

**ESD SENSITIVE**

ECUO-U12-XX-XXX-0-X-1-X

DATA RATE  
 -14: 14 Gbps  
 -16: 16.1 Gbps

FIBER TYPE  
 -4: AQUA LOOSE TUBE WITH BOOT  
 -5: BLACK JACKETED RIBBON WITH BOOT  
 -6: BLACK JACKETED RIBBON  
 -7: BLACK LOOSE TUBE WITH BOOT  
 -8: BLACK LOOSE TUBE

ASSEMBLY LENGTH  
 -XXX: LENGTH (cm) SEE TABLES 1, 2

HEAT SINK  
 -1: FLAT  
 -2: PIN FIN  
 -3: FLAT WITH GROOVE (SEE NOTE 1)  
 -4: PCIe® PIN FIN (-14 DATA RATE ONLY)

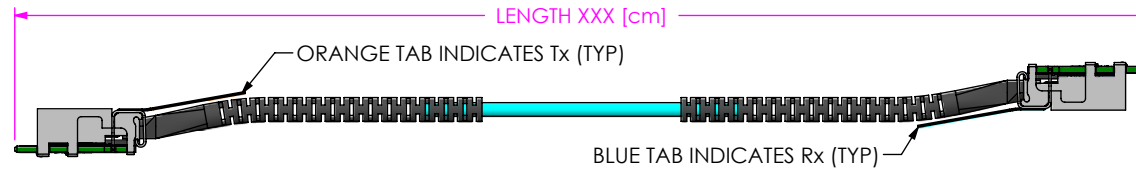
TABLE 1: ASSEMBLY ENGLH LIMITS [cm]

FIBER TYPE	MIN	MAX
-4	15	999
-5	10	100
-6	8	100
-7	10	300
-8	8	300

TABLE 2: LENGTH TOLERANCE

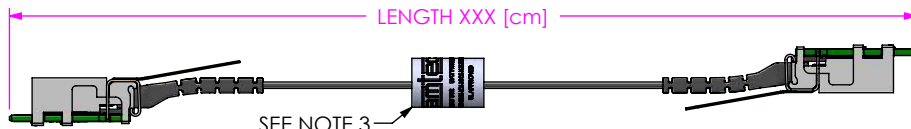
ASSEMBLY LENGTH [cm]	TOLERANCE [cm]*
000-016	±0.16
017-999	±1%

\* ROUNDED UP TO 2 DECIMAL PLACES



PART NUMBER ECUO-U12-XX-XXX-0-1-1-4 SHOWN

DO NOT SCALE FROM THIS PRINT



PART NUMBER ECUO-U12-XX-XXX-0-1-1-5 SHOWN



PART NUMBER ECUO-U12-XX-XXX-0-1-1-6 SHOWN



PART NUMBER ECUO-U12-XX-XXX-0-1-1-7 SHOWN



PART NUMBER ECUO-U12-XX-XXX-0-1-1-8 SHOWN

NOTES:

1. PASS THROUGH ALLOWS ONE JACKETED RIBBON (FIBER TYPE -5/-6) OF CABLE LENGTH MAX 50 cm TO PASS ABOVE HEAT SINK AND UNDER COLD PLATE GROOVE ALLOWS ONE JACKETED RIBBON (FIBER TYPE -5/-6) OF CABLE LENGTH MAX 50 CM OR TWO CABLES OF JACKETED LOOSE TUBE (FIBER TYPE -7/-8) TO PASS ABOVE HEAT SINK AND UNDER COLD PLATE
2. ALL CABLES WITH A LENGTH GREATER THAN 50 cm ARE LABELED. LABEL TO CONTAIN PART NUMBER AND SERIAL NUMBER INFORMATION
3. YELLOW LATCH PINS NOT SHOWN FOR CLARITY. SEE FIREFLY INSTALLATION INSTRUCTIONS FOR MORE DETAILS
- 4.

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. ALL DIMENSIONS ARE FOR REFERENCE ONLY

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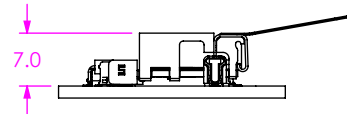
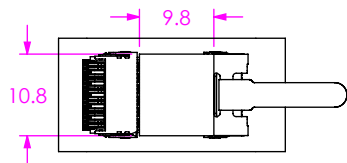
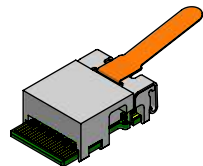
520 PARK EAST BLVD, NEW ALBANY, IN 47150  
 PHONE: 812-944-6733 FAX: 812-948-5047  
 e-Mail info@SAMTEC.com code 53322

MATERIAL: DO NOT SCALE DRAWING SHEET SCALE: 1:1

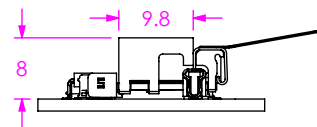
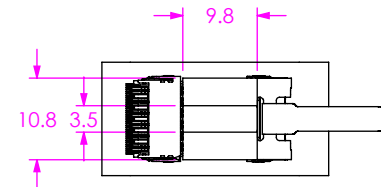
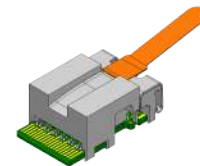
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DWG. NO. ECUO-U12-XX-XXX-0-X-1-X

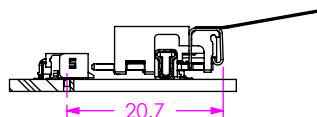
BY: AARON B. 03/10/2020 SHEET 1 OF 4



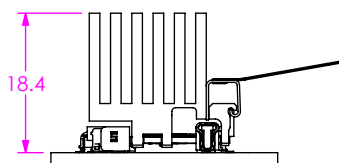
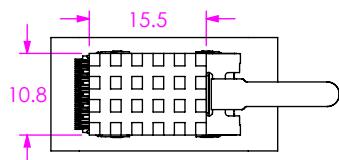
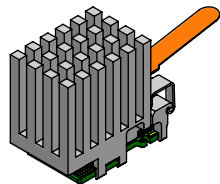
-1 FLAT HEAT SINK



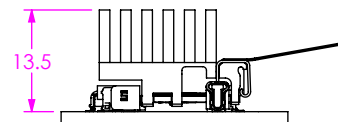
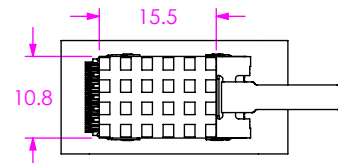
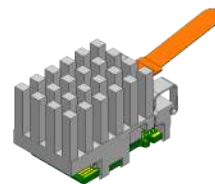
-3 FLAT HEAT SINK WITH PASS THROUGH



KEEP OUT AREA FOR DE-MATING  
TYPICAL FOR HEAT SINKS -1/-2/-3/-4  
REFER TO UEC5 FOOTPRINT DRAWING  
FOR DETAILED KEEPOUT AREAS



-2 PIN-FIN HEAT SINK



-4 LOW-PROFILE PIN-FIN HEAT SINK

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SHEET SCALE: 1:1

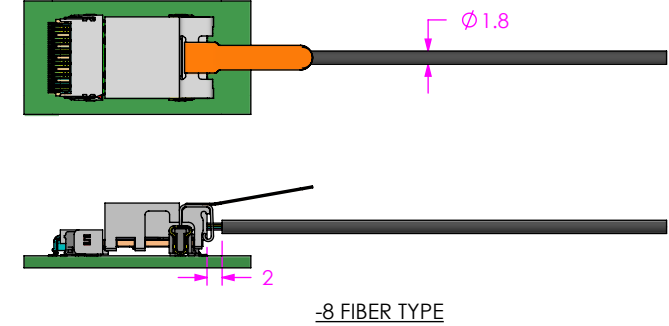
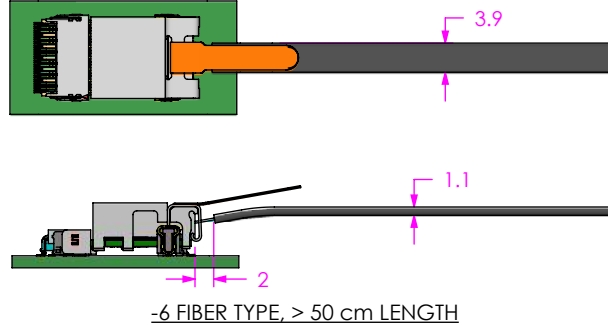
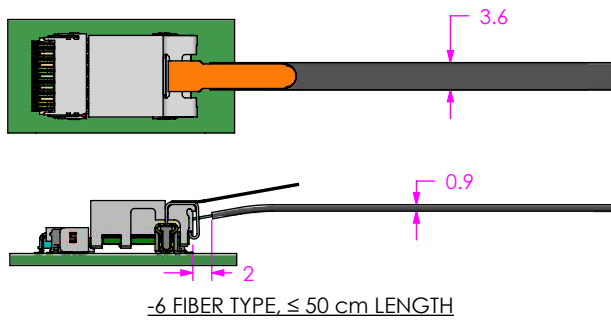
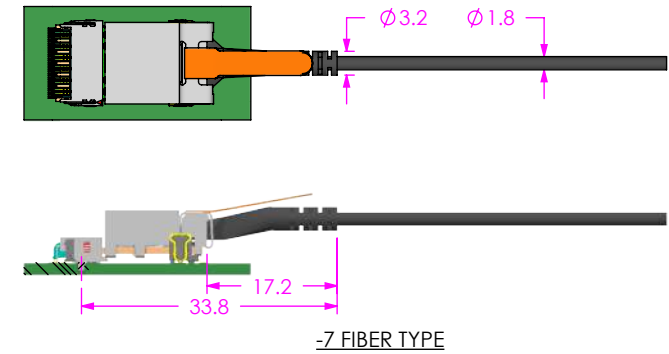
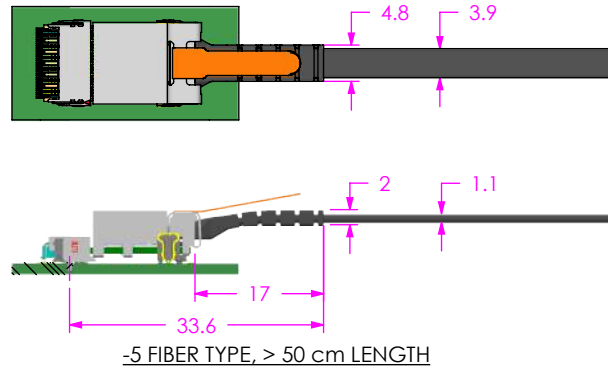
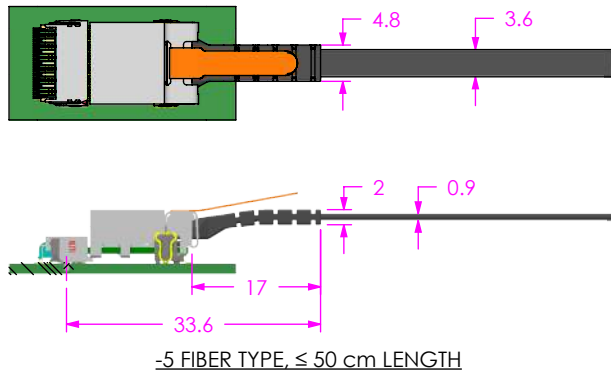
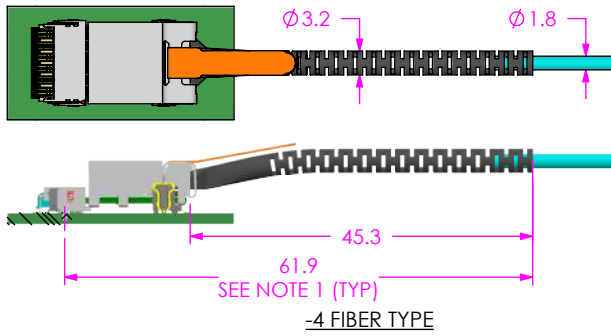


520 PARK EAST BLVD., NEW ALBANY, IN 47150  
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e-Mail info@SAMTEC.com code 55322

DESCRIPTION:  
OPTICAL FIREFLY ASSEMBLY

DWG. NO.  
ECUO-U12-XX-XXX-0-X-1-X

BY: AARON B. 03/10/2020 SHEET 2 OF 4



NOTES:  
1. DIMENSIONED FROM THE CENTER OF THE ALIGNMENT PIN HOLE AS SHOWN ON THE UEC5/UCC8 CONNECTOR FOOTPRINT

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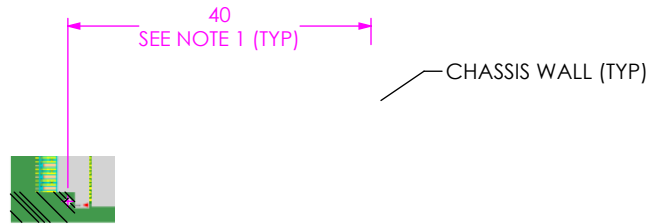
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SHEET SCALE: 1:1

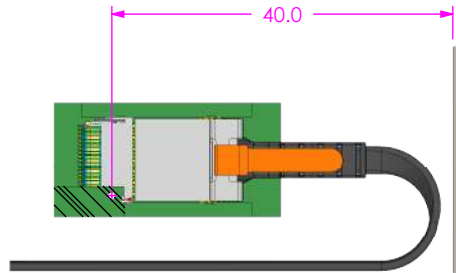
DESCRIPTION:  
OPTICAL FIREFLY ASSEMBLY

DWG. NO.  
ECUO-U12-XX-XXX-0-X-1-X

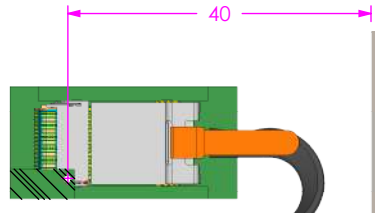
BY: AARON B. 03/10/2020 SHEET 3 OF 4



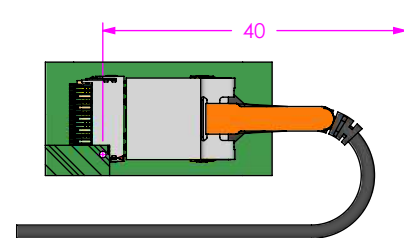
-4 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE



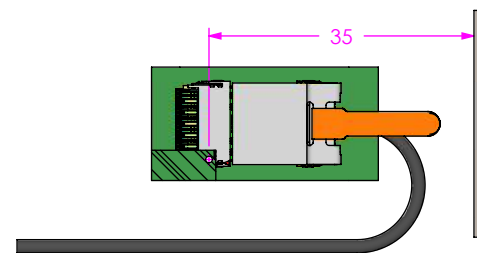
-5 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE



-6 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE




-7 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE



-8 FIBER TYPE RECOMMENDED CABLE ESCAPE CLEARANCE

NOTES:

1. DIMENSIONED FROM THE CENTER OF THE ALIGNMENT PIN HOLE AS SHOWN ON THE UEC5/UCC8 CONNECTOR FOOTPRINT
2. DUE TO THE COMPLIANT NATURE OF FIBER CABLE AND THE MOLDED FIBER BOOT COMPONENTS, THE DIMENSIONS SHOWN ON THIS SHEET ARE FOR GUIDANCE ONLY. EACH APPLICATION IS UNIQUE AND MAY RESULT IN UNIQUE CLEARANCE DIMENSIONS FOR THE CABLE ESCAPE.

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<p>DO NOT SCALE DRAWING SHEET SCALE: 1:1</p> <p>INSULATOR: CONTACT OR TERMINAL: SHIELD: PHOS BRONZE PLATING: CONTACT AREA: .00010 REF GOLD REMAINDER: .000200 REF TIN</p>	<p>DESCRIPTION: OPTICAL FIREFLY ASSEMBLY</p> <p>DWG. NO. ECUO-U12-XX-XXX-0-X-1-X</p> <p>BY: AARON B. 03/10/2020 SHEET 4 OF 4</p>