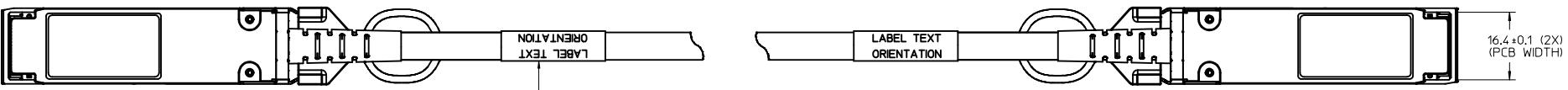
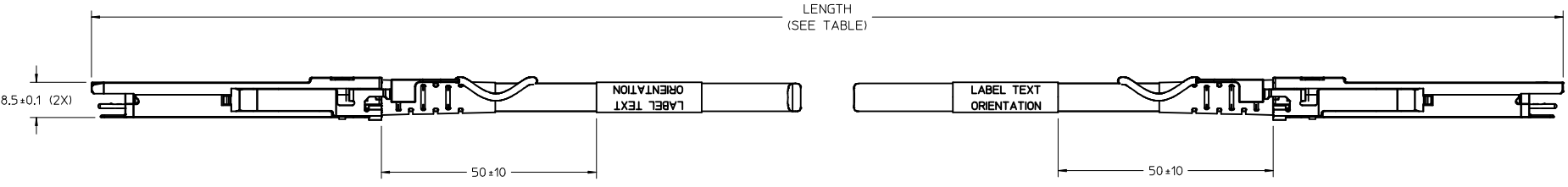
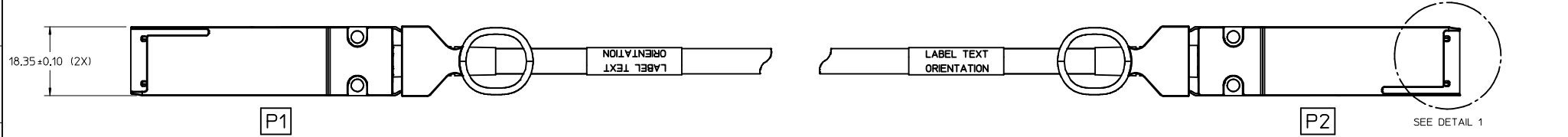
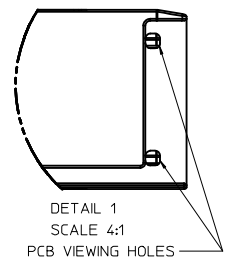
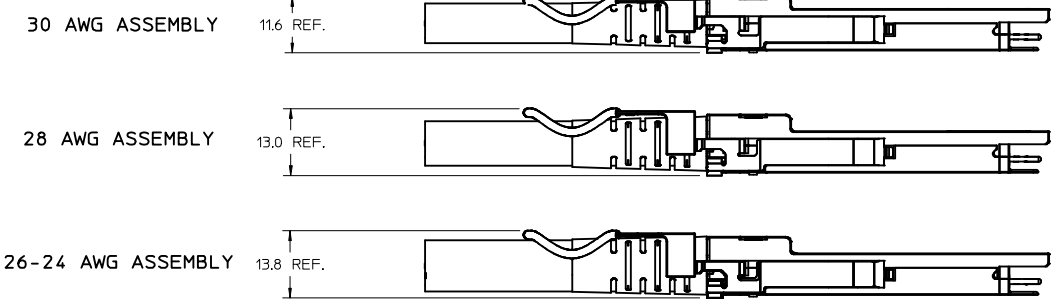


20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1



SEE SHEET 3 FOR LABEL DETAIL FOR CABLES UNDER 2M, LABEL ON P1 END ONLY

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

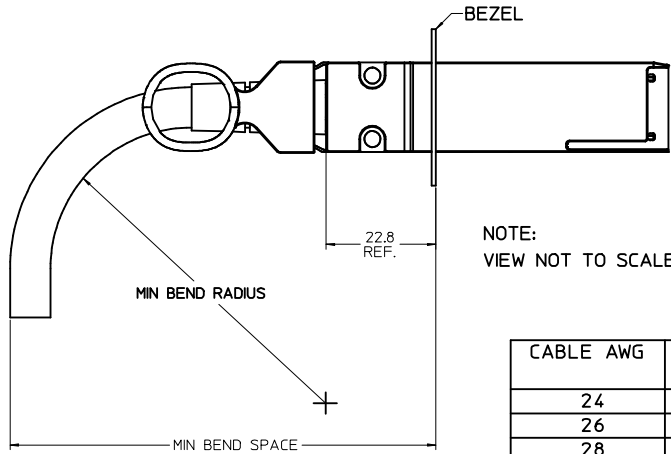
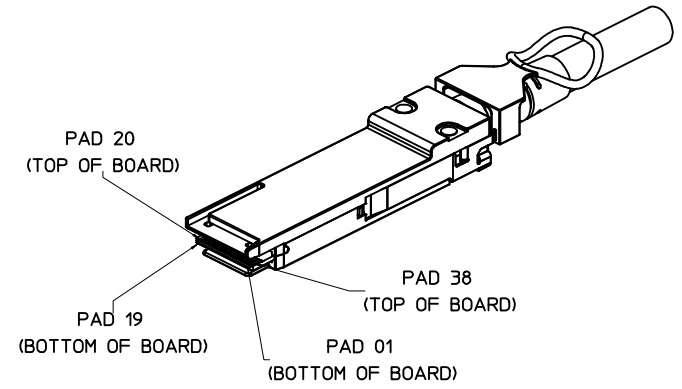
ADDED P/N 110402255 EC NO: CPG2017-0314 DRAWN BY: CHYOKUKIMARR CHECKED BY: CHYOKUKAGANNA APPR: ARAYBURN DATE: 2016/08/24 DATE: 2016/08/26 DATE: 2016/08/26	QUALITY SYMBOLS ∇=0 ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ±--- ±--- 3 PLACES ±--- ±--- 2 PLACES ±0.13 ±--- 1 PLACE ±0.25 ±--- 0 PLACE ± ±	mm INCH	DRAWN BY: JENGRAVE DATE: 2014/10/20	CHECKED BY: RAGYEI DATE: 2015/01/30	TITLE QSFP+ COPPER PATCH CABLE ASSEMBLY			
		ANGULAR ±---° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY: ARAYBURN DATE: 2014/11/11		MATERIAL NO. SEE P/N TABLE		DOCUMENT NO. SD-11040-0005	
				SHEET NO. 1 OF 3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 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)	
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



NOTE:  
VIEW NOT TO SCALE.

CABLE BEND RADIUS

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

NOTES:

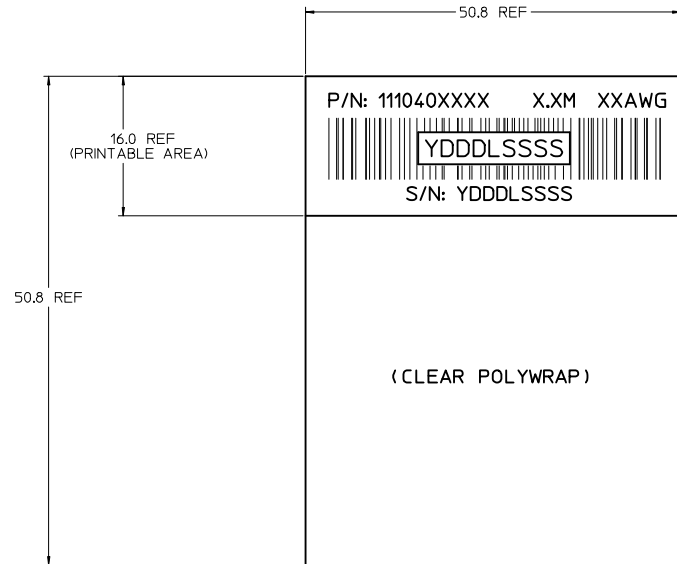
1. DC BLOCKING CAPS ON RECEIVE SIDE ONLY
2. CABLE COILED AND PACKAGED IN BEST FIT ESD BAG AND SEALED WITH ESD LABEL FOR SHIPPING

ADDED P/N 110402255 EC NO: CPG2017-0314 DRWNG: KUMARR 2016/08/24 CHKD: KAGANNA 2016/08/26 APPR: ARAYBURN 2016/08/26 REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	∇=0 ∇=0 ∇=0	4 PLACES ± 3 PLACES ± 2 PLACES ±0.13 1 PLACE ±0.25 0 PLACE ±	mm INCH ± ± ± ± ± ± ± ± ± ±	MM ONLY	1:1	METRIC
MATERIAL NO. SEE P/N TABLE DOCUMENT NO. SD-111040-0005 SHEET NO. 2 OF 3		TITLE: QSFP+ COPPER PATCH CABLE ASSEMBLY molex				

**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

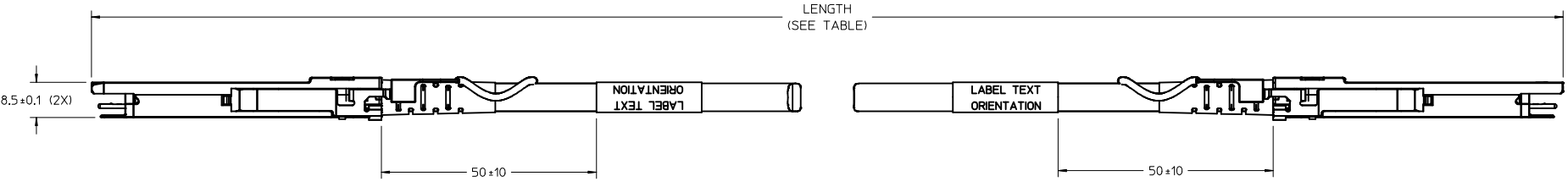
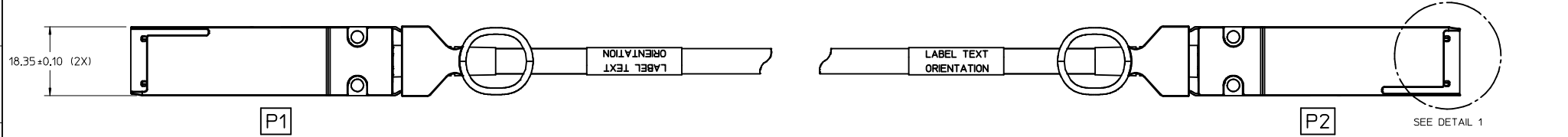
**LABEL DETAIL**



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

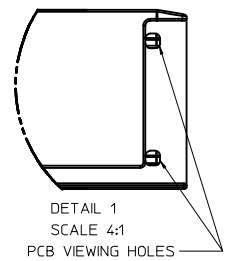
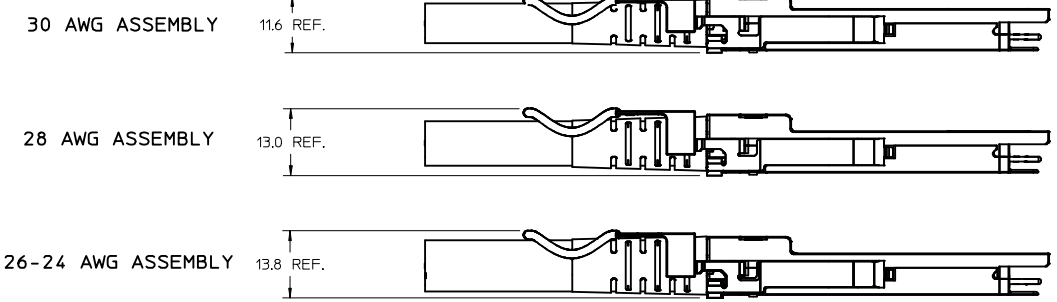
ADDED P/N 1110402255 EC NO: CFG2017-0314 DRWNG: KUMARR 2016/08/24 CHKD: KAGANNA 2016/08/26 APPR: ARAYBURN 2016/08/26 REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ±---+---+---	MM ONLY	1:1	METRIC	☉
	▽=0	3 PLACES ±---+---+---				
	▽=0	2 PLACES ±0.13+---+---				
		1 PLACE ±0.25+---+---				
		0 PLACE ±+---+---				
		ANGULAR ±-----				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
			DRAWN BY: JENGRAVE	DATE: 2014/10/20	TITLE: QSFP+ COPPER PATCH CABLE ASSEMBLY	
			CHECKED BY: RAGYEI	DATE: 2015/01/30		
			APPROVED BY: ARAYBURN	DATE: 2014/11/11		
			MATERIAL NO. SEE P/N TABLE	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			

20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1



SEE SHEET 3 FOR LABEL DETAIL FOR CABLES UNDER 2M, LABEL ON P1 END ONLY

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

ADDED P/N 110402255 EC NO: CPG2017-0314 DRAWN BY: CHYOKUKIMARR CHECKED BY: CHYOKUKAGANNA APPR: ARAYBURN DATE: 2016/08/24 DATE: 2016/08/26 DATE: 2016/08/26	QUALITY SYMBOLS ∇=0 ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES ±--- ±--- 3 PLACES ±--- ±--- 2 PLACES ±0.13 ±--- 1 PLACE ±0.25 ±--- 0 PLACE ± ±	mm INCH ±--- ±--- ±--- ±--- ±--- ±--- ±--- ±---	DRAWN BY: JENGRAVE DATE: 2014/10/20 CHECKED BY: DATE RAGYEI 2015/01/30 APPROVED BY: DATE ARAYBURN 2014/11/11	TITLE QSFP+ COPPER PATCH CABLE ASSEMBLY	MATERIAL NO. SEE P/N TABLE	DOCUMENT NO. SD-11040-0005

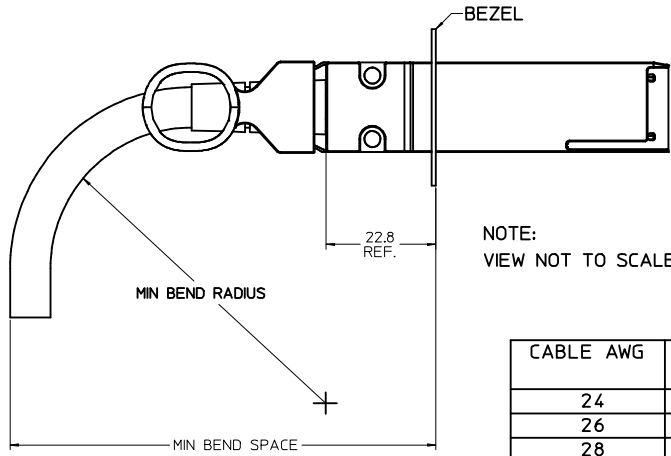
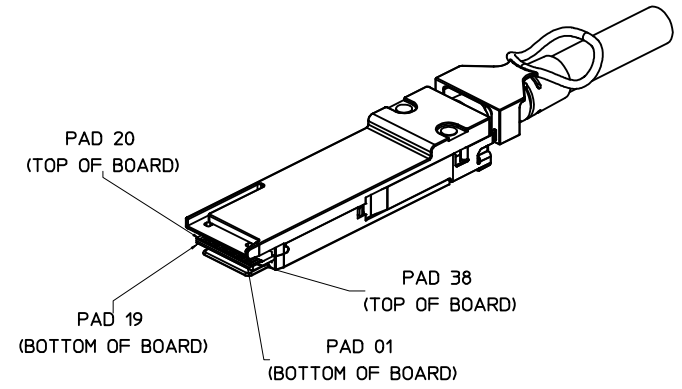
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 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)	
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



NOTE:  
VIEW NOT TO SCALE.

CABLE BEND RADIUS

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

NOTES:

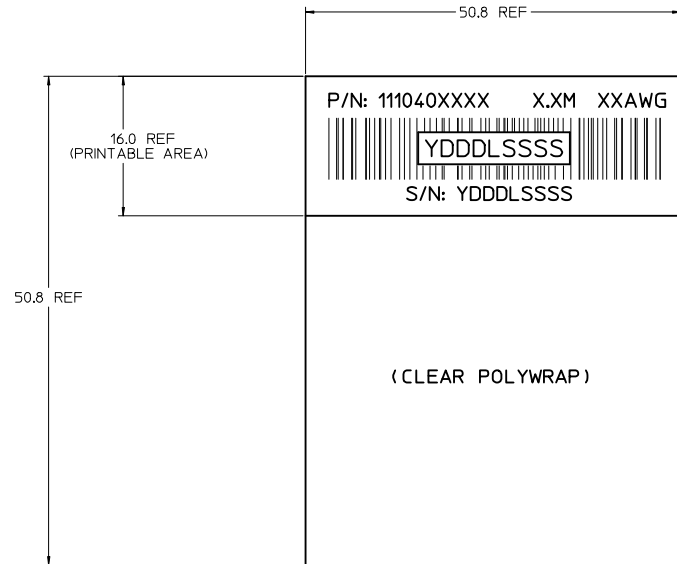
1. DC BLOCKING CAPS ON RECEIVE SIDE ONLY
2. CABLE COILED AND PACKAGED IN BEST FIT ESD BAG AND SEALED WITH ESD LABEL FOR SHIPPING

ADDED P/N 110402255 EC NO: CPG2017-0314 DRWNG: KUMARR 2016/08/24 CHKD: KAGANNA 2016/08/26 APPR: ARAYBURN 2016/08/26	QUALITY SYMBOLS ∇=0 ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ±--- ±--- 3 PLACES ±0.13 ±--- 2 PLACES ±0.25 ±--- 1 PLACE ± ±--- 0 PLACE ± ±--- ANGULAR ±---° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION STYLE MM ONLY DRAWN BY DATE JENGRIVE 2014/10/20 CHECKED BY DATE RAGYEI 2015/01/30 APPROVED BY DATE ARAYBURN 2014/11/11	SCALE 1:1 DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE QSFP+ COPPER PATCH CABLE ASSEMBLY	MATERIAL NO. SEE P/N TABLE	DOCUMENT NO. SD-111040-0005	SHEET NO. 2 OF 3

**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: CFG2017-0314 DRWNG: KUMARR 2016/08/24 CHKD: KAGANNA 2016/08/26 APPR: ARAYBURN 2016/08/26 REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ±---+---+---	MM ONLY	1:1	METRIC	☉
	▽=0	3 PLACES ±---+---+---				
	▽=0	2 PLACES ±0.13+---+---				
		1 PLACE ±0.25+---+---				
		0 PLACE ±+---+---				
		ANGULAR ±----°				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
			DRAWN BY: JENGRAVE	DATE: 2014/10/20	TITLE: QSFP+ COPPER PATCH CABLE ASSEMBLY	
			CHECKED BY: RAGYEJ	DATE: 2015/01/30		
			APPROVED BY: ARAYBURN	DATE: 2014/11/11		
			MATERIAL NO:	DOCUMENT NO:	SHEET NO.	
			SEE P/N TABLE	SD-111040-0005	3 OF 3	
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			