

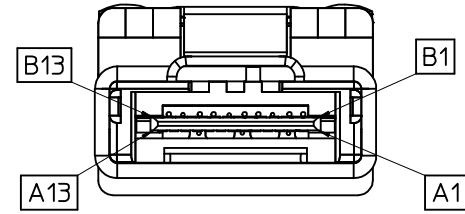
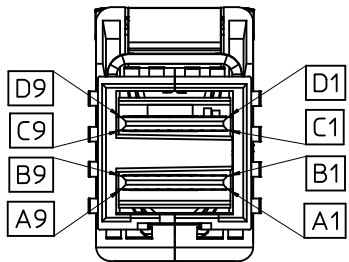
MOLEX P/N	DESCRIPTION	LENGTH (M)	TOLERANCE ± (mm)	KEY	IDENTIFIER	GAGE
1110683200	X4 MINISAS 2.0 TO MINISAS HD 2.1	0.5	25	2'4'6	UNIVERSAL KEY, SAS	30
1110683201	X4 MINISAS 2.0 TO MINISAS HD 2.1	1.0	50	2'4'6	UNIVERSAL KEY, SAS	28
1110683202	X4 MINISAS 2.0 TO MINISAS HD 2.1	2.0	50	2'4'6	UNIVERSAL KEY, SAS	28
1110683203	X4 MINISAS 2.0 TO MINISAS HD 2.1	3.0	100	2'4'6	UNIVERSAL KEY, SAS	28
1110683204	X4 MINISAS 2.0 TO MINISAS HD 2.1	4.0	100	2'4'6	UNIVERSAL KEY, SAS	26
1110683205	X4 MINISAS 2.0 TO MINISAS HD 2.1	5.0	100	2'4'6	UNIVERSAL KEY, SAS	26
1110683206	X4 MINISAS 2.0 TO MINISAS HD 2.1	6.0	100	2'4'6	UNIVERSAL KEY, SAS	24
1110683207	X4 MINISAS 2.0 TO MINISAS HD 2.1	7.0	150	2'4'6'R3	UNIVERSAL KEY, SAS	24
1110683208	X4 MINISAS 2.0 TO MINISAS HD 2.1	8.0	150	2'4'6'R3	UNIVERSAL KEY, SAS	24
1110683209	X4 MINISAS 2.0 TO MINISAS HD 2.1	9.0	150	2'4'6'R3	UNIVERSAL KEY, SAS	24
1110683210	X4 MINISAS 2.0 TO MINISAS HD 2.1	10.0	150	2'4'6'R3	UNIVERSAL KEY, SAS	24

NOTES:

- MATERIAL -
BACKSHELLS - ZINC DIECAST.
LATCH - STAINLESS STEEL.
PULL - MOLDED PLASTIC.
- LENGTH= SEE TABLE.
- ELECTRICAL PERFORMANCE PER SAS 2.1.
- ALL ASSEMBLIES HAVE AN EEPROM IN ACCORDANCE WITH SFF 8636.
- LEAD FREE, NO RoHS EXEMPTIONS.
- PROTECTIVE DUST CAP TO BE INSTALLED ONTO EACH PLUG.
- TAPE CABLE BUNDLES EVERY 1/2 METER (APPROX) USING (BLACK) TAPE.

SEE REVISION TABLE IEC NO: CPG2013-1373 DRAWN BY: DRWNSHOSSAIN 2012/10/31 CHECKED BY: CHYORAKLINE 2012/10/31 APPROVED BY: APPRPRMKHAN 2012/11/27	QUALITY SYMBOLS ∇=0 ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <td></td> <td>mm</td> <td>INCH</td> </tr> <tr> <td>4 PLACES</td> <td>±0.13</td> <td>±0.005</td> </tr> <tr> <td>3 PLACES</td> <td>±0.25</td> <td>±0.010</td> </tr> <tr> <td>2 PLACES</td> <td>±0.50</td> <td>±0.020</td> </tr> <tr> <td>1 PLACE</td> <td>±1.00</td> <td>±0.040</td> </tr> <tr> <td>0 PLACE</td> <td>±1.50</td> <td>±0.060</td> </tr> </table>		mm	INCH	4 PLACES	±0.13	±0.005	3 PLACES	±0.25	±0.010	2 PLACES	±0.50	±0.020	1 PLACE	±1.00	±0.040	0 PLACE	±1.50	±0.060	DIMENSION STYLE MM ONLY	SCALE 1.75:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		mm	INCH																					
	4 PLACES	±0.13	±0.005																					
	3 PLACES	±0.25	±0.010																					
2 PLACES	±0.50	±0.020																						
1 PLACE	±1.00	±0.040																						
0 PLACE	±1.50	±0.060																						
	MATERIAL NO. SEE P/N TABLE DATE: 2010/12/20 DATE: 2010/12/20 DATE: 2011/07/24	TITLE MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL	molex																					
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE P/N TABLE	DOCUMENT NO. SD-111068-3200	SHEET NO. 1 OF 4																				
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																							

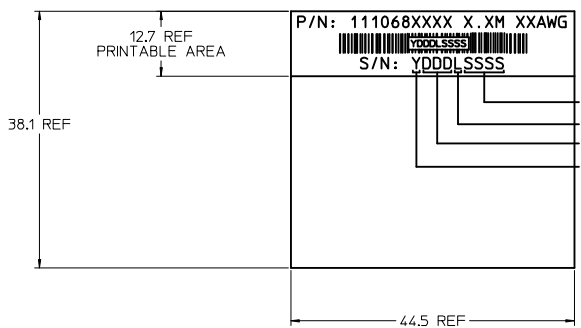
MINISAS HD WIRING CHART			
-P1-		-P2-	
GND	D9	----- A1	GND
Tx2-	D8	-----> A9	Rx2-
Tx2+	D7	-----> A8	Rx2+
GND	D6	----- A7	GND
Tx0-	D5	-----> A3	Rx0-
Tx0+	D4	-----> A2	Rx0+
GND	D3		
Vman	D2	EEPROM	
Vact	D1		
SCL	C1		
SDA	C2		
GND	C3	A4	GND
Tx1+	C4	-----> A5	Rx1+
Tx1-	C5	-----> A6	Rx1-
GND	C6	----- A10	GND
Tx3+	C7	-----> A11	Rx3+
Tx3-	C8	-----> A12	Rx3-
GND	C9	----- A13	GND
GND	B9	----- B1	GND
Rx2-	B8	-----< B9	Tx2-
Rx2+	B7	-----< B8	Tx2+
GND	B6	----- B7	GND
Rx0-	B5	-----< B3	Tx0-
Rx0+	B4	-----< B2	Tx0+
GND	B3	NC	
ModPrsl	B2	NC	
Vact	B1	NC	
Rev	A1	NC	
IntL	A2	NC	
GND	A3	----- B4	GND
Rx1+	A4	-----< B5	Tx1+
Rx1-	A5	-----< B6	Tx1-
GND	A6	----- B10	GND
Rx3+	A7	-----< B11	Tx3+
Rx3-	A8	-----< B12	Tx3-
GND	A9	----- B13	GND



EEPROM CONNECTIONS

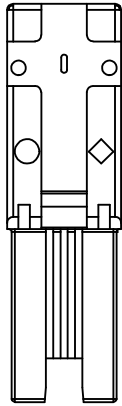
VACT = WRITE PROTECT
 SCL = CLOCK SIGNAL
 SDA = DATA SIGNAL
 GND = GROUND

ID LABEL TEXT

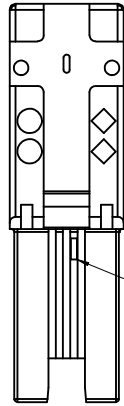


YDDDLSSSS
 SSSS---SEQUENTIAL NUMBERS
 L---LOCATION (1 = HPC, 2 = GUAD, 3 = DG)
 DDD---DAY OF THE YEAR
 Y--- YEAR, THE LAST DIGIT OF YEAR

SEE REVISION TABLE EC NO: CPG2013-1373 DRAWN BY: TD CHECKED BY: CHYORUKLINE APPROVED BY: APPR:RKHAN	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ± 0.13	mm	MM ONLY	5:1	METRIC
	▽=0	3 PLACES ± 0.25	INCH			
	▽=0	2 PLACES ± 0.50				
		ANGULAR ± 2°				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
			DRAWN BY: BREED	DATE: 2010/12/20	TITLE: MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL	
			CHECKED BY: RKHAN	DATE: 2010/12/20	molex	
			APPROVED BY: RKHAN	DATE: 2011/07/24		
			MATERIAL NO:	DOCUMENT NO:	SHEET NO. 2 OF 4	
			SEE P/N TABLE	SD-111068-3200		
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

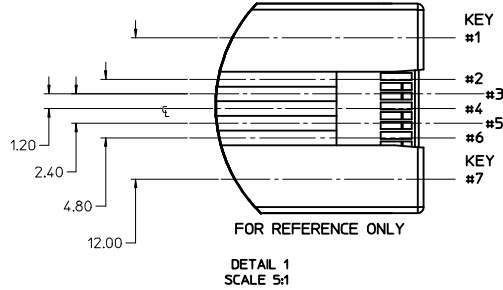
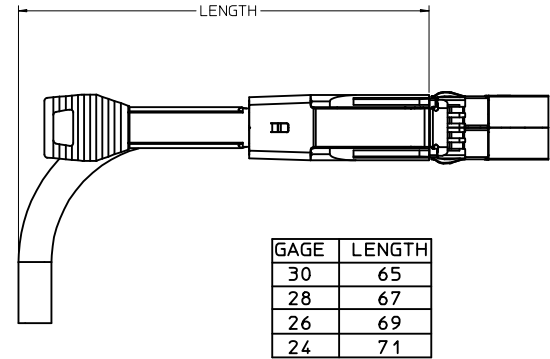
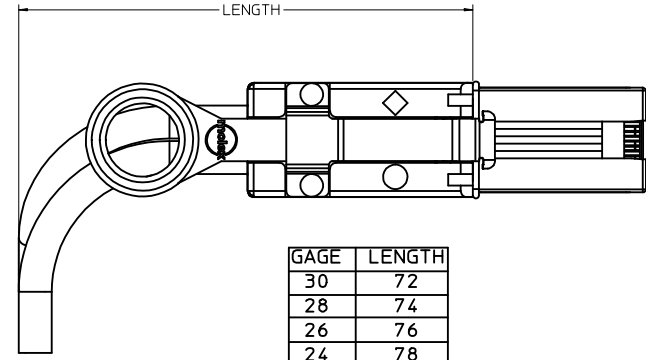


0.5M THRU 6.0M
SAS 1.1 & 2.0

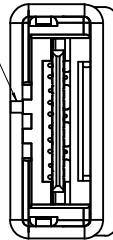


7.0M THRU 10.0M
SAS 2.0
RAISED KEY 3

RAISED KEY 3



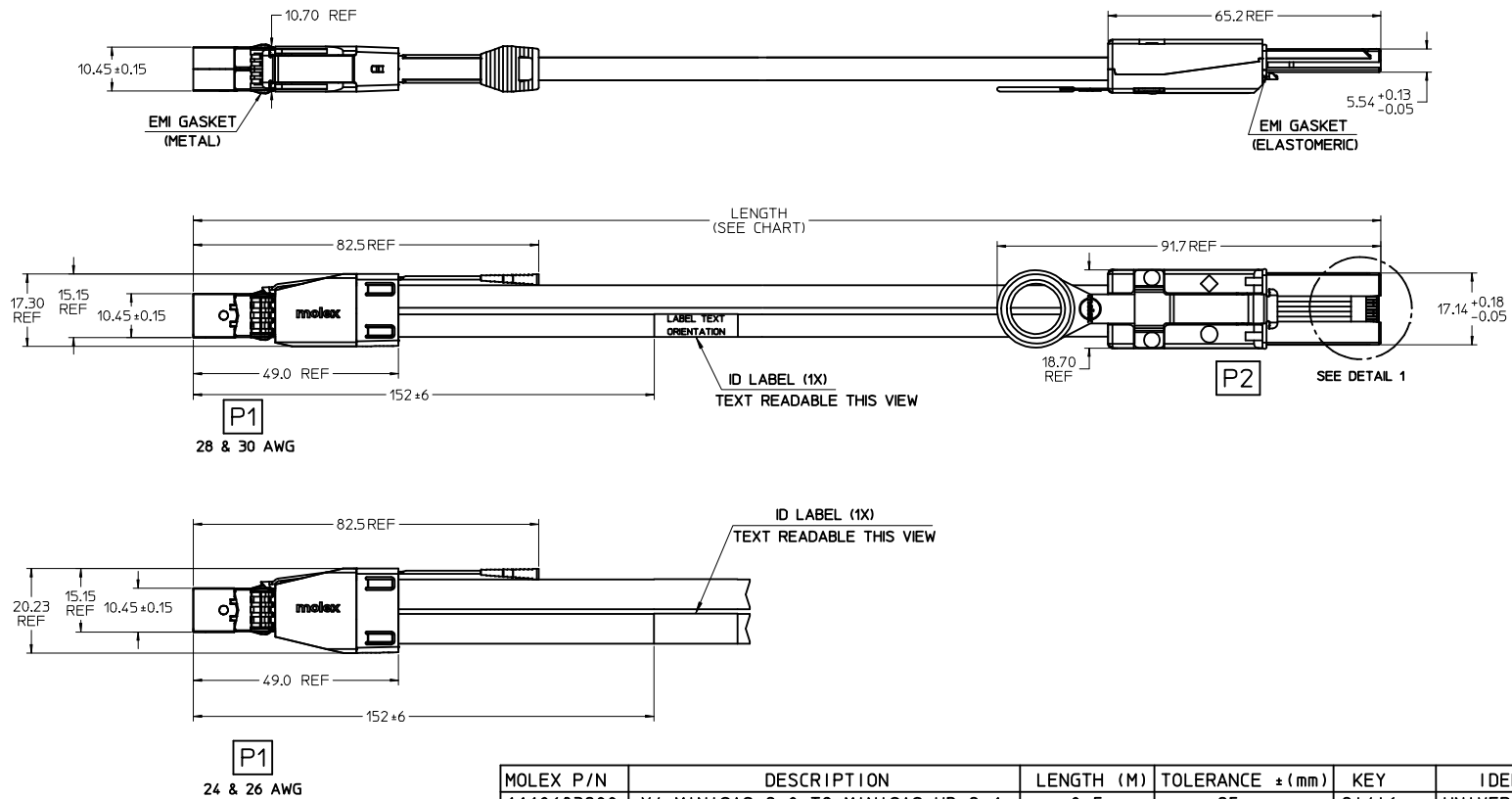
RAISED KEY 3 (R3)
(24AWG ONLY)



REV	DESCRIPTION	QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
		mm	INCH	mm	INCH	MM ONLY	INCH			
1	SEE REVISION TABLE	∇=0	∇=0	4 PLACES ±---	±---	BREED	DATE	2:1	METRIC	MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL
2	EC NO: CPG2013-1373	∇=0	∇=0	3 PLACES ±---	±---	CHECKED BY	DATE			
3	DRWN:SHOSSAIN 2012/10/31	∇=0	∇=0	2 PLACES ±0.13	±---	RKHAN	2010/12/20			
4	CHKD:RKLINE 2012/10/31	∇=0	∇=0	1 PLACE ±0.25	±---	APPROVED BY	DATE			
5	APPR:RMKHAN 2012/11/27			0 PLACE ±	±	RMKHAN	2011/07/24			
		ANGULAR ± 2 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE P/N TABLE		MATERIAL NO.		DOCUMENT NO.
								SD-11068-3200		SHEET NO.
										3 OF 4
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

DATE	REV	DESCRIPTION
2011/10/18	C	1. CHANGED LABEL
2012/07/28	D	1. ADDED PART NUMBERS 3204, 3208, & 3209. 2. UPDATED SHEET FORMAT. 3. ADDED REVISION HISTORY TABLE.
2012/09/06	E	1. CHANGED TEXT FONT SIZE FOR CONSISTENCY.
2012/10/31	F	1. ADDED LABEL TEXT ORIENTATION ON SHEET 1. 2. ADJUSTED FRONT VIEW OF CABLE ASSEMBLY ON SHEET 1. 3. CORRECTED PCB PIN OUT FOR MINISAS END ON SHEET 2.

SEE REVISION TABLE IEC NO: CPG2013-1373 DRAWN BY: TD CHECKED BY: CHYDORLINE APPR: RMKHAN	QUALITY SYMBOLS ∇=0 ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				MM ONLY		METRIC		
		4 PLACES ± ---	mm INCH	BREED	DATE	TITLE		
		3 PLACES ± ---		CHKD BY	DATE	MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL		
2 PLACES ± 0.13		APPR BY	DATE					
1 PLACE ± 0.25								
0 PLACE ±		ANGULAR ± 2 °		MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE P/N TABLE		SD-111068-3200	SD-111068-3200	4 OF 4		
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								



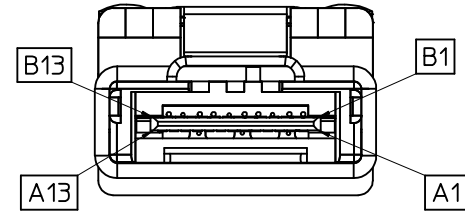
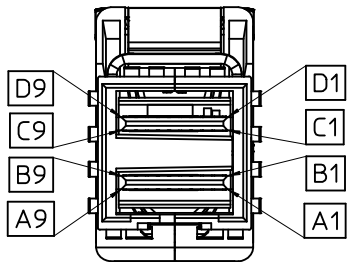
MOLEX P/N	DESCRIPTION	LENGTH (M)	TOLERANCE ± (mm)	KEY	IDENTIFIER	GAGE
1110683200	X4 MINISAS 2.0 TO MINISAS HD 2.1	0.5	25	2'4'6	UNIVERSAL KEY, SAS	30
1110683201	X4 MINISAS 2.0 TO MINISAS HD 2.1	1.0	50	2'4'6	UNIVERSAL KEY, SAS	28
1110683202	X4 MINISAS 2.0 TO MINISAS HD 2.1	2.0	50	2'4'6	UNIVERSAL KEY, SAS	28
1110683203	X4 MINISAS 2.0 TO MINISAS HD 2.1	3.0	100	2'4'6	UNIVERSAL KEY, SAS	28
1110683204	X4 MINISAS 2.0 TO MINISAS HD 2.1	4.0	100	2'4'6	UNIVERSAL KEY, SAS	26
1110683205	X4 MINISAS 2.0 TO MINISAS HD 2.1	5.0	100	2'4'6	UNIVERSAL KEY, SAS	26
1110683206	X4 MINISAS 2.0 TO MINISAS HD 2.1	6.0	100	2'4'6	UNIVERSAL KEY, SAS	24
1110683207	X4 MINISAS 2.0 TO MINISAS HD 2.1	7.0	150	2'4'6'R3	UNIVERSAL KEY, SAS	24
1110683208	X4 MINISAS 2.0 TO MINISAS HD 2.1	8.0	150	2'4'6'R3	UNIVERSAL KEY, SAS	24
1110683209	X4 MINISAS 2.0 TO MINISAS HD 2.1	9.0	150	2'4'6'R3	UNIVERSAL KEY, SAS	24
1110683210	X4 MINISAS 2.0 TO MINISAS HD 2.1	10.0	150	2'4'6'R3	UNIVERSAL KEY, SAS	24

NOTES:

- MATERIAL -
BACKSHELLS - ZINC DIECAST.
LATCH - STAINLESS STEEL.
PULL - MOLDED PLASTIC.
- LENGTH= SEE TABLE.
- ELECTRICAL PERFORMANCE PER SAS 2.1.
- ALL ASSEMBLIES HAVE AN EEPROM IN ACCORDANCE WITH SFF 8636.
- LEAD FREE, NO RoHS EXEMPTIONS.
- PROTECTIVE DUST CAP TO BE INSTALLED ONTO EACH PLUG.
- TAPE CABLE BUNDLES EVERY 1/2 METER (APPROX) USING (BLACK) TAPE.

SEE REVISION TABLE IEC NO: CPG2013-1373 DRAWN BY: DRWNSHOSSAIN 2012/10/31 CHECKED BY: CHYOKARKLINE 2012/10/31 APPROVED BY: APPR:RMKHAN 2012/11/27	QUALITY SYMBOLS ∇=0 ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>±0.13</td> <td>±0.005</td> </tr> <tr> <td>3 PLACES</td> <td>±0.25</td> <td>±0.010</td> </tr> <tr> <td>2 PLACES</td> <td>±0.50</td> <td>±0.020</td> </tr> <tr> <td>1 PLACE</td> <td>±1.00</td> <td>±0.040</td> </tr> <tr> <td>0 PLACE</td> <td>±1.50</td> <td>±0.060</td> </tr> </table>		mm	INCH	4 PLACES	±0.13	±0.005	3 PLACES	±0.25	±0.010	2 PLACES	±0.50	±0.020	1 PLACE	±1.00	±0.040	0 PLACE	±1.50	±0.060	DIMENSION STYLE MM ONLY	SCALE 1.75:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		mm	INCH																					
	4 PLACES	±0.13	±0.005																					
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1 PLACE	±1.00	±0.040																						
0 PLACE	±1.50	±0.060																						
			DRAWN BY: BREED DATE: 2010/12/20 CHECKED BY: RKHAN DATE: 2010/12/20 APPROVED BY: RMKHAN DATE: 2011/07/24			TITLE MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL																		
			MATERIAL NO. SEE P/N TABLE	DOCUMENT NO. SD-111068-3200		SHEET NO. 1 OF 4																		
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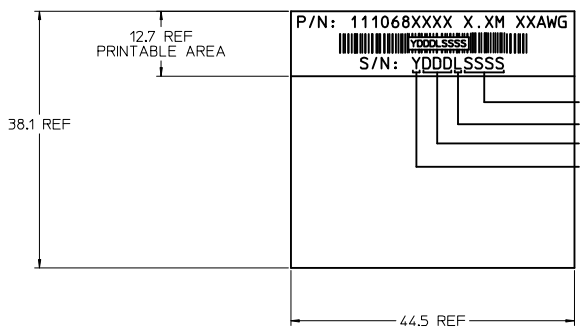
MINISAS HD WIRING CHART			
-P1-		-P2-	
GND	D9	----- A1	GND
Tx2-	D8	-----> A9	Rx2-
Tx2+	D7	-----> A8	Rx2+
GND	D6	----- A7	GND
Tx0-	D5	-----> A3	Rx0-
Tx0+	D4	-----> A2	Rx0+
GND	D3		
Vman	D2	EEPROM	
Vact	D1		
SCL	C1		
SDA	C2		
GND	C3	A4	GND
Tx1+	C4	-----> A5	Rx1+
Tx1-	C5	-----> A6	Rx1-
GND	C6	----- A10	GND
Tx3+	C7	-----> A11	Rx3+
Tx3-	C8	-----> A12	Rx3-
GND	C9	----- A13	GND
GND	B9	----- B1	GND
Rx2-	B8	-----< B9	Tx2-
Rx2+	B7	-----< B8	Tx2+
GND	B6	----- B7	GND
Rx0-	B5	-----< B3	Tx0-
Rx0+	B4	-----< B2	Tx0+
GND	B3	NC	
ModPrsl	B2	NC	
Vact	B1	NC	
Rev	A1	NC	
IntL	A2	NC	
GND	A3	----- B4	GND
Rx1+	A4	-----< B5	Tx1+
Rx1-	A5	-----< B6	Tx1-
GND	A6	----- B10	GND
Rx3+	A7	-----< B11	Tx3+
Rx3-	A8	-----< B12	Tx3-
GND	A9	----- B13	GND



EEPROM CONNECTIONS

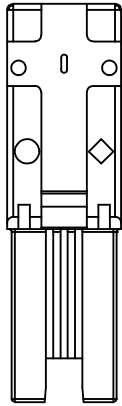
VACT = WRITE PROTECT
 SCL = CLOCK SIGNAL
 SDA = DATA SIGNAL
 GND = GROUND

ID LABEL TEXT

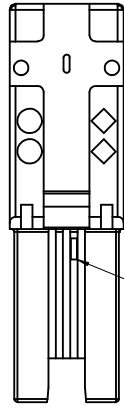


YDDDLSSSS
 SSSS---SEQUENTIAL NUMBERS
 L---LOCATION (1 = HPC, 2 = GUAD, 3 = DG)
 DDD---DAY OF THE YEAR
 Y--- YEAR, THE LAST DIGIT OF YEAR

SEE REVISION TABLE EC NO: CPG2013-1373 DRAWN BY: TD CHECKED BY: CHYORUKLINE APPROVED BY: APPR:RMKHAH DATE: 2012/10/31 DATE: 2012/11/27	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ± 0.13	mm	MM ONLY	5:1	METRIC
	▽=0	3 PLACES ± 0.25	INCH			
	▽=0	2 PLACES ± 0.50				
		ANGULAR ± 2°				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
			DRAWN BY: BREED	DATE: 2010/12/20	TITLE: MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL	
			CHECKED BY: RKHAN	DATE: 2010/12/20	molex	
			APPROVED BY: RMKHAH	DATE: 2011/07/24		
			MATERIAL NO:	DATE:	DOCUMENT NO:	SHEET NO:
			SEE P/N TABLE		SD-111068-3200	2 OF 4
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

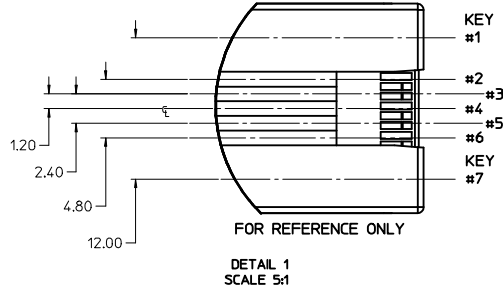
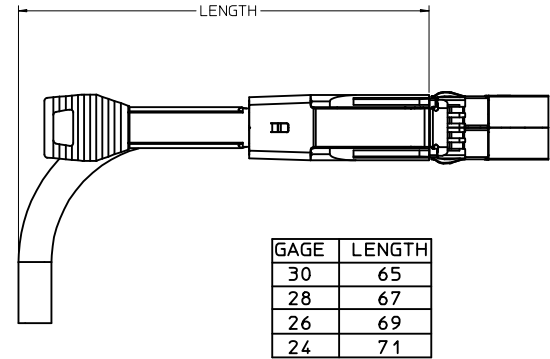
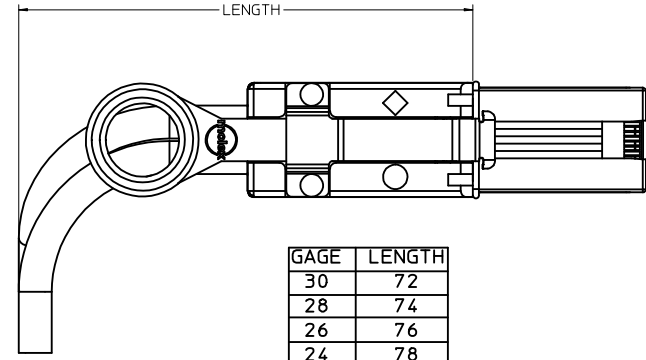


0.5M THRU 6.0M
SAS 1.1 & 2.0

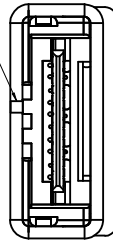


7.0M THRU 10.0M
SAS 2.0
RAISED KEY 3

RAISED KEY 3



RAISED KEY 3 (R3)
(24AWG ONLY)



REV	DESCRIPTION	QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		mm	INCH	mm	INCH	MM ONLY	INCH				
1	SEE REVISION TABLE	∇=0	∇=0	4 PLACES ±---	±---	BREED	DATE	2:1	METRIC	MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL molex DOCUMENT NO. SD-11068-3200	
2	EC NO: CPG2013-1373	∇=0	∇=0	3 PLACES ±---	±---	CHECKED BY	DATE				SHEET NO. 3 OF 4
3	DRWN:SHOSSAIN 2012/10/31	∇=0	∇=0	2 PLACES ±0.13	±---	RKHAN	DATE				
4	CHK:RKLINE 2012/10/31	∇=0	∇=0	1 PLACE ±0.25	±---	APPROVED BY	DATE				
5	APPR:RMKHAH 2012/11/27	∇=0	∇=0	0 PLACE ±	±	RMKHAH	DATE				
				ANGULAR ± 2 °		SEE P/N TABLE					
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE P/N TABLE					
						THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

DATE	REV	DESCRIPTION
2011/10/18	C	1. CHANGED LABEL
2012/07/28	D	1. ADDED PART NUMBERS 3204, 3208, & 3209. 2. UPDATED SHEET FORMAT. 3. ADDED REVISION HISTORY TABLE.
2012/09/06	E	1. CHANGED TEXT FONT SIZE FOR CONSISTENCY.
2012/10/31	F	1. ADDED LABEL TEXT ORIENTATION ON SHEET 1. 2. ADJUSTED FRONT VIEW OF CABLE ASSEMBLY ON SHEET 1. 3. CORRECTED PCB PIN OUT FOR MINISAS END ON SHEET 2.

SEE REVISION TABLE IEC NO: CPG2013-1373 DRAWN BY: TD CHECKED BY: CHYKORLINE APPR: RMKHAN	QUALITY SYMBOLS ∇=0 ∇=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				MM ONLY		METRIC		
		4 PLACES ± ---	mm INCH	DRAWN BY	DATE	TITLE		
		3 PLACES ± ---		BREED	2010/12/20	MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL		
2 PLACES ± 0.13		CHECKED BY	DATE					
1 PLACE ± 0.25		RMKHAN	2010/12/20					
0 PLACE ±		APPROVED BY	DATE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
		RMKHAN	2011/07/24	SEE P/N TABLE	SD-111068-3200	4 OF 4		
ANGULAR ± 2 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				