

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0743015018

Status:

Active

Overview:

[hdm](#)

Description:

2.00mm (.079") Pitch HDM® Board-to-Board Backplane Header, Vertical, SMC, Press-Fit, Extended PC Tail, Polar/Guide Option, 144 Circuits

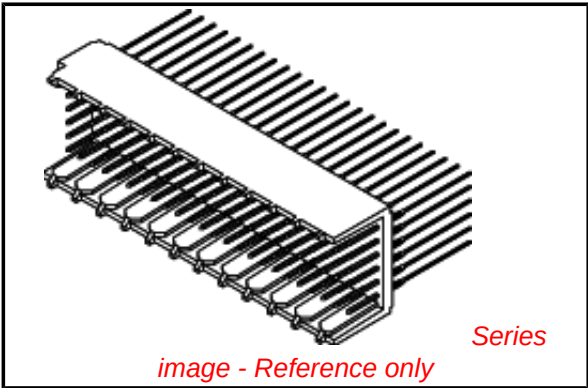
Documents:

[Drawing \(PDF\)](#)

[RoHS Certificate of Compliance \(PDF\)](#)

| General                        |                                  |
|--------------------------------|----------------------------------|
| Product Family                 | Backplane Connectors             |
| Series                         | <a href="#">74301</a>            |
| Application                    | Backplane                        |
| Component Type                 | PCB Header                       |
| Overview                       | <a href="#">hdm</a>              |
| 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                               |
| Guide to Mating Part           | No                               |
| Keying to Mating Part          | None                             |
| Material - Metal               | Phosphor Bronze, Stainless Steel |
| Material - Plating Mating      | Gold                             |
| Material - Plating Termination | Tin-Lead                         |
| 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)            | 0.276 In                         |
| PC Tail Length (mm)            | 7.00 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) | 15                               |
| Plating min: Termination (µm)  | 0.375                            |
| 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     |

Electrical



EU RoHS

China RoHS

Compliance Status

Not Reviewed

REACH SVHC

Not Reviewed

Halogen-Free

Status

Not Reviewed

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

[74301Series](#)

|                               |          |
|-------------------------------|----------|
| 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**

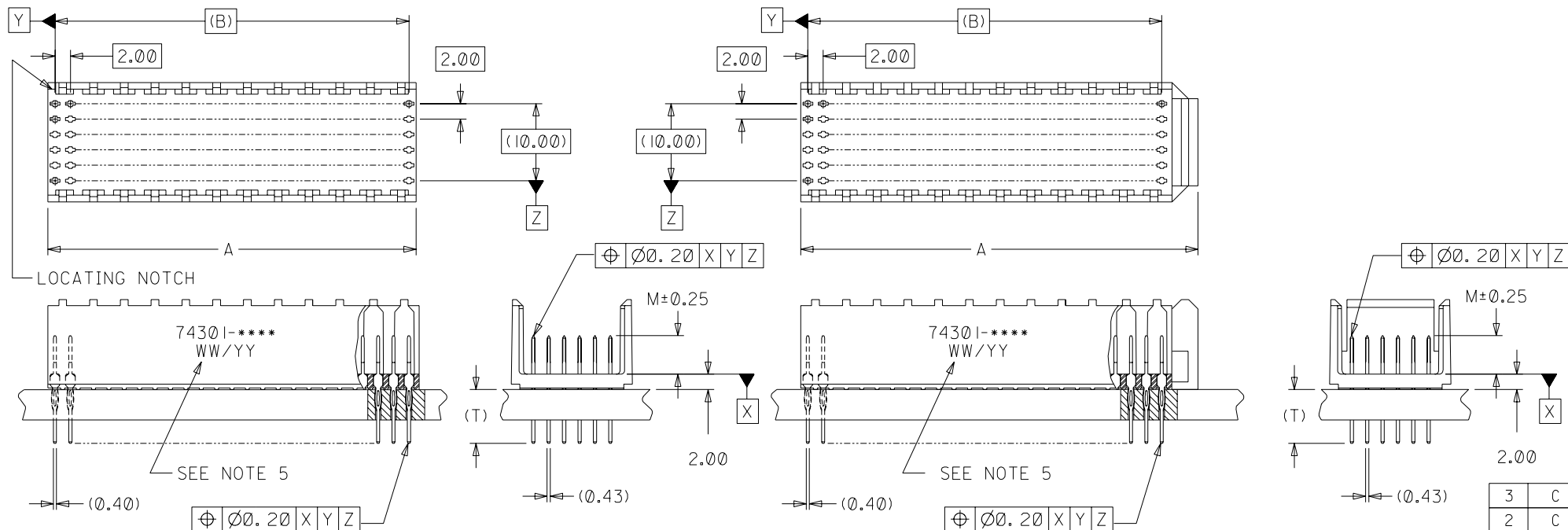
|                         |               |
|-------------------------|---------------|
| Packaging Specification | PK-70873-0868 |
| Sales Drawing           | SD-74301-001  |

HDM and High Density Metric are trademarks of Amphenol Corporation

This document was generated on 05/15/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

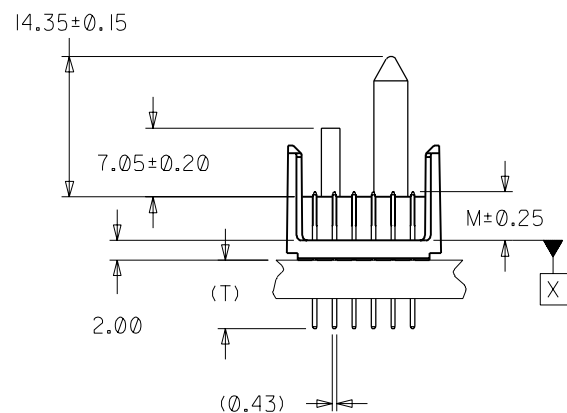
5. PARTS MARKED WITH PART NUMBER AND DATE CODE,  
ON EITHER SIDE, APPROXIMATELY WHERE SHOWN.



OPEN END OPTION

END WALL OPTION

|             |                   |                                                         |                                                                                                                                   |                                                                                      |                                                                                                                 |                                     |                                     |                                                |                                      |
|-------------|-------------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|------------------------------------------------|--------------------------------------|
| REVISED     | EC NO.            | UCP2003-2260                                            |                                                                                                                                   |                                                                                      |                                                                                                                 |                                     |                                     |                                                |                                      |
|             | DRWN:             | THOMAS 03/04/25                                         |                                                                                                                                   |                                                                                      |                                                                                                                 |                                     |                                     |                                                |                                      |
|             | CHK:              | BINGHAM 03/04/25                                        |                                                                                                                                   |                                                                                      |                                                                                                                 |                                     |                                     |                                                |                                      |
|             | APPR:             | REED 03/04/25                                           |                                                                                                                                   |                                                                                      |                                                                                                                 |                                     |                                     |                                                |                                      |
|             |                   |                                                         |                                                                                                                                   |                                                                                      |                                                                                                                 |                                     |                                     |                                                |                                      |
| DESCRIPTION | QUALITY SYMBOLS   | GENERAL TOLERANCES:<br>(UNLESS SPECIFIED)               | SCALE<br>DRAWN BY & DATE                                                                                                          | DESIGN UNITS<br><input checked="" type="checkbox"/> mm <input type="checkbox"/> INCH |  THIRD ANGLE<br>PROJECTION | <input type="checkbox"/> mm<br>INCH | <input type="checkbox"/> INCH<br>mm | <input checked="" type="checkbox"/> mm<br>ONLY | SMITH / REV<br>REVISE ON<br>CAD ONLY |
|             | MAJOR<br>= 0      |                                                         |                                                                                                                                   |                                                                                      | TITLE: SALES ASSEMBLY, HDM<br>BACKPLANE CONNECTOR<br>EXTENDED TAIL VERSION                                      |                                     |                                     |                                                |                                      |
|             | CRITICAL<br>C = 0 |                                                         |                                                                                                                                   | CHECKED BY & DATE<br>SREED 99/01/21                                                  |                                                                                                                 |                                     |                                     |                                                |                                      |
|             |                   |                                                         |                                                                                                                                   | APPROVED BY & DATE<br>CBIXLER 99/01/21                                               |  MOLEX INCORPORATED        |                                     |                                     |                                                |                                      |
|             |                   |                                                         |                                                                                                                                   | CAD FILENAME<br>S74301X.DGN                                                          | MATERIAL NO.<br>SEE CHART                                                                                       | DRAWING NO.<br>SD-74301-001         | SHEET NO.<br>1 OF 3                 |                                                |                                      |
| D           | REV               | DRAFT WHERE APPLICABLE MUST<br>REMAIN WITHIN DIMENSIONS | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |                                                                                      |                                                                                                                 |                                     |                                     |                                                | SIZE<br>B                            |



|                                                                                                                         |             |                                          |                                                                                                                                   |       |                                                         |                                                                                      |                                                                                                                 |                                                                                                                      |                              |     |  |
|-------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------------------------|-----|--|
| SEE SHEET 1<br>EC NO. UDT2000-0413<br>DRWNG:JBINGHAM 99/11/02<br>CHK'g SPEED 99/11/02<br>APPR:CBIXLER 99/11/02<br><br>C | DESCRIPTION | QUALITY SYMBOLS<br><br>MAJOR<br>CRITICAL | GENERAL TOLERANCES:<br>(UNLESS SPECIFIED)                                                                                         |       | SCALE<br>2 : 1                                          | DESIGN UNITS<br><input checked="" type="checkbox"/> mm <input type="checkbox"/> INCH |  THIRD ANGLE<br>PROJECTION | DIMENSIONS:<br><input type="checkbox"/> mm <input type="checkbox"/> INCH <input checked="" type="checkbox"/> mm ONLY | SHT<br>REVISE ON<br>CAD ONLY | REV |  |
|                                                                                                                         |             |                                          |                                                                                                                                   | mm    | INCH                                                    | DRAWN BY & DATE<br>JBINGHAM 99/01/21                                                 | TITLE: SALES ASSEMBLY, HDM<br>BACKPLANE CONNECTOR<br>EXTENDED TAIL VERSION                                      |                                                                                                                      |                              |     |  |
|                                                                                                                         |             |                                          | 4 PLACES                                                                                                                          | ±0.   | ±.                                                      | CHECKED BY & DATE<br>SREED 99/01/21                                                  |                                                                                                                 |                                                                                                                      |                              |     |  |
|                                                                                                                         |             |                                          | 3 PLACES                                                                                                                          | ±0.   | ±.                                                      | APPROVED BY & DATE<br>CBIXLER 99/01/21                                               |  MOLEX INCORPORATED        |                                                                                                                      |                              |     |  |
|                                                                                                                         |             |                                          | 2 PLACES                                                                                                                          | ±0.05 | ±.                                                      | CAD FILENAME<br>S74301X2.DGN                                                         |                                                                                                                 |                                                                                                                      |                              |     |  |
| 1 PLACE                                                                                                                 | ±0.10       | ±.                                       | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. |       |                                                         |                                                                                      | SIZE<br>B                                                                                                       |                                                                                                                      |                              |     |  |
| REV                                                                                                                     |             |                                          | ANGULAR: ± 1/2°                                                                                                                   |       | DRAFT WHERE APPLICABLE MUST<br>REMAIN WITHIN DIMENSIONS |                                                                                      |                                                                                                                 |                                                                                                                      |                              |     |  |

MATERIAL NUMBER ASSIGNMENT

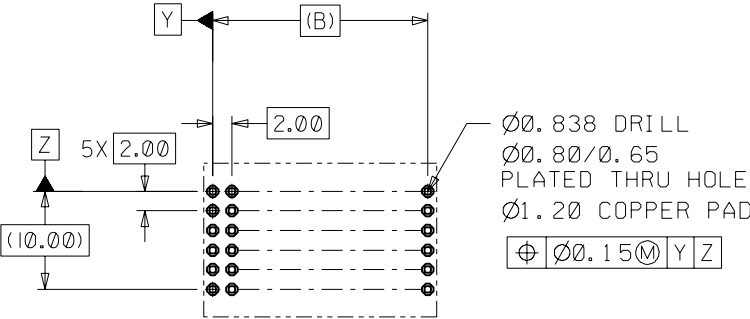
0 = 72-CIRCUIT OPEN END  
1 = 144-CIRCUIT OPEN END  
2 = 72-CIRCUIT END WALL  
3 = 144-CIRCUIT END WALL  
4 = 72-CIRCUIT POALR/GUIDE  
5 = 144-CIRCUIT POLAR/GUIDE

0 = 5.0mm MATING, 7.0mm TAIL  
1 = 5.5mm MATING, 7.0mm TAIL  
2 = 6.0mm MATING, 7.0mm TAIL

74301- \* \* \* \*

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

| PART NUMBER | DIM A | DIM B | DIM M | DIM T |
|-------------|-------|-------|-------|-------|
| 74301-0000  | 23.8  | 22.00 | 5.00  | 7.00  |
| 74301-0100  | 23.8  | 22.00 | 5.50  | 7.00  |
| 74301-0200  | 23.8  | 22.00 | 6.00  | 7.00  |
| 74301-1000  | 47.8  | 46.00 | 5.00  | 7.00  |
| 74301-1100  | 47.8  | 46.00 | 5.50  | 7.00  |
| 74301-1200  | 47.8  | 46.00 | 6.00  | 7.00  |
| 74301-2000  | 27.6  | 22.00 | 5.00  | 7.00  |
| 74301-2100  | 27.6  | 22.00 | 5.50  | 7.00  |
| 74301-2200  | 27.6  | 22.00 | 6.00  | 7.00  |
| 74301-3000  | 51.6  | 46.00 | 5.00  | 7.00  |
| 74301-3100  | 51.6  | 46.00 | 5.50  | 7.00  |
| 74301-3200  | 51.6  | 46.00 | 6.00  | 7.00  |
| 74301-40**  | 31.6  | 22.00 | 5.00  | 7.00  |
| 74301-41**  | 31.6  | 22.00 | 5.50  | 7.00  |
| 74301-42**  | 31.6  | 22.00 | 6.00  | 7.00  |
| 74301-50**  | 55.6  | 46.00 | 5.00  | 7.00  |
| 74301-51**  | 55.6  | 46.00 | 5.50  | 7.00  |
| 74301-52**  | 55.6  | 46.00 | 6.00  | 7.00  |



PCB LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: 2.50 MIN.

SEE SHEET 1  
EC NO. UDT2000-0413  
DRWN:JBINGHAM 99/11/02  
CHK: SREED 99/11/02  
APPR:CBIXLER 99/11/02

DESCRIPTION  
MAJOR  
CRITICAL

REV

GENERAL TOLERANCES:  
(UNLESS SPECIFIED)

mm

INCH

4 PLACES ±0. ±.

3 PLACES ±0. ±.

2 PLACES ±0.05 ±.

1 PLACE ±0.10 ±.

ANGULAR: ± 1/2°

DRAFT WHERE APPLICABLE MUST  
REMAIN WITHIN DIMENSIONS

SCALE  
2 : 1

DESIGN UNITS  
mm INCH

DRAWN BY & DATE  
JBINGHAM 99/01/21

CHECKED BY & DATE  
SREED 99/01/21

APPROVED BY & DATE  
CBIXLER 99/01/21

CAD FILENAME  
S74301X3.DGN

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

DIMENSIONS:  
mm INCH mm ONLY

THIRD ANGLE  
PROJECTION

TITLE:  
SALES ASSEMBLY, HDM  
BACKPLANE CONNECTOR  
EXTENDED TAIL VERSION

MOLEX  
MOLEX INCORPORATED

MATERIAL NO.  
SEE CHART

DRAWING NO.  
SD-74301-001

SHT  
3

REV  
B



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.