

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0736441016](#)
Status: **Active**
Overview: [hdm](#)
Description: 2.00mm (.079") Pitch HDM® Board-to-Board Backplane Header, Vertical, SMC, Press-Fit, Guide Post Location B, Polarizing Key Position N/A, 144 Circuits

Documents:

[3D Model](#) [Test Summary \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

General

Product Family Backplane Connectors
 Series [73644](#)
 Application Backplane
 Comments Standard Press-Fit
 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 None
 Material - Metal Phosphor Bronze, Stainless Steel
 Material - Plating Mating Gold
 Material - Plating Termination Gold
 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 No
 PCB Retention Yes
 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) 2
 Plating min: Termination (µm) 0.05



image - Reference only

EU RoHS

ELV and RoHS Compliant
REACH SVHC Contains SVHC: No
Halogen-Free Status

China RoHS



Not Reviewed

Need more information on product environmental compliance?

Email 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

[73644Series](#)

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	0622013700
HDM® Backplane Insertion Signal Contact Tool	0621001400
HDM® Backplane Insertion Head for 144 Positions	0622005703

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

Extraction Tool	0621001000
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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

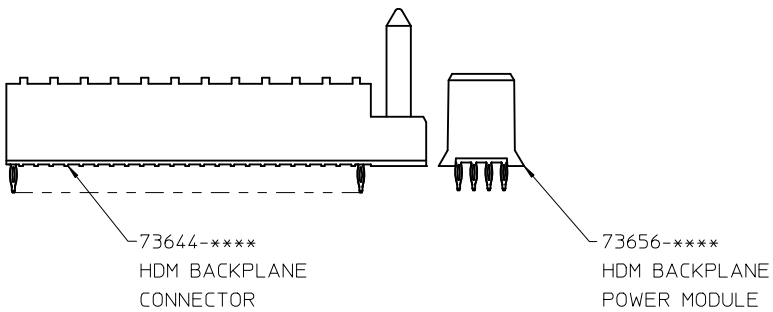
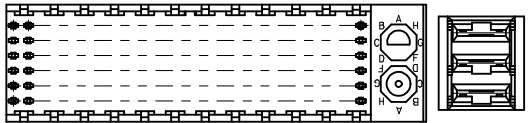
Packaging Specification	PK-70873-0818
Sales Drawing	SD-73644-004, SDA-73644-****

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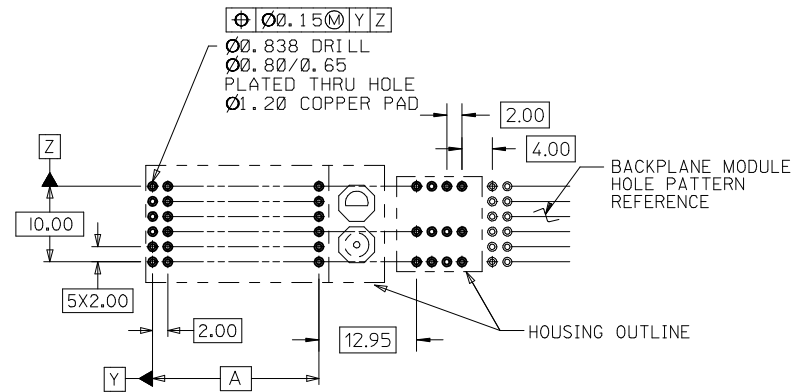
This document was generated on 05/14/2010

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NOTES:
 1. SEE SD-73644-**** FOR ADDITIONAL INFORMATION FOR THE 73644 BACKPLANE MODULE.
 2. SEE SD-73656-*00* FOR ADDITIONAL INFORMATION FOR THE 73656 MODULE.



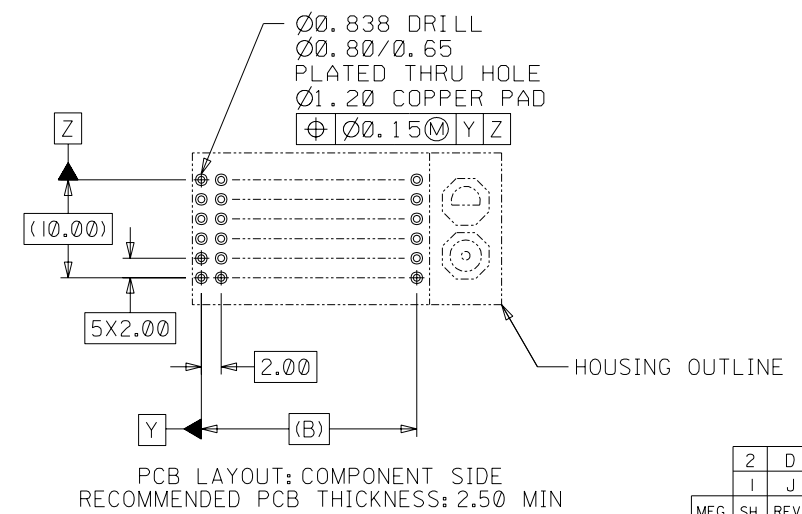
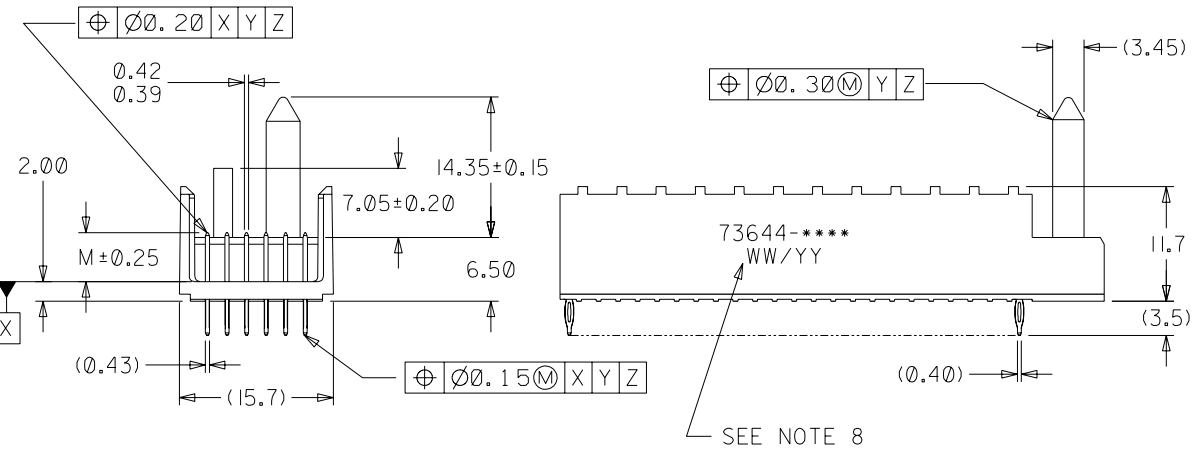
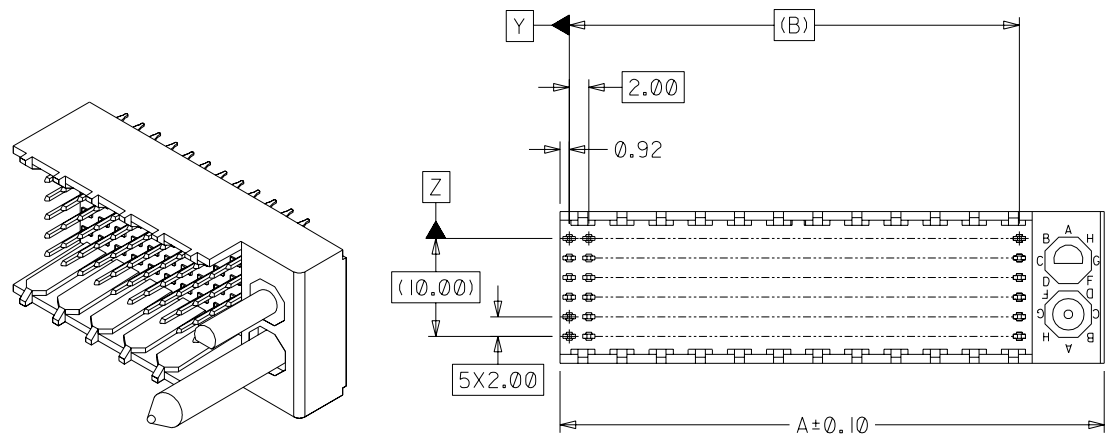
MATERIAL NUMBER	NUMBER OF SIGNAL CONTACTS	DIM "A"
73644-00**	72	22.00
73644-01**	72	22.00
73644-02**	72	22.00
73644-10**	144	46.00
73644-11**	144	46.00
73644-12**	144	46.00
73644-20**	72	22.00
73644-21**	72	22.00
73644-22**	72	22.00
73644-30**	144	46.00
73644-31**	144	46.00
73644-32**	144	46.00



PCB LAYOUT: COMPONENT SIDE
 RECOMMENDED PCB THICKNESS: 2.50 MIN

INITIAL RELEASE EC NO: UCP2009-3131 DRW:SDANNELLEY 2009/08/05 CHKD:BSMART 2009/08/06 APPR:SMILLER 2009/08/07	DESCRIPTION REV A	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																
		<table border="1"> <tr><th></th><th>mm</th><th>INCH</th></tr> <tr><td>4 PLACES</td><td>± .005</td><td>± .0005</td></tr> <tr><td>3 PLACES</td><td>± .005</td><td>± .0005</td></tr> <tr><td>2 PLACES</td><td>± 0.13</td><td>± .010</td></tr> <tr><td>1 PLACE</td><td>± 0.25</td><td>± .010</td></tr> </table>			mm	INCH	4 PLACES	± .005	± .0005	3 PLACES	± .005	± .0005	2 PLACES	± 0.13	± .010	1 PLACE	± 0.25	± .010	DRAWN BY DATE SDANNELLEY 2009/06/26 CHECKED BY DATE BSMART 2009/06/26 APPROVED BY DATE SMILLER 2009/06/26		TITLE PCB LAYOUT FOR 73644 AND 73659 CONNECTORS USED IN CONJUNCTION		
			mm	INCH																			
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3 PLACES	± .005	± .0005																					
2 PLACES	± 0.13	± .010																					
1 PLACE	± 0.25	± .010																					
ANGULAR ±1/2°			MATERIAL NO. N/A		MOLEX INCORPORATED DOCUMENT NO. SD-73644-004																		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SIZE C		SHEET NO. 1 OF 1																		

- 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 MIN. THICKNESS; SELECTIVE TIN/LEAD (Sb/Pb) IN TAIL AREA; NICKEL (Ni) OVERALL.
 3. THIS PART CONFORMS TO MOLEX PRODUCT SPECIFICATION PS-73670-9999.
 4. FOR MIXED CONTACT MATING LENGTHS, CONSULT FACTORY FOR AVAILABILITY.
 5. DIMENSIONS ARE IN MILLIMETERS.
 6. FOR SPECIFIC MATERIAL NUMBERS, REFER TO SHEET 2.
 7. PACKAGE PER PK-70873-0818.
 8. PARTS MARKED WITH PART NUMBER AND DATE CODE, ON EITHER SIDE, APPROXIMATELY WHERE SHOWN.



2	D
1	J
MFG. SH.	REV.

SEE NOTE 8

PCB LAYOUT: COMPONENT SIDE
RECOMMENDED PCB THICKNESS: 2.50 MIN

				I		REVISED ECR UDT2000-0348 BINGHAM 99/10/12		DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°		▽ = 0 ▼ = 0 REVISE ONLY ON CAD SYSTEM													
				H		REVISED ECR UDT1999-0662 BINGHAM 99/05/18		<table border="1"> <tr> <th colspan="2">INCH</th> <th>METRIC</th> </tr> <tr> <td>3 PLACE</td> <td>± N/A</td> <td>---</td> </tr> <tr> <td>2 PLACE</td> <td>± N/A</td> <td>± 0.05</td> </tr> <tr> <td>1 PLACE</td> <td>---</td> <td>± 0.10</td> </tr> </table>		INCH		METRIC	3 PLACE	± N/A	---	2 PLACE	± N/A	± 0.05	1 PLACE	---	± 0.10	TITLE SALES ASSY, HDM BACKPLANE MODULE, POLAR/GUIDE OPTION	
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3 PLACE	± N/A	---																					
2 PLACE	± N/A	± 0.05																					
1 PLACE	---	± 0.10																					
J		REVISED ECR UCP2003-2260 THOMAS 03/04/25		G		REVISED ECR UDT1999-0476 BINGHAM 98/12/21		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX INCORPORATED LISLE, ILL. 60532 U.S.A. SHEET NO. 1 OF 2 DATE 96/12/18													
LTR.		REVISIONS		LTR.		REVISIONS		FILE NAME S73644X1 DGN		PART NO. SDA-73644-**** DRWG. NO.													
								DRWG. BY: JRR CHK'D. BY: SMR APP'D. BY: CAB SCALE: 2 : 1		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.													
										DIV. DA SIZE B													

MATERIAL NUMBER	NUMBER OF SIGNAL CONTACTS	PLATING	DIM "A"	DIM "B"	DIM "M"
73644-00**	72	SELECTIVE GOLD/GOLD FLASH	31.60	22.00	5.00
73644-01**	72	SELECTIVE GOLD/GOLD FLASH	31.60	22.00	5.50
73644-02**	72	SELECTIVE GOLD/GOLD FLASH	31.60	22.00	6.00
73644-10**	144	SELECTIVE GOLD/GOLD FLASH	55.60	46.00	5.00
73644-11**	144	SELECTIVE GOLD/GOLD FLASH	55.60	46.00	5.50
73644-12**	144	SELECTIVE GOLD/GOLD FLASH	55.60	46.00	6.00
73644-20**	72	SELECTIVE GOLD/SELECTIVE TIN-LEAD	31.60	22.00	5.00
73644-21**	72	SELECTIVE GOLD/SELECTIVE TIN-LEAD	31.60	22.00	5.50
73644-22**	72	SELECTIVE GOLD/SELECTIVE TIN-LEAD	31.60	22.00	6.00
73644-30**	144	SELECTIVE GOLD/SELECTIVE TIN-LEAD	55.60	46.00	5.00
73644-31**	144	SELECTIVE GOLD/SELECTIVE TIN-LEAD	55.60	46.00	5.50
73644-32**	144	SELECTIVE GOLD/SELECTIVE TIN-LEAD	55.60	46.00	6.00

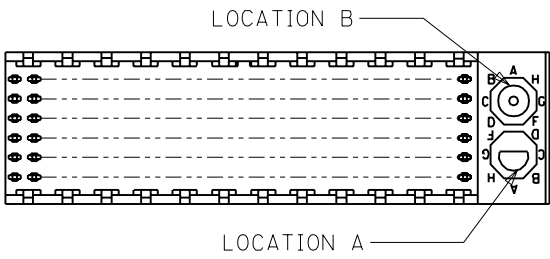
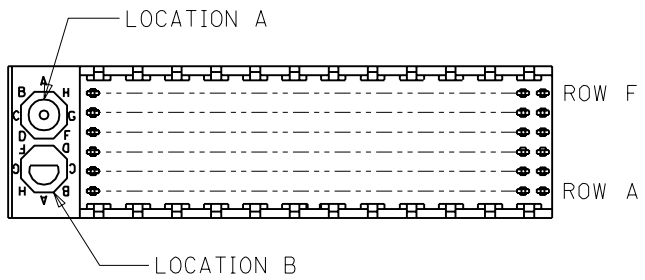
MATERIAL NUMBER ASSIGNMENT

73644- * * * *

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

0 = 5.00 MATING LENGTH
 1 = 5.50 MATING LENGTH
 2 = 6.00 MATING LENGTH

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



REF. MATERIAL NUMBER 73644-0009
 GUIDE PIN IS IN LOCATION A
 POLARIZING KEY IS IN LOCATION B, POSITION 9

REF. MATERIAL NUMBER 73644-0008
 GUIDE PIN IS IN LOCATION B
 POLARIZING KEY IS IN LOCATION A, POSITION 9

DIMENSIONS SHOWN (METRIC) INCH				▽ = 0 ▼ = 0		REVISE ONLY ON CAD SYSTEM																															
UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR = 1/2°				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">TITLE</td> <td colspan="2" style="text-align: center;">SHEET NO.</td> <td colspan="2" style="text-align: center;">DATE</td> </tr> <tr> <td colspan="2" style="text-align: center;">SALES ASSY, HDM BACKPLANE MODULE, POLAR/GUIDE OPTION</td> <td colspan="2" style="text-align: center;">2</td> <td colspan="2" style="text-align: center;">96/12/18</td> </tr> <tr> <td colspan="2" style="text-align: center;">molex MOLEX INCORPORATED</td> <td colspan="2" style="text-align: center;">LISLE, ILL. 60532</td> <td colspan="2" style="text-align: center;">PART NO. SDA-73644-****</td> </tr> <tr> <td colspan="2" style="text-align: center;">DRAWING FILE NAME</td> <td colspan="2" style="text-align: center;">SEE CHART</td> <td colspan="2" style="text-align: center;">DRWG. NO.</td> </tr> <tr> <td colspan="2" style="text-align: center;">S73644X2 DGN</td> <td colspan="2" style="text-align: center;">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.</td> <td colspan="2" style="text-align: center;">DIV. DA SIZE B</td> </tr> </table>				TITLE		SHEET NO.		DATE		SALES ASSY, HDM BACKPLANE MODULE, POLAR/GUIDE OPTION		2		96/12/18		molex MOLEX INCORPORATED		LISLE, ILL. 60532		PART NO. SDA-73644-****		DRAWING FILE NAME		SEE CHART		DRWG. NO.		S73644X2 DGN		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.		DIV. DA SIZE B	
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