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Part Number: [0740591021](#)
Status: **Active**
Overview: [vhdm](#)
Description: 2.00mm (.079") Pitch VHDM® Board-to-Board Backplane Header, Vertical, 6-Row, Guide Pin Signal Module, Shield End Version, 60 Circuits, Pin Length 4.75mm (.187")

Documents:

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

Agency Certification

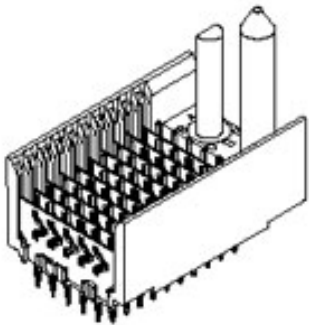
UL E29179

General

Product Family Backplane Connectors
Series [74059](#)
Application Backplane
Application Tooling Documents Tooling Manual
Comments Position B
Component Type PCB Header
Overview [vhdm](#)
Product Name VHDM®
Style N/A

Physical

Circuits (Loaded) 60
Circuits (maximum) 60
Color - Resin Black
Durability (mating cycles max) 200
First Mate / Last Break No
Flammability 94V-0
Guide to Mating Part Yes
Keying to Mating Part Yes
Material - Metal Beryllium Copper, High Performance Alloy (HPA), Stainless Steel
Material - Plating Mating Gold
Material - Plating Termination Tin-Lead
Material - Resin High Temperature Thermoplastic
Number of Columns N/A
Number of Pairs Open Pin Field
Number of Rows 6
Orientation Vertical
PC Tail Length (in) 0.098 In
PC Tail Length (mm) 2.50 mm
PCB Locator No
PCB Retention None
PCB Thickness Recommended (in) 0.070 In
PCB Thickness Recommended (mm) 1.80 mm
Packaging Type Tube
Pitch - Mating Interface (in) 0.079 In
Pitch - Mating Interface (mm) 2.00 mm
Pitch - Term. Interface (in) 0.039 In
Pitch - Term. Interface (mm) 2.00 mm
Plating min: Mating (µin) 30
Plating min: Mating (µm) 0.75



Series

image - Reference only

EU RoHS
RoHS Compliant by Exemption
REACH SVHC
Contains SVHC: No
Halogen-Free
Status
Halogen-Free

China RoHS



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
[74059Series](#)

Mates With
[74030 VHDM® 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
VHDM® Insertion Module for Advanced Mate Signal Header, 6 Row by 11 Wide, 20.00mm (.787")	0622011101
VHDM® Signal Pin Inserter Repair Tool	0622015700

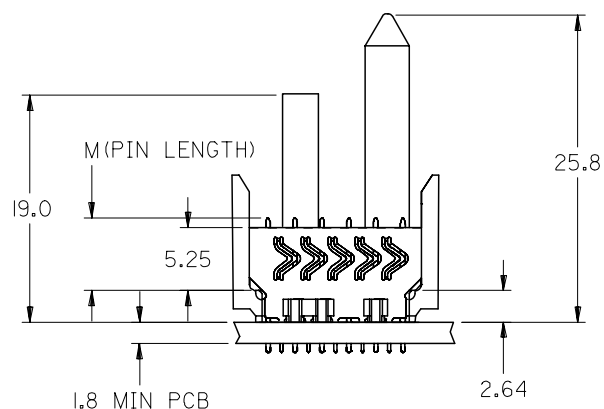
Plating min: Termination (µin)	30	VHDM® 6 Row Pin and Shield Repair Tool	0622015800
Plating min: Termination (µm)	0.75	VHDM® 6 Row Shield Extraction Tool	0622016000
Polarized to PCB	Yes	VHDM® Insertion Module for Advanced Mate Signal Header, 6 Row by 10 Wide, 20.00mm (.787")	0622020203
Stackable	No	VHDM® Insertion Module for Advanced Mate Signal Header, 6 Row by 10 Wide, 20.00mm (.787")	0622020207
Surface Mount Compatible (SMC)	Yes		
Temperature Range - Operating	-55°C to +105°C		
Termination Interface: Style	Through Hole - Compliant Pin		
Electrical			
Current - Maximum per Contact	1A		
Data Rate	3.125 Gbps		
Real Signals (per 25mm)	72		
Shield Type	Ground Plane Shield		
Shielded	Yes		
Voltage - Maximum	120V AC (RMS)/DC		
Material Info			
Reference - Drawing Numbers			
Sales Drawing	SD-74059-002		
VHDM and Very High Density Metric are trademarks of Amphenol Corporation			

This document was generated on 05/19/2010

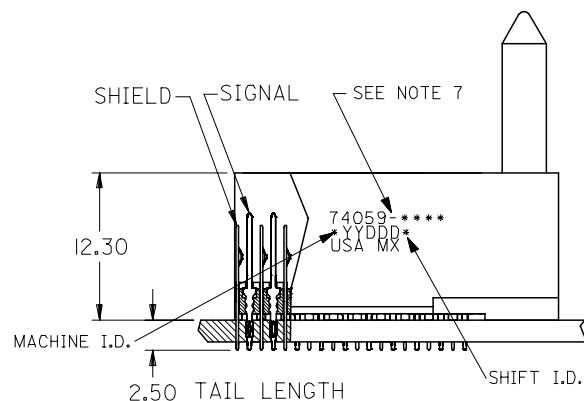
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BACKPLANE HOLE PATTERN
RECOMMENDED DIMENSIONS



- NOTES:
1. MATERIALS:
HOUSING - LIQUID CRYSTAL POLYMER (LCP),
GLASS-FILLED, UL 94V-0, COLOR: BLACK
SIGNAL PIN & SHIELD - COPPER ALLOY
 2. FINISHES:
CONTACT AREA: SELECTIVE GOLD (Au)
PCB TAILS: SELECTIVE TIN/LEAD (Sn/Pb)
OR SELECTIVE MATTE TIN (Sn)
NICKEL (Ni) OVERALL.
 3. THIS PART CONFORMS TO MOLEX PRODUCT
SPECIFICATION PS-74031-999
 4. FOR MIXED CONTACT LENGTHS CONSULT
MOLEX FOR AVAILABILITY
 5. FOR SPECIFIC MATERIAL NUMBERS & MATING
INFORMATION REFER TO SHEET 2 AND 3
 6. PACKAGE PER PK-74058-003
 7. EITHER MARK PART WITH PART NUMBER & DATE
CODE APPROXIMATELY WHERE SHOWN OR PLACE
LABEL ON THE TUBE.



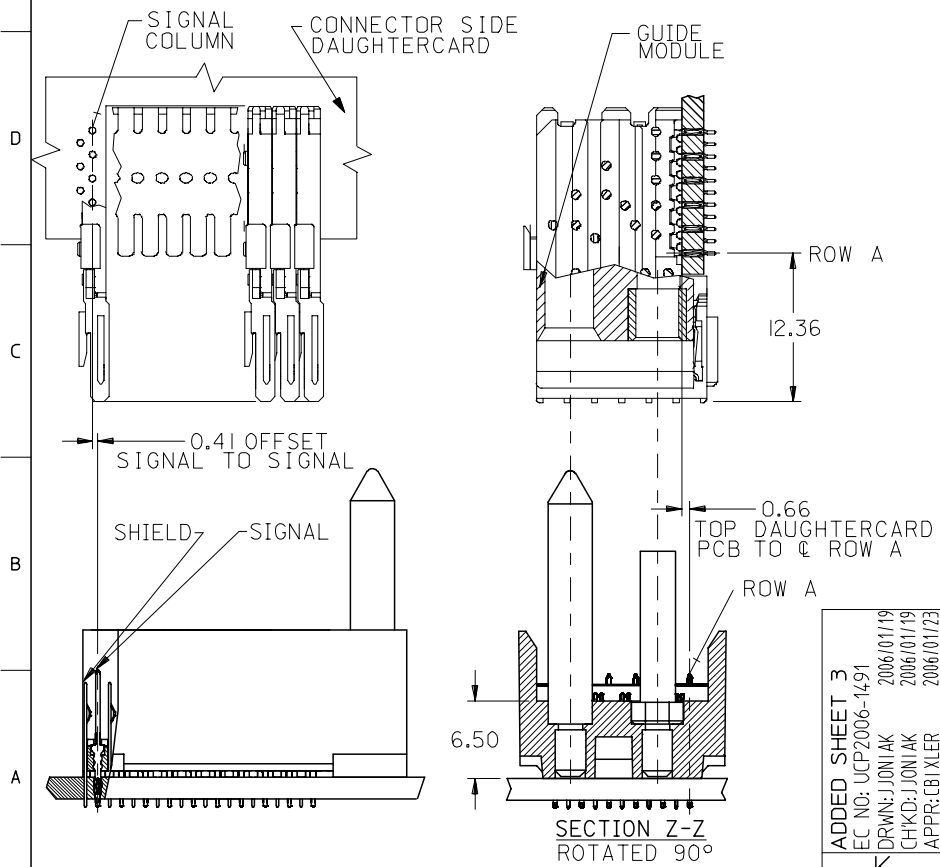
ADDED TOLERANCE EC NO: UCP2006-2669 DRW: JONIAK 2006/06/02 CHKD: JONIAK 2006/06/02 APPR: CBIXLER 2006/06/09				QUALITY SYMBOLS ▽=0 ▽=0		GENERAL TOLERANCES (UNLESS SPECIFIED)				DIMENSION STYLE MM ONLY				SCALE 2.5:1		DESIGN UNITS METRIC		THIRD ANGLE PROJECTION					
DESCRIPTION						mm		INCH		DRAWN BY MWANG		DATE 1998/11/09		TITLE VHDM 6 ROW SHIELD END BACKPLANE SALES DRAWING									
						4 PLACES ± ---		± ---		CHECKED BY JLAURX		DATE 1998/11/09											
						3 PLACES ± ---		± ---		APPROVED BY CBIXLER		DATE 1998/11/19		MOLEX MOLEX INCORPORATED									
						2 PLACES ± 0.15		± ---															
						1 PLACE ± 0.25		± ---															
						ANGULAR ±1/2°				MATERIAL NO.		DOCUMENT NO.						SHEET NO.					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SEE SHEET 2				SD-74059-002				1 OF 3											
M						SIZE B		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
REV																							

M/N 74059-()	-**0*	-**1*	-**2*	-**3*	-**4*	-**5*	-**6*	-**7*	-**8*
KEYING PIN ORIENTATION	O	A	B	C	D	E	F	G	H

74059- * * * *

NUMBER OF COLUMNS/PLATING
10 = 10 COLUMN TIN/LEAD
21 = 11 COLUMN TIN/LEAD*
25 = 25 COLUMN TIN/LEAD
90 = 10 COLUMN MATTE TIN
85 = 25 COLUMN MATTE TIN
81 = 11 COLUMN MATTE TIN*
CONTACT LOAD (PIN LENGTH)
1 & 6 = 4.75
2 & 7 = 6.25
3 & 8 = 4.25
4 & 9 = 5.15

* - SEE SHEET 3 FOR 11 COLUMN P/N'S



PART NUMBER	COLUMN	NUMBER OF SIGNAL PIN	NUMBER OF SHIELD	A	B	M	Au (um) THICKNESS	Sn (um) THICKNESS
74059-*0*1	10	60	10	27.00	18.00	4.75	0.76	0.76-1.52
74059-*0*6							1.27	
74059-*5*1	25	150	25	57.00	48.00		0.76	
74059-*5*6							1.27	
74059-*0*2	10	60	10	27.00	18.00	6.25	0.76	
74059-*0*7							1.27	
74059-*5*2	25	150	25	57.00	48.00		0.76	
74059-*5*7							1.27	
74059-*0*3	10	60	10	27.00	18.00	4.25	0.76	
74059-*5*3	25	150	25	57.00	48.00		0.76	
74059-*5*8							1.27	
74059-*0*4	10	60	10	27.00	18.00	5.15	0.76	
74059-*0*9							1.27	
74059-*5*4	25	150	25	57.00	48.00		0.76	
74059-*5*9							1.27	

ADDED SHEET 3
EC NO: UCP2006-1491
DRW: JONIAK 2006/01/19
CHKD: JONIAK 2006/01/19
APPR: CBIXLER 2006/01/23

DESCRIPTION
REV

QUALITY SYMBOLS
=0
=0

GENERAL TOLERANCES (UNLESS SPECIFIED)
mm INCH
4 PLACES ± --- ± ---
3 PLACES ± --- ± ---
2 PLACES ± --- ± ---
1 PLACE ± --- ± ---
ANGULAR ±1/2°

DRAFT WHERE APPLICABLE
MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE
MM ONLY
DRAWN BY DATE
MWANG 1998/11/09
CHECKED BY DATE
JLAURX 1998/11/09
APPROVED BY DATE
CBIXLER 1998/11/09
MATERIAL NO.
SEE CHART

SCALE
2.5:1

DESIGN UNITS
METRIC

THIRD ANGLE PROJECTION

VHDM 6 ROW
SHIELD END BACKPLANE
SALES DRAWING

MOLEX INCORPORATED

DOCUMENT NO.
SD-74059-002

SHEET NO.
2 OF 3