

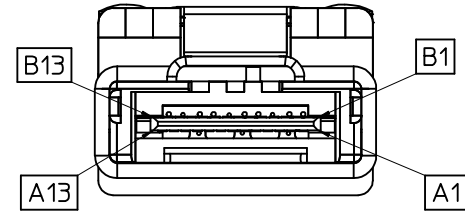
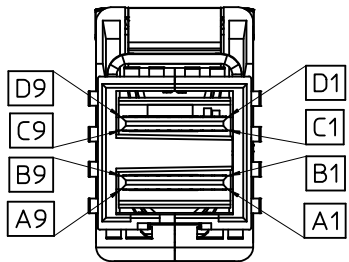
MOLEX P/N	DESCRIPTION	LENGTH (M)	TOLERANCE ± (mm)	KEY	IDENTIFIER	GAGE
1110683200	X4 MINISAS 2.0 TO MINISAS HD 2.1	0.5	25	2'4'6	UNIVERSAL KEY, SAS	30
1110683201	X4 MINISAS 2.0 TO MINISAS HD 2.1	1.0	50	2'4'6	UNIVERSAL KEY, SAS	28
1110683202	X4 MINISAS 2.0 TO MINISAS HD 2.1	2.0	50	2'4'6	UNIVERSAL KEY, SAS	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>±---</td> </tr> <tr> <td>3 PLACES</td> <td>±0.25</td> <td>±---</td> </tr> <tr> <td>2 PLACES</td> <td>±0.50</td> <td>±---</td> </tr> <tr> <td>1 PLACE</td> <td>±1.00</td> <td>±---</td> </tr> <tr> <td>0 PLACE</td> <td>±---</td> <td>±---</td> </tr> </table>		mm	INCH	4 PLACES	±0.13	±---	3 PLACES	±0.25	±---	2 PLACES	±0.50	±---	1 PLACE	±1.00	±---	0 PLACE	±---	±---	DIMENSION STYLE MM ONLY	SCALE 1.75:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		mm	INCH																					
	4 PLACES	±0.13	±---																					
	3 PLACES	±0.25	±---																					
2 PLACES	±0.50	±---																						
1 PLACE	±1.00	±---																						
0 PLACE	±---	±---																						
	MATERIAL NO. SEE P/N TABLE	DATE BREED 2010/12/20 RKHAN 2010/12/20 RKHAN 2011/07/24	TITLE MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL	DOCUMENT NO. SD-111068-3200	SHEET NO. 1 OF 4																			
	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																					

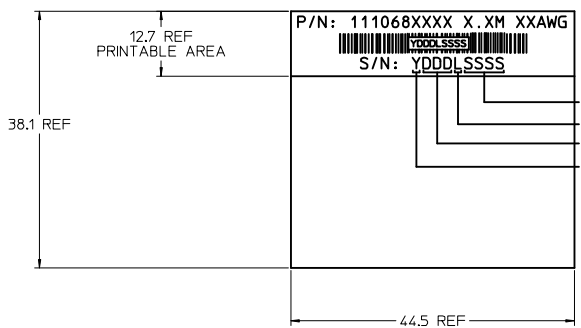
MINISAS HD WIRING CHART			
-P1-		-P2-	
GND	D9	----- A1	GND
Tx2-	D8	----- A9	Rx2-
Tx2+	D7	----- A8	Rx2+
GND	D6	----- A7	GND
Tx0-	D5	----- A3	Rx0-
Tx0+	D4	----- A2	Rx0+
GND	D3		
Vman	D2	EEPROM	
Vact	D1		
SCL	C1		
SDA	C2		
GND	C3		A4
Tx1+	C4	----- A5	Rx1+
Tx1-	C5	----- A6	Rx1-
GND	C6	----- A10	GND
Tx3+	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

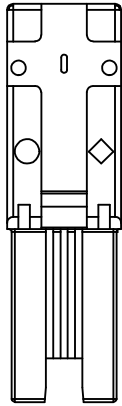
ID LABEL TEXT



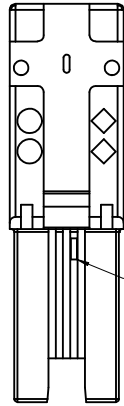
YDDDLSSSS
 SSSS---SEQUENTIAL NUMBERS
 L---LOCATION (1 = HPC, 2 = GUAD, 3 = DG)
 DDD---DAY OF THE YEAR
 Y--- YEAR, THE LAST DIGIT OF YEAR

SEE REVISION TABLE EC NO: CPG2013-1373 DRAWN BY: TDRWNSHSSAIN 2012/10/31 CHECKED BY: CHYDKRLINE 2012/10/31 APPROVED BY: APPR:RKHAN 2012/11/27	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ± 0.13	MM ONLY	5:1	METRIC	☉
	▽=0	3 PLACES ± 0.25				
	▽=0	2 PLACES ± 0.50				
		ANGULAR ± 2°				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE P/N TABLE			
			MATERIAL NO.	DOCUMENT NO.		

TITLE: MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL
molex
 SD-111068-3200
 SHEET NO. 2 OF 4

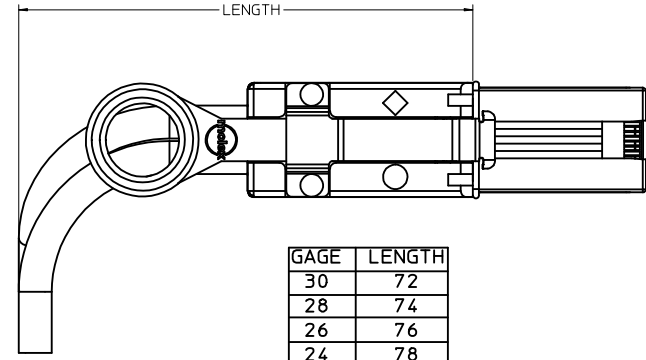


0.5M THRU 6.0M
SAS 1.1 & 2.0

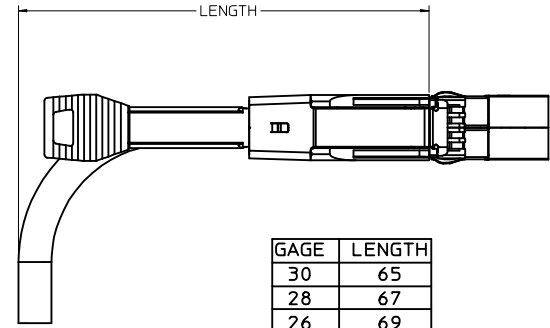


7.0M THRU 10.0M
SAS 2.0
RAISED KEY 3

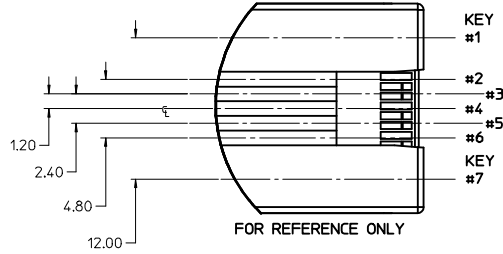
RAISED KEY 3



GAGE	LENGTH
30	72
28	74
26	76
24	78



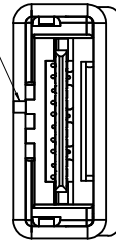
GAGE	LENGTH
30	65
28	67
26	69
24	71



FOR REFERENCE ONLY

DETAIL 1
SCALE 5:1

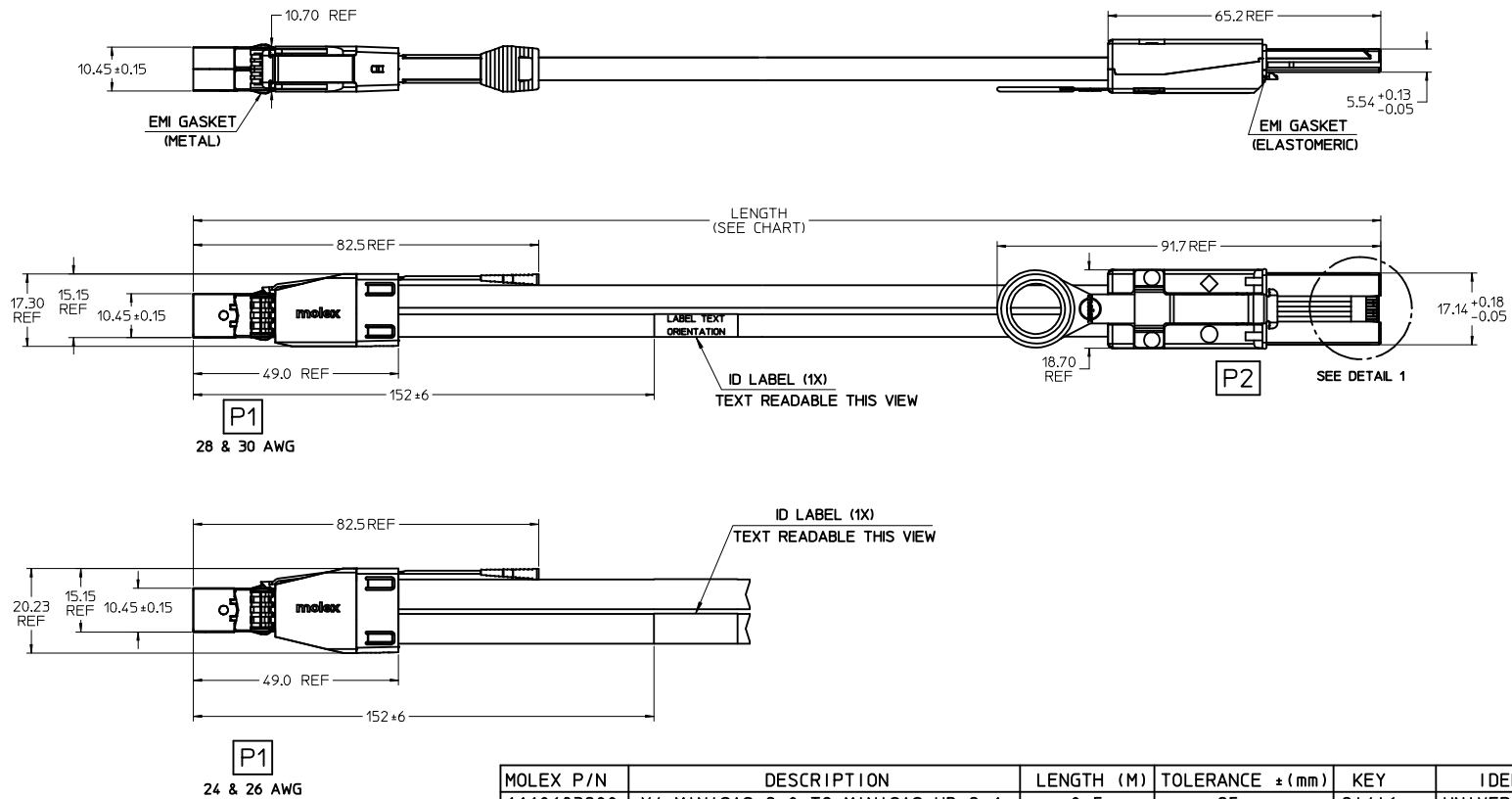
RAISED KEY 3 (R3)
(24AWG ONLY)



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 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 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE P/N TABLE					

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: CPG2013-4373 DRAWN BY: TDWNSHROSSAIN 2012/10/31 CHECKED BY: CHYKORUKLINE 2012/10/31 APPR: RMKHAH 2012/11/27	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	mm	MM ONLY		METRIC	
	▽=0	INCH	4 PLACES ± --- ± ---	DRAWN BY		
	▽=0		3 PLACES ± --- ± ---	DATE		TITLE
			2 PLACES ± 0.13 ± ---	BREED	2010/12/20	MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL
		1 PLACE ± 0.25 ± ---	CHECKED BY			
		0 PLACE ± ±	RMKHAH	2010/12/20		
		ANGULAR ± 2 °	APPROVED BY			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	RMKHAH	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			



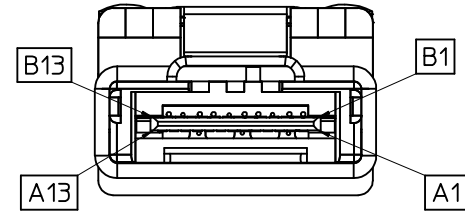
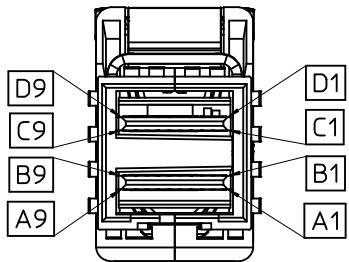
MOLEX P/N	DESCRIPTION	LENGTH (M)	TOLERANCE ± (mm)	KEY	IDENTIFIER	GAGE
1110683200	X4 MINISAS 2.0 TO MINISAS HD 2.1	0.5	25	2'4'6	UNIVERSAL KEY, SAS	30
1110683201	X4 MINISAS 2.0 TO MINISAS HD 2.1	1.0	50	2'4'6	UNIVERSAL KEY, SAS	28
1110683202	X4 MINISAS 2.0 TO MINISAS HD 2.1	2.0	50	2'4'6	UNIVERSAL KEY, SAS	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: APPRPRMKHAN 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																					
	3 PLACES	±0.25	±0.010																					
2 PLACES	±0.50	±0.020																						
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																		
		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																					

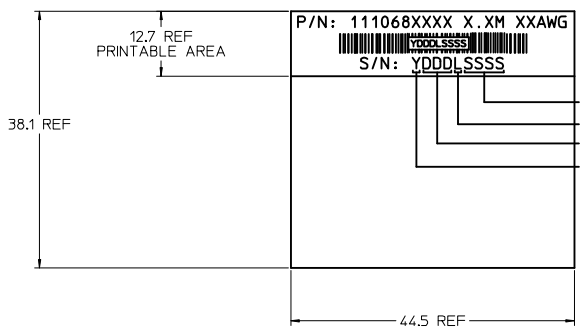
MINISAS HD WIRING CHART			
-P1-		-P2-	
GND	D9	----- A1	GND
Tx2-	D8	-----> A9	Rx2-
Tx2+	D7	-----> A8	Rx2+
GND	D6	----- A7	GND
Tx0-	D5	-----> A3	Rx0-
Tx0+	D4	-----> A2	Rx0+
GND	D3		
Vman	D2	EEPROM	
Vact	D1		
SCL	C1		
SDA	C2		
GND	C3	A4	GND
Tx1+	C4	-----> A5	Rx1+
Tx1-	C5	-----> A6	Rx1-
GND	C6	----- A10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

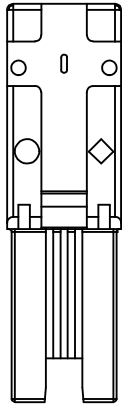
VACT = WRITE PROTECT
 SCL = CLOCK SIGNAL
 SDA = DATA SIGNAL
 GND = GROUND

ID LABEL TEXT

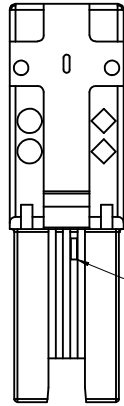


YDDDLSSSS
 SSSS---SEQUENTIAL NUMBERS
 L---LOCATION (1 = HPC, 2 = GUAD, 3 = DG)
 DDD---DAY OF THE YEAR
 Y--- YEAR, THE LAST DIGIT OF YEAR

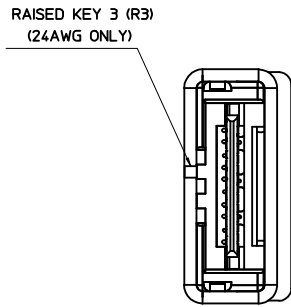
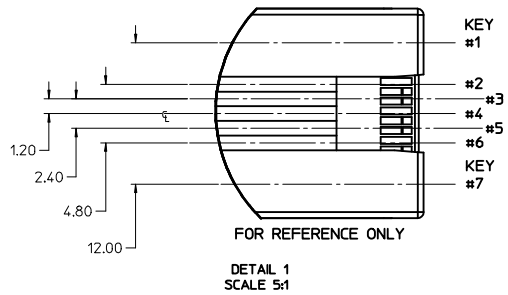
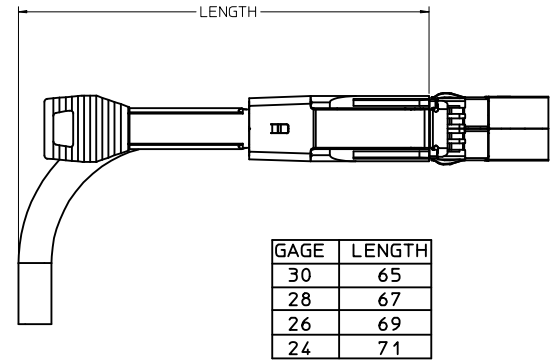
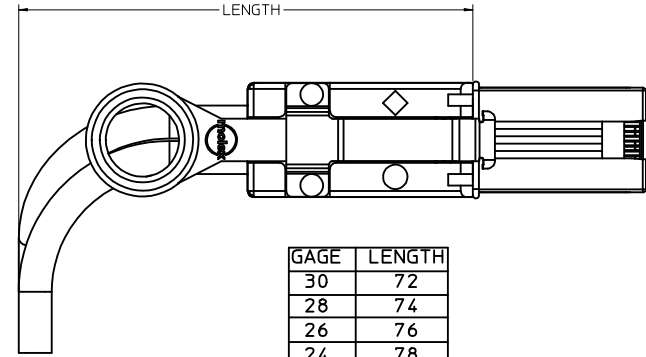
SEE REVISION TABLE EC NO: CPG2013-1373 DRAWN BY: TDRWNSHSSAIN 2012/10/31 CHECKED BY: CHYDRKLINE 2012/10/31 APPROVED BY: APPR:RKHAN 2012/11/27	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0	4 PLACES ± 0.13	MM ONLY	5:1	METRIC	☉
	▽=0	3 PLACES ± 0.25				
	▽=0	2 PLACES ± 0.50				
	ANGULAR ± 2°	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DATE	DATE	TITLE	
			BREED 2010/12/20	DATE	MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL	
			CHKED BY: RKHAN 2010/12/20	DATE		
			APPROVED BY: RKHAN 2011/07/24	DATE		
			MATERIAL NO.	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



QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	mm	INCH	MM ONLY				
▽=0	4 PLACES ±	---	DRAWN BY	DATE	2:1	METRIC	MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL molex
▽=0	3 PLACES ±	---	BREED	2010/12/20			
▽=0	2 PLACES ±	0.13	CHECKED BY	DATE			
▽=0	1 PLACE ±	0.25	RKHAN	2010/12/20			
▽=0	0 PLACE ±	---	APPROVED BY	DATE			
	ANGULAR ± 2 °		MATERIAL NO.	DOCUMENT NO.			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE P/N TABLE	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: 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
				2010/12/20	2010/12/20	MINISAS HD TO MINISAS 4X CABLE ASSEMBLIES EXTERNAL
				2011/07/24		molex
						DOCUMENT NO. SD-111068-3200
						SHEET NO. 4 OF 4