

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0738022216](#)  
**Status:** **Active**  
**Overview:** [hdm](#)  
**Description:** 2.00mm (.079") Pitch HDM® Board-to-Board Midplane Header, Vertical, SMC, Press-Fit, Long Pin, Guide Pin Option, 72 Circuits

**Documents:**

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-73780-999 \(PDF\)](#)

**Agency Certification**

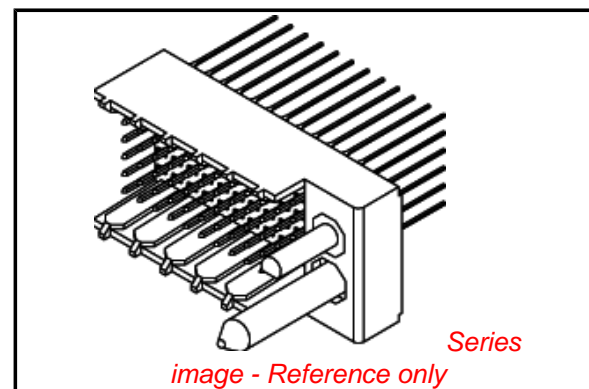
CSA LR19980  
 UL E29179

**General**

Product Family Backplane Connectors  
 Series [73802](#)  
 Application Midplane  
 Component Type PCB Header  
 Overview [hdm](#)  
 Product Name HDM®  
 Style N/A

**Physical**

Circuits (Loaded) 72  
 Circuits (maximum) 72  
 Color - Resin Black, Natural  
 Durability (mating cycles max) 250  
 First Mate / Last Break No  
 Flammability 94V-0  
 Guide to Mating Part Yes  
 Keying to Mating Part None  
 Material - Metal Stainless Steel  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin-Lead  
 Material - Resin High Temperature Thermoplastic  
 Number of Columns 15  
 Number of Pairs Open Pin Field  
 Number of Rows 6  
 Orientation Vertical  
 PC Tail Length (in) 0.453 In  
 PC Tail Length (mm) 11.50 mm  
 PCB Locator No  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.156 In  
 PCB Thickness Recommended (mm) 3.95 mm  
 Packaging Type Tube  
 Pitch - Mating Interface (in) 0.079 In  
 Pitch - Mating Interface (mm) 2.00 mm  
 Pitch - Term. Interface (in) 0.079 In  
 Pitch - Term. Interface (mm) 2.00 mm  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.75  
 Plating min: Termination (µin) 35.2  
 Plating min: Termination (µm) 0.88  
 Polarized to PCB No



**EU RoHS**

**RoHS Compliant by Exemption**  
**REACH SVHC Not Reviewed**  
**Halogen-Free Status Not Reviewed**

**China RoHS**



**Need more information on product environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[73802Series](#)

**Mates With**

[73632 HDM PLUS® Board-to-Board Daughtercard Receptacle](#). [73780 HDM® Board-to-Board Daughtercard Receptacle](#)

**Application Tooling | FAQ**

*Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.*

**Global**

Description	Product #
Flat Rock Tooling for Pneumatic Press	<a href="#">0622013700</a>

Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-55°C to +105°C

### **Electrical**

Current - Maximum per Contact	1A
Data Rate	1.0 Gbps
Real Signals (per 25mm)	75
Shielded	No
Voltage - Maximum	250V AC

### **Material Info**

#### **Reference - Drawing Numbers**

Packaging Specification	PK-70873-0868
Product Specification	PS-73780-999
Sales Drawing	SD-73802-001

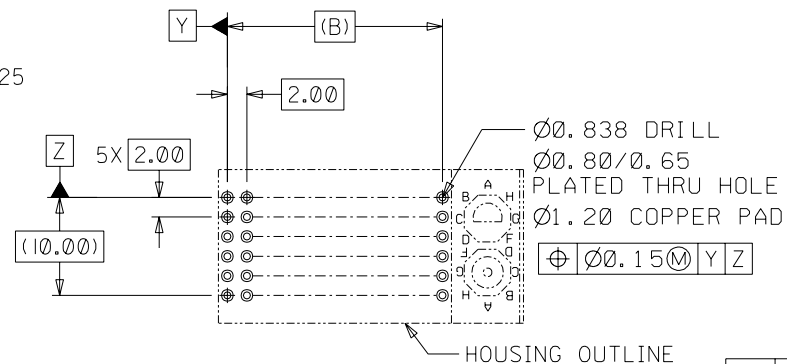
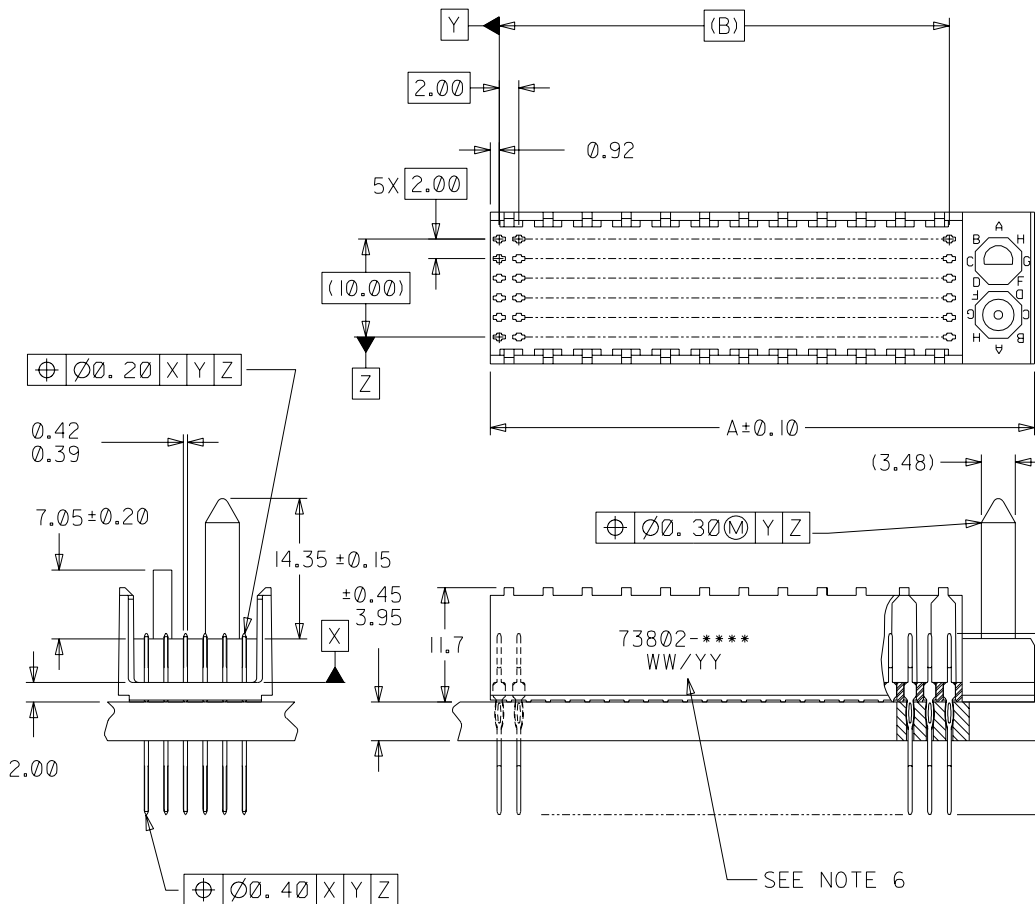
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This document was generated on 05/14/2010

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# NOTES:

1. MATERIALS: HOUSING - LIQUID CRYSTAL POLYMER (LCP), GLASS-FILLED, UL94V-0, COLOR: BLACK, TERMINAL - PHOSPHOR BRONZE.
2. FINISHES: SELECTIVE GOLD (Au) IN CONTACT AREA, 0.00076mm MINIMUM THICKNESS; NICKEL (Ni) AND GOLD FLASH OVERALL SELECTIVE GOLD (Au) IN CONTACT AREA, 0.00076mm MINIMUM THICKNESS; SELECTIVE TIN/LEAD (Sn/Pb) IN COMPLIANT AREA; NICKEL (Ni) OVERALL.
3. THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-73780-999.
4. FOR MIXED CONTACT MATING LENGTHS, CONSULT FACTORY FOR AVAILABILITY.
5. PACKAGE PER PK-70873-0868.
6. PARTS MARKED WITH PART NUMBER AND DATE CODE, ON EITHER SIDE, APPROXIMATELY WHERE SHOWN.



PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: 3.95 ± 0.45

MATERIAL NUMBER	NUMBER OF CONTACTS	DIM "A"	DIM "B"	DIM "M"	PLATING
73802-00**	72	31.6	22.00	5.00	GOLD/GOLD FLASH
73802-02**	72	31.6	22.00	6.00	GOLD/GOLD FLASH
73802-10**	144	55.6	46.00	5.00	GOLD/GOLD FLASH
73802-12**	144	55.6	46.00	6.00	GOLD/GOLD FLASH
73802-20**	72	31.6	22.00	5.00	GOLD/TIN-LEAD
73802-22**	72	31.6	22.00	6.00	GOLD/TIN-LEAD
73802-30**	144	55.6	46.00	5.00	GOLD/TIN-LEAD
73802-32**	144	55.6	46.00	6.00	GOLD/TIN-LEAD

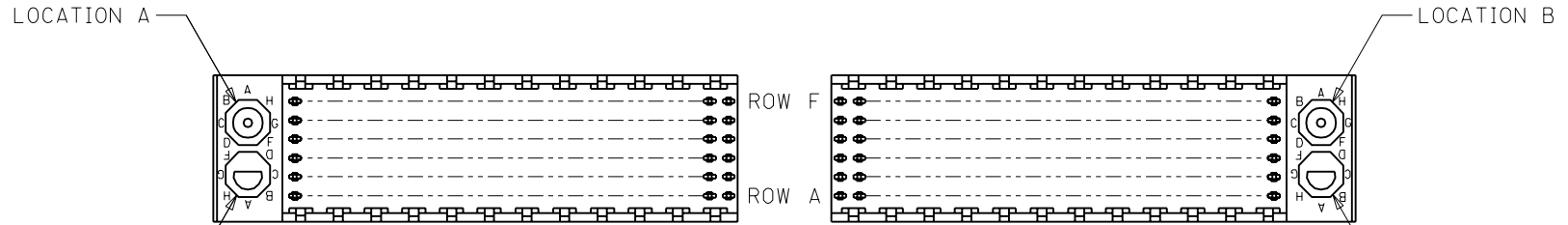
REVISED  
EC NO. JCP2004-1438  
DRWN: BINGHAM 04/02/04  
CHK: REED 04/02/04  
APPR: BIXLER 04/02/04  
H

QUALITY SYMBOLS  
MAJOR  $\nabla = 0$   
CRITICAL  $\nabla C = 0$

GENERAL TOLERANCES: (UNLESS SPECIFIED)  
SCALE 2 : 1  
DESIGN UNITS  mm  INCH  
THIRD ANGLE PROJECTION  
DRAWN BY & DATE: JBINGHAM 97/05/19  
CHECKED BY & DATE: SREED 97/05/19  
APPROVED BY & DATE: CBIXLER 97/05/19  
CAD FILENAME: S73802X1.DGN  
MATERIAL NO.: SEE CHART  
DRAWING NO.: SD-73802-001  
SHEET NO.: 1 OF 2

4 PLACES ± 0.1  
3 PLACES ± 0.1  
2 PLACES ± 0.05  
1 PLACE ± 0.10  
ANGULAR: ± 1/2°  
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

TITLE: SALES ASSEMBLY HDM DOUBLE-END MIDPLANE POLAR/GUIDE OPTION  
MOLEX INCORPORATED  
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.



REF. MATERIAL NUMBER 73802-1009  
 GUIDE PIN IS IN LOCATION A  
 POLARIZING KEY IS IN LOCATION B, POSITION E

REF. MATERIAL NUMBER 73802-1008  
 GUIDE PIN IS IN LOCATION B  
 POLARIZING KEY IS IN LOCATION A, POSITION E

**MATERIAL NUMBER ASSIGNMENT**

73802- \* \* \* \*

- 0 = 72-CIRCUIT, GOLD/GOLD FLASH
- 1 = 144-CIRCUIT, GOLD/GOLDFLASH
- 2 = 72-CIRCUIT, GOLD/TIN-LEAD
- 3 = 144-CIRCUIT, GOLD/TIN-LEAD

- 0 = 5.00 MATING LENGTH
- 1 = RESERVED
- 2 = 6.00 MATING LENGTH

NUMBER	GUIDE POST LOCATION	POLAR KEY POSITION
00	B	
01	A	A
02	B	
03	A	B
04	B	
05	A	C
06	B	
07	A	D
08	B	
09	A	E
10	B	
11	A	F
12	B	
13	A	G
14	B	
15	A	H
16	B	
17	A	N/A
18	N/A	

SEE SHEET 1  
 EC NO. UDT2000-0277  
 DRWN: BINGHAM 99/09/21  
 CHK: REED 99/09/21  
 APPR: BIXLER 99/09/21

DESCRIPTION  
 MAJOR = 0  
 CRITICAL = 0

REV  
 E

QUALITY SYMBOLS

GENERAL TOLERANCES: (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	±0.	±.
3 PLACES	±0.	±.
2 PLACES	±0.N/A	±.
1 PLACE	±0.N/A	±.

ANGULAR: ± 1/2°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

SCALE NO: NE

DESIGN UNITS  mm  INCH

THIRD ANGLE PROJECTION

DRAWN BY & DATE  
 JBINGHAM 97/05/19

CHECKED BY & DATE  
 SREED 97/05/19

APPROVED BY & DATE  
 CBIXLER 97/05/19

CAD FILENAME  
 S73802X2.DGN

DIMENSIONS:  mm  INCH  mm ONLY

SHT REV  
 REVISE ON CAD ONLY

TITLE: SALES ASSEMBLY  
 HDM DOUBLE-END MIDPLANE  
 POLAR/GUIDE OPTION

MATERIAL NO. SEE CHART  
 DRAWING NO. SD-73802-001  
 SHEET NO. 2

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

SIZE B