

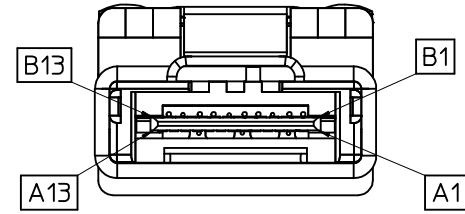
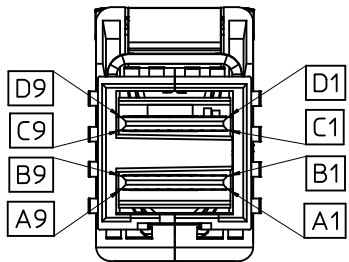
MOLEX P/N	DESCRIPTION	LENGTH (M)	TOLERANCE ± (mm)	KEY	IDENTIFIER	GAGE
1110683200	X4 MINISAS 2.0 TO MINISAS HD 2.1	0.5	25	2'4'6	UNIVERSAL KEY, SAS	30
1110683201	X4 MINISAS 2.0 TO MINISAS HD 2.1	1.0	50	2'4'6	UNIVERSAL KEY, SAS	28
1110683202	X4 MINISAS 2.0 TO MINISAS HD 2.1	2.0	50	2'4'6	UNIVERSAL KEY, SAS	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.

<b>SEE REVISION TABLE</b> IEC NO: CPG2013-1373 DRAWN BY: DRWNSHOSSAIN 2012/10/31 CHECKED BY: CHYORAKLINE 2012/10/31 APPROVED BY: APPR/RMKHAN 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>± 2.00</td> <td>± 0.080</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	± 2.00	± 0.080	DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>1.75:1</b>	DESIGN UNITS <b>METRIC</b>	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	± 2.00	± 0.080																						
MATERIAL NO. SEE P/N TABLE DOCUMENT NO. SD-111068-3200		TITLE <b>MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL</b>		SHEET NO. <b>1 OF 4</b>																				
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																								

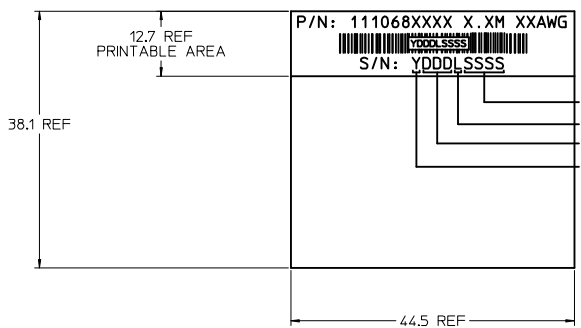
MINISAS HD WIRING CHART			
-P1-		-P2-	
GND	D9	----- A1	GND
Tx2-	D8	-----> A9	Rx2-
Tx2+	D7	-----> A8	Rx2+
GND	D6	----- A7	GND
Tx0-	D5	-----> A3	Rx0-
Tx0+	D4	-----> A2	Rx0+
GND	D3		
Vman	D2	EEPROM	
Vact	D1		
SCL	C1		
SDA	C2		
GND	C3		A4
Tx1+	C4	-----> A5	Rx1+
Tx1-	C5	-----> A6	Rx1-
GND	C6	----- A10	GND
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**

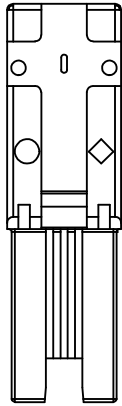
VACT = WRITE PROTECT  
 SCL = CLOCK SIGNAL  
 SDA = DATA SIGNAL  
 GND = GROUND

**ID LABEL TEXT**

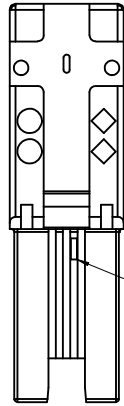


YDDDLSSSS  
 SSSS---SEQUENTIAL NUMBERS  
 L---LOCATION (1 = HPC, 2 = GUAD, 3 = DG)  
 DDD---DAY OF THE YEAR  
 Y--- YEAR, THE LAST DIGIT OF YEAR

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 INCH	5:1	METRIC	☉
	▽=0	3 PLACES ± 0.25		MM ONLY		
	▽=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	<b>molex</b> DOCUMENT NO: SD-111068-3200	
			APPROVED BY: RKHAN	DATE: 2011/07/24		
			MATERIAL NO: SEE P/N TABLE	SIZE: D	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

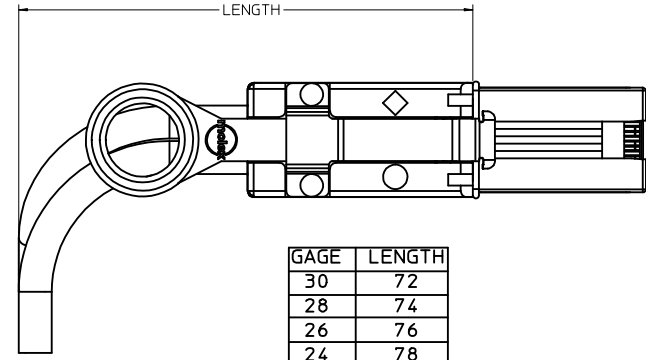


0.5M THRU 6.0M  
SAS 1.1 & 2.0

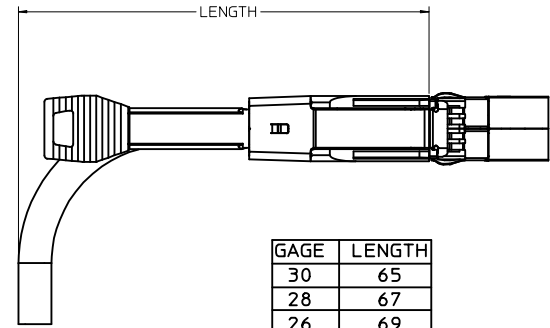


7.0M THRU 10.0M  
SAS 2.0  
RAISED KEY 3

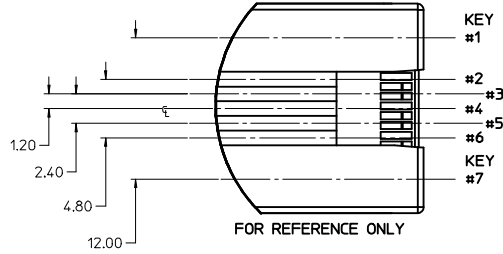
RAISED KEY 3



GAGE	LENGTH
30	72
28	74
26	76
24	78



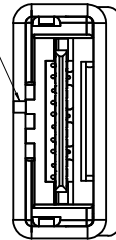
GAGE	LENGTH
30	65
28	67
26	69
24	71



FOR REFERENCE ONLY

DETAIL 1  
SCALE 5:1

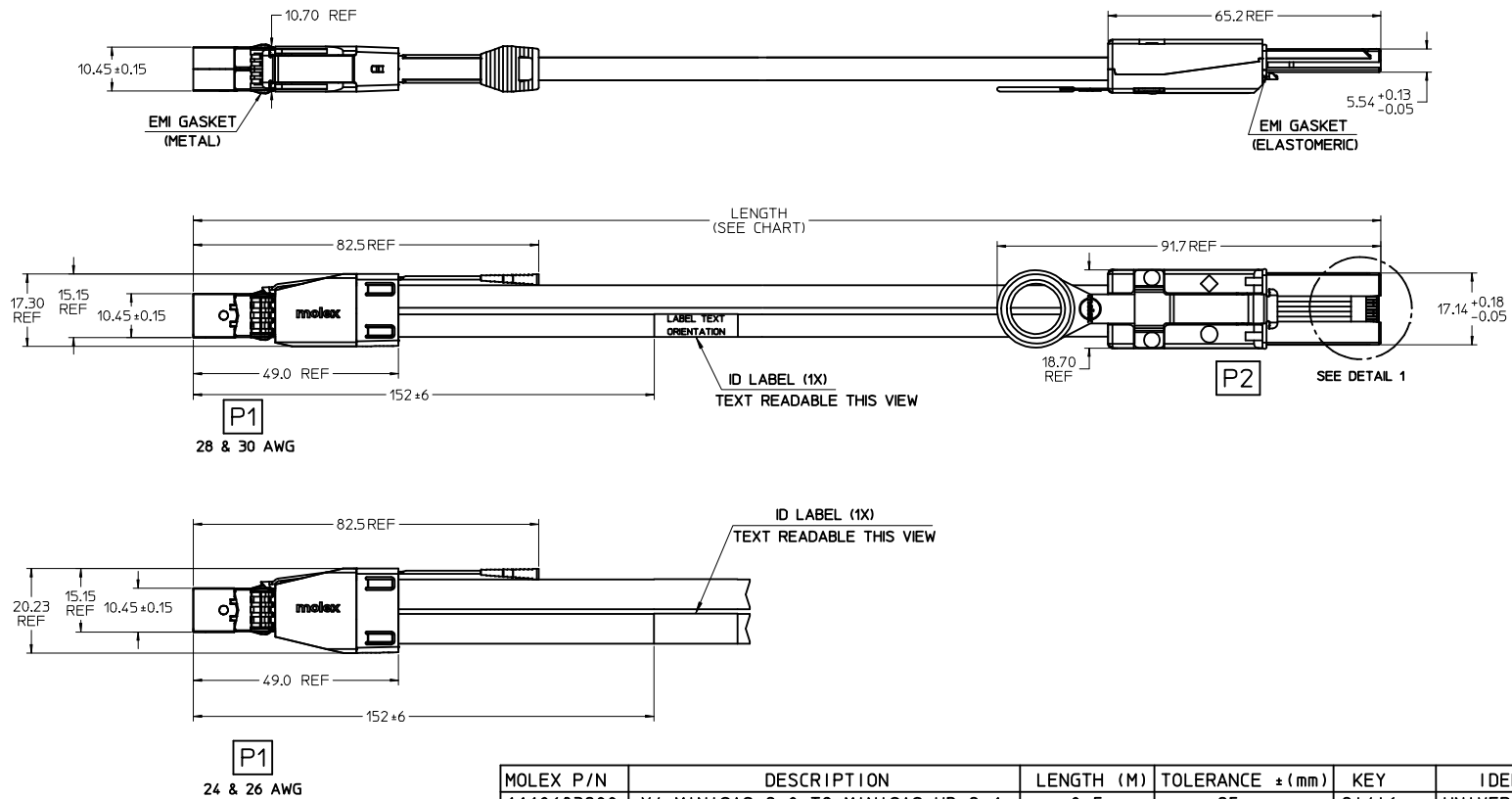
RAISED KEY 3 (R3)  
(24AWG ONLY)



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: CHYD APPROVED BY: APPR:RMK	QUALITY SYMBOLS ∇=0 ∇=0 ∇=0	DESCRIPTION 2012/10/31 2012/10/31 2012/11/27	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
					MM ONLY	METRIC		
					DRAWN BY: BREED	DATE: 2010/12/20	TITLE: MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL	
					CHECKED BY: RKHAN	DATE: 2010/12/20	APPROVED BY: RMKhan	
			DATE: 2011/07/24	MATERIAL NO.:	DOCUMENT NO. SD-111068-3200	SHEET NO. 4 OF 4		
			DATE: 2011/07/24	SEE P/N TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		



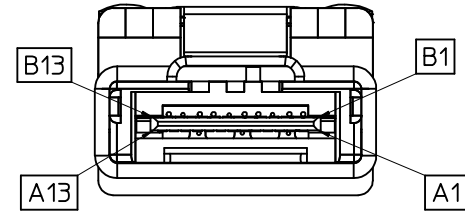
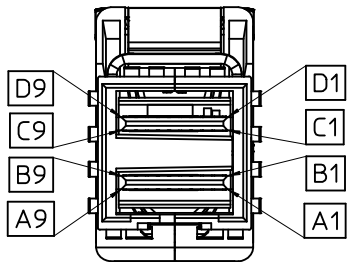
MOLEX P/N	DESCRIPTION	LENGTH (M)	TOLERANCE ± (mm)	KEY	IDENTIFIER	GAGE
1110683200	X4 MINISAS 2.0 TO MINISAS HD 2.1	0.5	25	2'4'6	UNIVERSAL KEY, SAS	30
1110683201	X4 MINISAS 2.0 TO MINISAS HD 2.1	1.0	50	2'4'6	UNIVERSAL KEY, SAS	28
1110683202	X4 MINISAS 2.0 TO MINISAS HD 2.1	2.0	50	2'4'6	UNIVERSAL KEY, SAS	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.

<b>SEE REVISION TABLE</b> 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> <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 <b>MM ONLY</b>	SCALE <b>1.75:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION
		mm	INCH																					
	4 PLACES	±0.13	±0.005																					
	3 PLACES	±0.25	±0.010																					
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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 <b>MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL</b>	<b>molex</b>																					
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE P/N TABLE	DOCUMENT NO. <b>SD-111068-3200</b>	SHEET NO. <b>1 OF 4</b>																				
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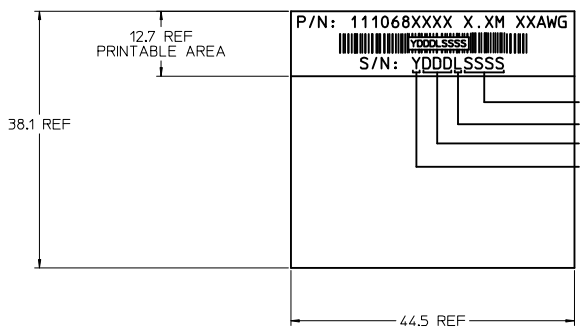
MINISAS HD WIRING CHART			
-P1-		-P2-	
GND	D9	----- A1	GND
Tx2-	D8	----- A9	Rx2-
Tx2+	D7	----- A8	Rx2+
GND	D6	----- A7	GND
Tx0-	D5	----- A3	Rx0-
Tx0+	D4	----- A2	Rx0+
GND	D3		
Vman	D2	EEPROM	
Vact	D1		
SCL	C1		
SDA	C2		
GND	C3		A4
Tx1+	C4	----- A5	Rx1+
Tx1-	C5	----- A6	Rx1-
GND	C6	----- A10	GND
Tx3+	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**

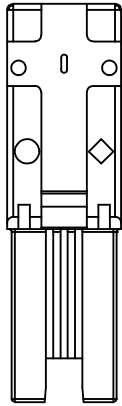
VACT = WRITE PROTECT  
 SCL = CLOCK SIGNAL  
 SDA = DATA SIGNAL  
 GND = GROUND

**ID LABEL TEXT**

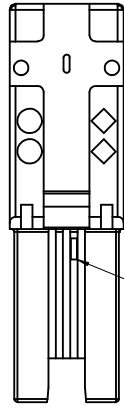


YDDDLSSSS  
 SSSS---SEQUENTIAL NUMBERS  
 L---LOCATION (1 = HPC, 2 = GUAD, 3 = DG)  
 DDD---DAY OF THE YEAR  
 Y--- YEAR, THE LAST DIGIT OF YEAR

<b>SEE REVISION TABLE</b> EC NO: CPG2013-1373 DRAWN BY: TDW/SHSSAIN 2012/10/31 CHECKED BY: CHYOR/KLINE 2012/10/31 APPROVED BY: APPR/RMKHAN 2012/11/27	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 ± ±		DIMENSION STYLE <b>MM ONLY</b>	SCALE <b>5:1</b>	DESIGN UNITS <b>METRIC</b>	THIRD ANGLE PROJECTION	
		ANGULAR ± 2 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWN BY: BREED DATE: 2010/12/20 CHECKED BY: DATE: 2010/12/20 APPROVED BY: DATE: 2011/07/24	TITLE <b>MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL</b>			
		MATERIAL NO. SEE P/N TABLE DOCUMENT NO. SD-111068-3200		SHEET NO. 2 OF 4				
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

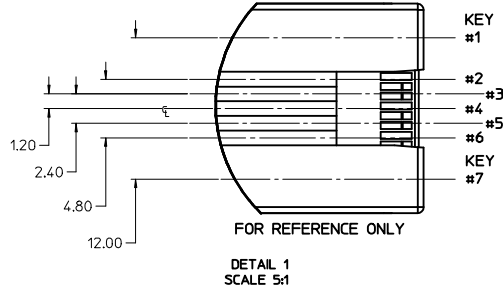
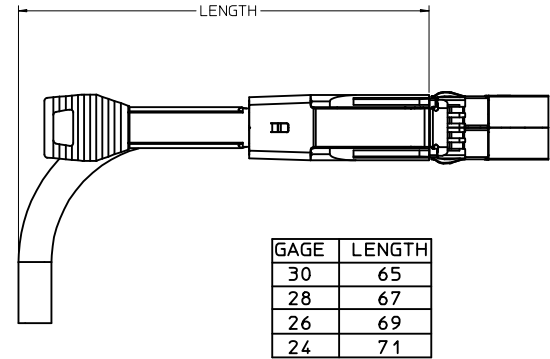
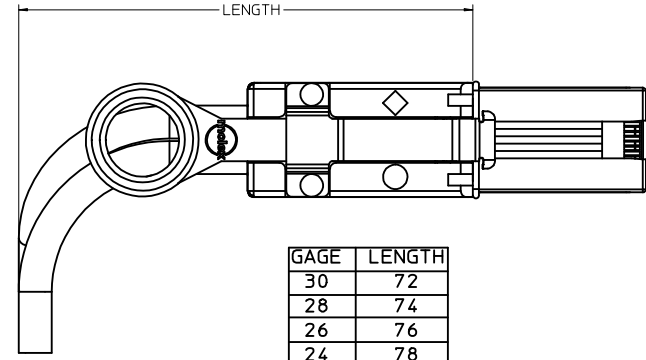


0.5M THRU 6.0M  
SAS 1.1 & 2.0

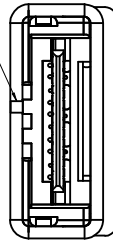


7.0M THRU 10.0M  
SAS 2.0  
RAISED KEY 3

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 <b>molex</b>
2	EC NO: CPG2013-1373	∇=0	∇=0	3 PLACES ±---	±---	CHECKED BY	DATE			
3	DRWN:SHOSSAIN 2012/10/31	∇=0	∇=0	2 PLACES ±0.13	±---	APPROVED BY	DATE			
4	CHK:RKLINE 2012/10/31	∇=0	∇=0	1 PLACE ±0.25	±---	MATERIAL NO.	DATE			
5	APPR:RMKHAN 2012/11/27			0 PLACE ±	±	RMKHAN	2011/07/24			DOCUMENT NO.
						ANGULAR ± 2 °		SEE P/N TABLE		SD-11068-3200
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE D		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
										SHEET NO. 3 OF 4

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