR, LAST DIGIT OF YEAR
DDD = DAY OF THE YEAR (ISO-8601 FORMAT)
L = LOCATION - 1 = USA
2 = MEXICO
3 = CHINA
4 = PHILIPPINES
SSSS = SERIAL NUMBER (0001-9999)
X.XM: CABLE LENGTH, AS SHOWN ON P/N TABLE
XXAWG: WIRE GAGE, SEE TABLE

ADDED P/N 1110402255
EC NO: CPG2017-0314 2016/08/26
DRWN:CKUMARR 2016/08/26
CHKD:KNAGANNA 2016/08/26
APPR:ARAYBURN
DESCRIPTION
REV: H

QUALITY SYMBOLS
▽=0
▽=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.13	± ---
1 PLACE	± 0.25	± ---
0 PLACE	±	±

ANGULAR ±---°
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

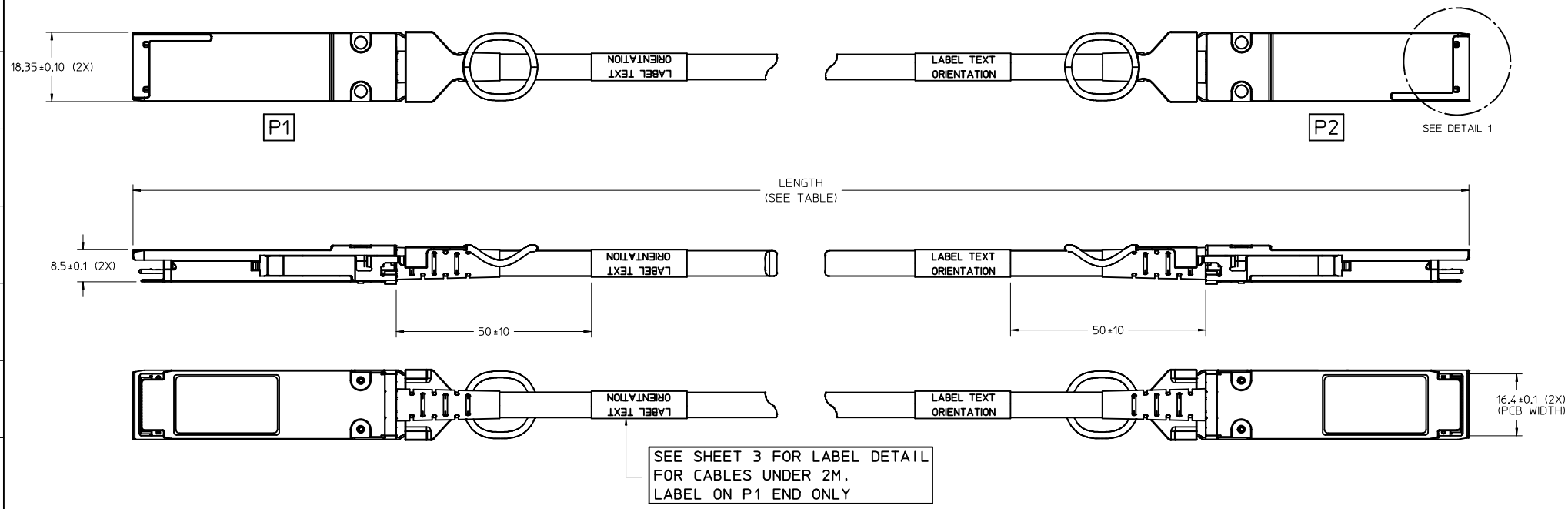
DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

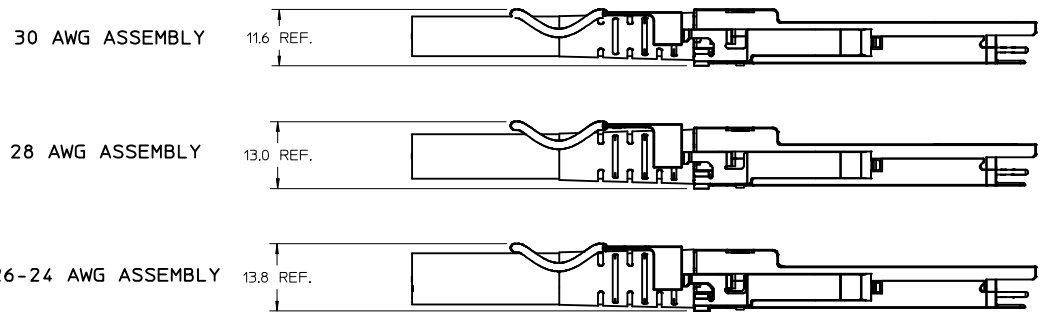
		DATE
DRAWN BY	JENGRAVE	2014/10/20
CHECKED BY	RAGYEI	2015/01/30
APPROVED BY	ARAYBURN	2014/11/11

MATERIAL NO.: SEE P/N TABLE
SIZE: D

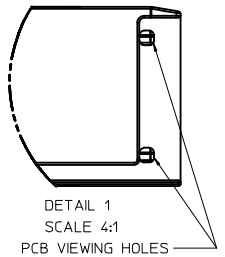
TITLE: QSFP+ COPPER PATCH CABLE ASSEMBLY
molex
DOCUMENT NO.: SD-111040-0005
SHEET NO.: 3 OF 3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION





SEE SHEET 3 FOR P/N TABLE



NOTES:
1. CABLE DISTANCE 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 - FR4
   - RIVETS - STAINLESS STEEL
3. IMPEDANCE - 100 OHMS DIFFERENTIAL
4. RoHS COMPLIANT, NO EXEMPTIONS

REV	DESCRIPTION
H	ADDED P/N 111040255 EC NO: CPG2017-0314 DRWN:CKUMARR 2016/08/24 CHKD:KNAGANNA 2016/08/26 APPR:ARAYBURN 2016/08/26

QUALITY SYMBOLS: ▽=0 (4 PLACES), ▽=0 (3 PLACES), ▽=0 (2 PLACES), ▽=0 (1 PLACE), 0 PLACE

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.13	± ---
1 PLACE	± 0.25	± ---
0 PLACE	±	±
ANGULAR	±---°	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

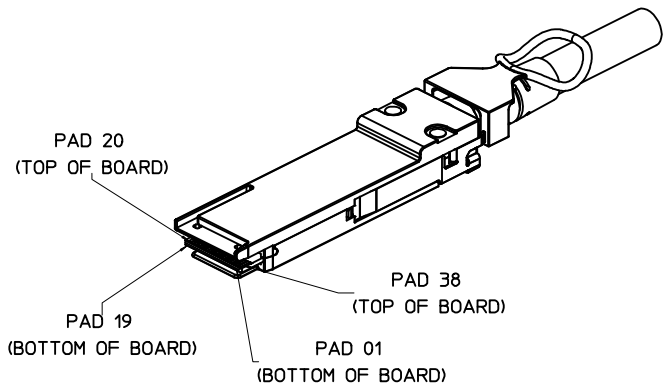
DIMENSION STYLE	MM ONLY
SCALE	2:1
DESIGN UNITS	METRIC
	THIRD ANGLE PROJECTION
DRAWN BY	JENGRAVE
DATE	2014/10/20
CHECKED BY	RAGYEI
DATE	2015/01/30
APPROVED BY	ARAYBURN
DATE	2014/11/11
MATERIAL NO.	SEE P/N TABLE
TITLE	QSFP+ COPPER PATCH CABLE ASSEMBLY
DOCUMENT NO.	SD-111040-0005
SHEET NO.	1 OF 3
SIZE	D

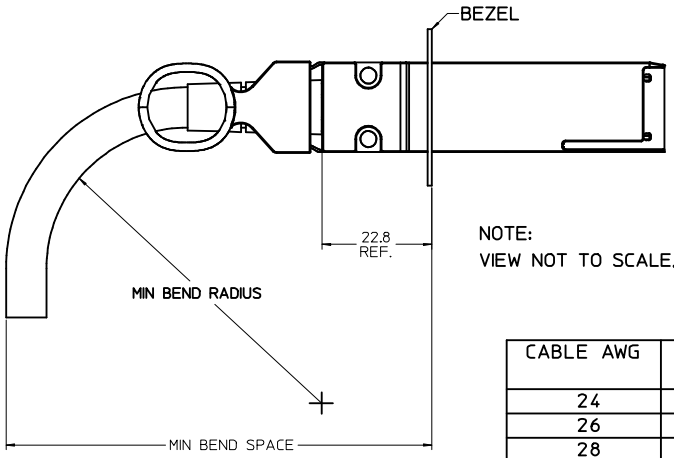
molex

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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)
08	ModSelL	■ ■	27	ModPrsL
09	ResetL	■ ■	28	IntL
10	VccRx	■ ■	29	VccTx
11	SCL	■ NC	30	Vcc1
12	SDA	■ ■	31	LPMode
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)
27	ModPrsL	■ ■	08	ModSelL
28	IntL	■ ■	09	ResetL
29	VccTx	■ ■	10	VccRx
30	Vcc1	NC ■	11	SCL
31	LPMode	■ ■	12	SDA
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)

LEGEND:
---- = THRU LINES
---> = TRANSMIT TO RECEIVE ON HIGH SPEED CIRCUITS
C = COMMON GROUND CONNECTION
NC = NOT CONNECTED
■ = CONNECTION TO A DEVICE ON THE PCB





CABLE BEND RADIUS

NOTE:
VIEW NOT TO SCALE.

CABLE AWG	MIN BEND RADIUS (mm)	MIN BEND SPACE (mm)
24	50	83
26	44	76
28	39	69
30	33	62

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

ADDED P/N 111040255
EC NO: CPS2017-0314
DRWN:CKUMARR 2016/08/24
CH'KD:KNAGANNA 2016/08/26
APPR:ARAYBURN 2016/08/26
DESCRIPTION
REV: H

QUALITY SYMBOLS
▽=0
▽=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.13	± ---
1 PLACE	± 0.25	± ---
0 PLACE	±	±
ANGULAR	±---°	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

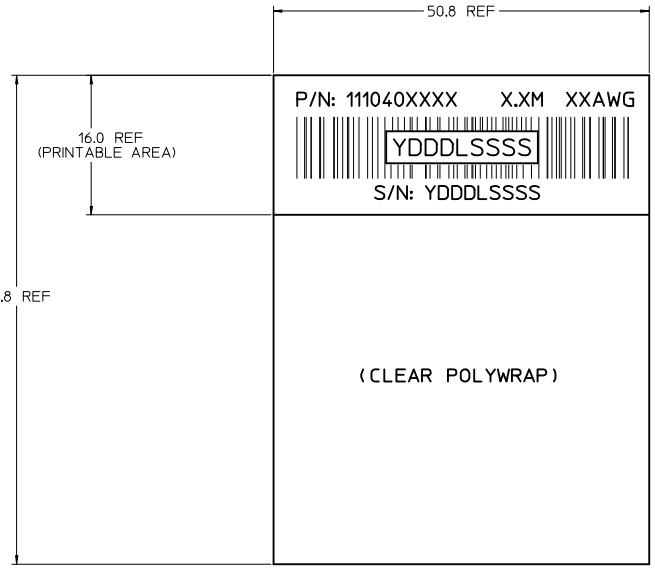
DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION
DRAWN BY: JENGRAVE DATE: 2014/10/20
CHECKED BY: RAGYEI DATE: 2015/01/30
APPROVED BY: ARAYBURN DATE: 2014/11/11
MATERIAL NO.: SEE P/N TABLE
TITLE: QSFP+ COPPER PATCH CABLE ASSEMBLY
molex
DOCUMENT NO.: SD-111040-0005
SHEET NO.: 2 OF 3
SIZE: D

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

PART NUMBER TABLE

MOLEX P/N	LENGTH (M)	LENGTH TOLERANCE (mm)	AWG
1110401045	0.35	±30	30
1110401055	0.5	±30	30
1110401075	0.75	±30	30
1110401105	1.0	±50	30
1110401155	1.5	±50	30
1110401205	2.0	±50	30
1110401255	2.5	±50	30
1110401305	3.0	±50	30
1110401325	3.2	±50	30
1110401405	4.0	±50	30
1110401505	5.0	±80	30
1110401705	7.0	±80	30
1110402055	0.5	±30	28
1110402105	1.0	±50	28
1110402205	2.0	±50	28
1110402255	2.5	±50	28
1110402305	3.0	±50	28
1110401358	3.5	±50	28
1110402405	4.0	±50	28
1110402505	5.0	±80	28
1110402605	6.0	±80	28
1110402705	7.0	±80	28
1110403055	0.5	±30	26
1110403105	1.0	±50	26
1110403205	2.0	±50	26
1110403305	3.0	±50	26
1110403405	4.0	±50	26
1110403505	5.0	±80	26
1110403605	6.0	±80	26
1110403705	7.0	±80	26
1110404055	0.5	±30	24
1110404105	1.0	±50	24
1110404205	2.0	±50	24
1110404305	3.0	±50	24
1110404405	4.0	±50	24
1110404505	5.0	±80	24
1110404605	6.0	±80	24
1110404705	7.0	±80	24

LABEL DETAIL



P/N: SEE TABLE
S/N: Y = YEAR, LAST DIGIT OF YEAR
DDD = DAY OF THE YEAR (ISO-8601 FORMAT)
L = LOCATION - 1 = USA
2 = MEXICO
3 = CHINA
4 = PHILIPPINES
SSSS = SERIAL NUMBER (0001-9999)
X.XM: CABLE LENGTH, AS SHOWN ON P/N TABLE
XXAWG: WIRE GAGE, SEE TABLE

ADDED P/N 1110402255
EC NO: CPG2017-0314 2016/08/26
DRWN:CKUMARR 2016/08/26
CHKD:KNAGANNA 2016/08/26
APPR:ARAYBURN
DESCRIPTION
REV: H

QUALITY SYMBOLS
▽=0
▽=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.13	± ---
1 PLACE	± 0.25	± ---
0 PLACE	±	±

ANGULAR ±---°
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: 1:1
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

		DATE
DRAWN BY	JENGRAVE	2014/10/20
CHECKED BY	RAGYEI	2015/01/30
APPROVED BY	ARAYBURN	2014/11/11

MATERIAL NO.: SEE P/N TABLE
SIZE: D

TITLE: QSFP+ COPPER PATCH CABLE ASSEMBLY
molex
DOCUMENT NO.: SD-111040-0005
SHEET NO.: 3 OF 3

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