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**Part Number:** [0739447016](#)  
**Status:** **Active**  
**Overview:** [hdm](#)  
**Description:** 2.00mm (.079") Pitch HDM® Board-to-Board Backplane Header, Vertical, SMC, Solder Tail, Guide Pin Option, 144 Circuits

**Documents:**  
[3D Model](#) [Product Specification PS-73670-9999 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

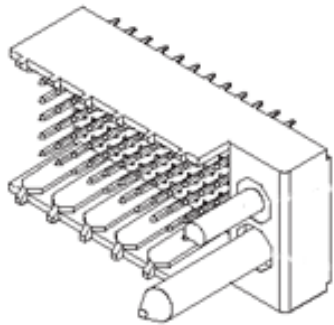
CSA LR19980  
UL E29179

**General**

Product Family Backplane Connectors  
Series [73944](#)  
Application Backplane  
Component Type PCB Header  
Overview [hdm](#)  
Product Name HDM®  
Style N/A

**Physical**

Circuits (Loaded) 144  
Circuits (maximum) 144  
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 Yes  
Material - Metal Phosphor Bronze, Stainless Steel  
Material - Plating Mating Gold  
Material - Plating Termination Tin  
Material - Resin High Temperature Thermoplastic  
Number of Columns 24  
Number of Pairs Open Pin Field  
Number of Rows 6  
Orientation Vertical  
PC Tail Length (in) 0.138 In  
PC Tail Length (mm) 3.50 mm  
PCB Locator Yes  
PCB Retention None  
PCB Thickness Recommended (in) 0.098 In  
PCB Thickness Recommended (mm) 2.50 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) 100  
Plating min: Termination (µm) 2.5  
Polarized to PCB No



Series

image - Reference only

**EU RoHS**  
**ELV and RoHS**  
**Compliant**  
**REACH SVHC**  
**Contains SVHC: No**  
**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**  
[73944Series](#)

**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 #                  |
|---------------------------------|----------------------------|
| HDM® Backplane Insertion Signal | <a href="#">0621001400</a> |
| Contact Tool                    |                            |
| Extraction Tool                 | <a href="#">0621001000</a> |

|                                |                 |
|--------------------------------|-----------------|
| Stackable                      | No              |
| Surface Mount Compatible (SMC) | No              |
| Temperature Range - Operating  | -55°C to +105°C |
| Termination Interface: Style   | Through Hole    |

**Electrical**

|                               |          |
|-------------------------------|----------|
| Current - Maximum per Contact | 1A       |
| Data Rate                     | 1.0 Gbps |
| Shielded                      | No       |
| Voltage - Maximum             | 250V AC  |

**Solder Process Data**

|                                                |                              |
|------------------------------------------------|------------------------------|
| Duration at Max. Process Temperature (seconds) | 40                           |
| Lead-free Process Capability                   | SMC & Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature        | 3                            |
| Process Temperature max. C                     | 260                          |

**Material Info**

**Reference - Drawing Numbers**

|                         |               |
|-------------------------|---------------|
| Packaging Specification | PK-70873-0818 |
| Product Specification   | PS-73670-9999 |
| Sales Drawing           | SD-73944-001  |

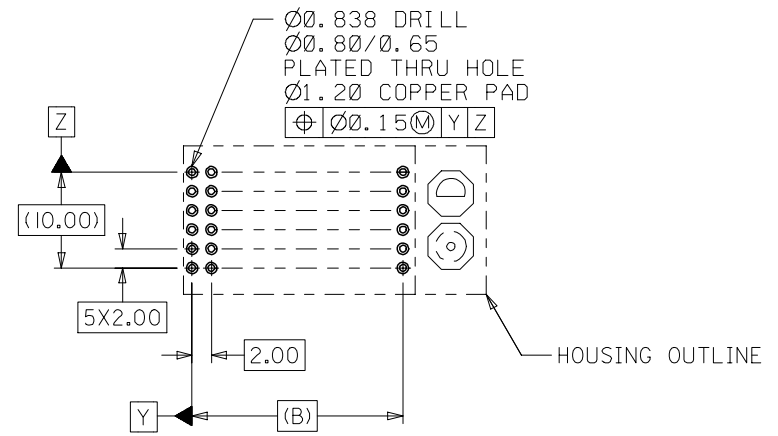
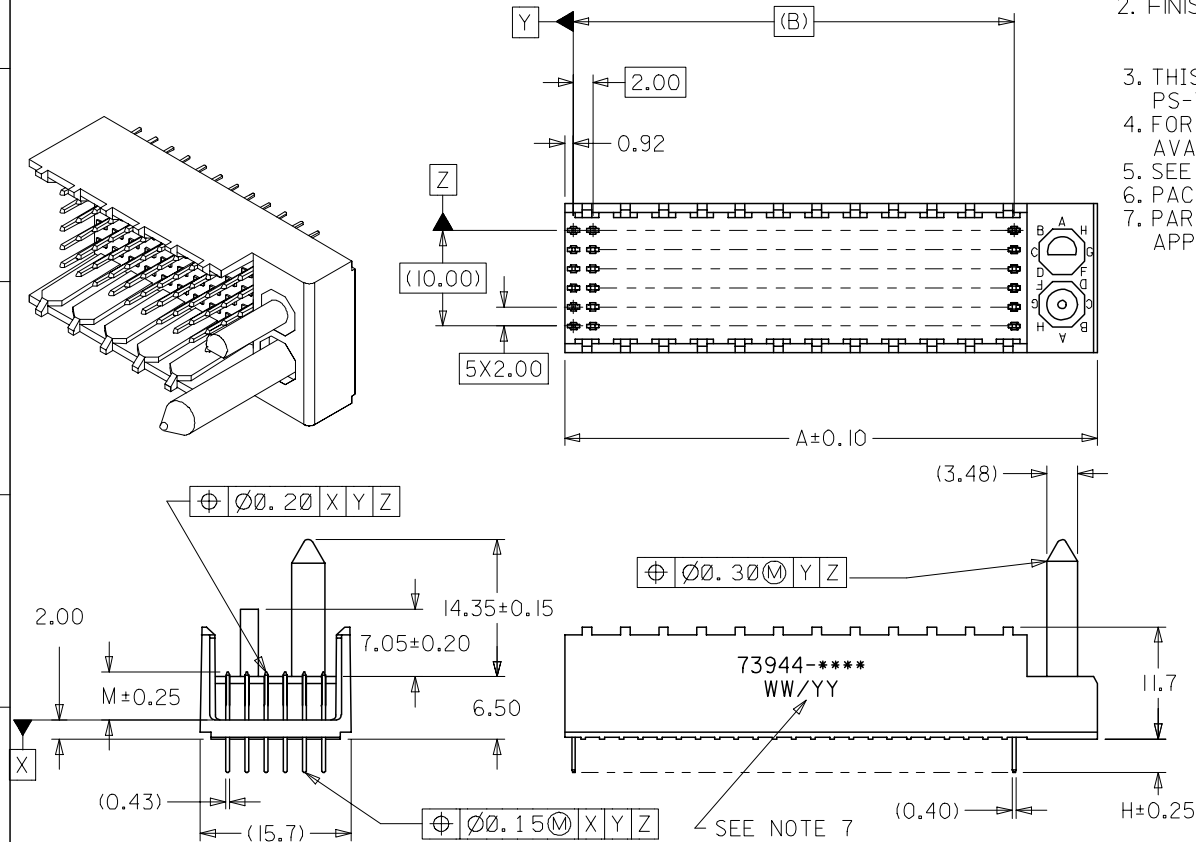
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This document was generated on 05/14/2010

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NOTES:

1. MATERIALS: HOUSING--LIQUID CRYSTAL POLYMER (LCP), GLASS FILLED, UL94V-0, COLOR: BLACK,  
TERMINAL: PHOSPHOR BRONZE.
2. FINISH: 0.75 MICROMETERS MINIMUM SELECTIVE GOLD (Au) IN MATING AREA  
2.50 MICROMETERS MINIMUM SELECTIVE TIN (Sn) IN TAIL AREA  
NICKEL (Ni) UNDERPLATE OVERALL.
3. THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-73670-9999.
4. FOR MIXED CONTACT MATING LENGTHS, CONSULT FACTORY FOR AVAILABILITY.
5. SEE SHEET 2 FOR SPECIFIC MATERIAL NUMBERS.
6. PACKAGE PER PK-70873-0818.
7. PARTS MARKED WITH PART NUMBER AND DATE CODE, ON EITHER SIDE, APPROXIMATELY WHERE SHOWN.



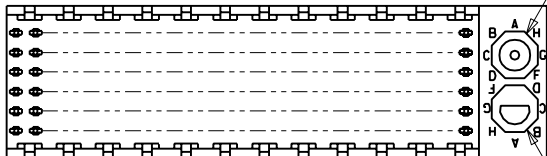
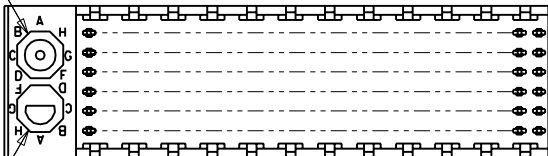
PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: 2.50 MIN

|     |     |
|-----|-----|
| 2   | A   |
| 1   | G   |
| SHT | REV |

|                                                                                                                              |                                                  |                                                            |        |                            |                                                                                                                               |                                                                       |                        |                           |  |  |            |
|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------------------------------|--------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------|---------------------------|--|--|------------|
| MODIFY FINISH NOTE<br>EC NO: UCP2007-2259<br>DRWN:MSI BARRA 2007/03/13<br>CHKD:BBARKER 2007/03/21<br>APPR:SMILLER 2007/03/22 | QUALITY SYMBOLS<br><div>▽=0</div> <div>▽=0</div> | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |        | DIMENSION STYLE<br>MM ONLY |                                                                                                                               | SCALE<br>2:1                                                          | DESIGN UNITS<br>METRIC | THIRD ANGLE<br>PROJECTION |  |  |            |
|                                                                                                                              |                                                  | mm                                                         | INCH   | DRAWN BY                   | DATE                                                                                                                          | SALES ASSY HDM BACKPLANE<br>POLAR/GUIDE OPTION<br>SOLDER TAIL VERSION |                        |                           |  |  |            |
|                                                                                                                              |                                                  | 4 PLACES                                                   | ± ---  | ± ---                      | JB INGHAM                                                                                                                     |                                                                       |                        |                           |  |  | 1998/01/14 |
|                                                                                                                              |                                                  | 3 PLACES                                                   | ± ---  | ± ---                      | CHECKED BY                                                                                                                    |                                                                       |                        |                           |  |  | DATE       |
|                                                                                                                              |                                                  | 2 PLACES                                                   | ± 0.05 | ± ---                      | SREED                                                                                                                         | 1998/01/14                                                            | MOLEX INCORPORATED     |                           |  |  |            |
|                                                                                                                              |                                                  | 1 PLACE                                                    | ± 0.10 | ± ---                      | APPROVED BY                                                                                                                   | DATE                                                                  |                        |                           |  |  |            |
|                                                                                                                              |                                                  | ANGULAR ±1/2°                                              |        | CBIXLER                    | 1998/01/14                                                                                                                    | MOLEX                                                                 |                        |                           |  |  |            |
|                                                                                                                              |                                                  | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |        | MATERIAL NO.               |                                                                                                                               | DOCUMENT NO.                                                          |                        | SHEET NO.                 |  |  |            |
|                                                                                                                              |                                                  |                                                            |        | SEE CHART                  |                                                                                                                               | SD-73944-001                                                          |                        | 1 OF 2                    |  |  |            |
|                                                                                                                              |                                                  |                                                            |        | SIZE<br>B                  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                                                       |                        |                           |  |  |            |
|                                                                                                                              |                                                  |                                                            |        |                            |                                                                                                                               |                                                                       |                        |                           |  |  |            |

LOCATION A

LOCATION B



REF. MATERIAL NUMBER 73944-1009  
GUIDE PIN IS IN LOCATION A  
POLARIZING KEY IS IN LOCATION B, POSITION E

REF. MATERIAL NUMBER 73944-1008  
GUIDE PIN IS IN LOCATION B  
POLARIZING KEY IS IN LOCATION A, POSITION E

## MATERIAL NUMBER ASSIGNMENT

73944- \* \* \* \*

| NUMBER | CIRCUIT SIZE | DIM "A" | DIM "B" | DIM "H" |
|--------|--------------|---------|---------|---------|
| 0      | 72           | 31.60   | 22.00   | 2.00    |
| 1      | 144          | 55.60   | 46.00   | 2.00    |
| 2      | 72           | 31.60   | 22.00   | 2.50    |
| 3      | 144          | 55.60   | 46.00   | 2.50    |
| 4      | 72           | 31.60   | 22.00   | 3.00    |
| 5      | 144          | 55.60   | 46.00   | 3.00    |
| 6      | 72           | 31.60   | 22.00   | 3.50    |
| 7      | 144          | 55.60   | 46.00   | 3.50    |

| NUMBER | DIM "M" |
|--------|---------|
| 0      | 5.00    |
| 1      | 5.50    |
| 2      | 6.00    |

| NUMBER | GUIDE POST LOCATION | POLAR KEY POSITION |
|--------|---------------------|--------------------|
| 00     | B                   | A                  |
| 01     | 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. U81577  
DRWN: BINGHAM 98/02/03  
CHK: REED 98/02/03  
APPR: BIXLER 98/02/03

MAJOR  
CRITICAL

REV

A

DESCRIPTION

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  
2 : 1

DESIGN UNITS  
☒ mm ☐ INCH

DRAWN BY & DATE  
JBINGHAM 98/01/14  
CHECKED BY & DATE  
SREED 98/01/14  
APPROVED BY & DATE  
CBIXLER 98/01/14  
CAD FILENAME  
S73944X2.DGN

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DIMENSIONS:  
☐ mm ☐ INCH ☒ mm ONLY

SHT REV  
REVISE ON  
CAD ONLY

TITLE: SALES ASSY, HDM BACKPLANE  
POLAR/GUIDE OPTION  
SOLDER TAIL VERSION

MOLEX INCORPORATED

MATERIAL NO. SEE CHART  
DRAWING NO. SD-73944-001  
SHEET NO. 2  
SIZE B



**Стандарт  
Электрон  
Связь**

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**Наши контакты:**

**Телефон:** +7 812 627 14 35

**Электронная почта:** [sales@st-electron.ru](mailto:sales@st-electron.ru)

**Адрес:** 198099, Санкт-Петербург,  
Промышленная ул, дом № 19, литера Н,  
помещение 100-Н Офис 331