

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

**Part Number:** [0755177644](#)  
**Status:** **Active**  
**Overview:** [gbx\\_backplane\\_connector\\_system](#)  
**Description:** 1.85mm by 1.85mm (.073 by .073") Pitch 5-Pair GbX® Backplane Connector System, Power Module, 10 Circuits, 1.27µm (50µ") Gold (Au)

**Documents:**

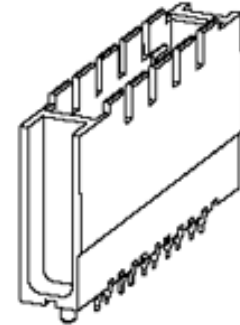
[Packaging Specification \(PDF\)](#)      [Product Specification PS-75221-999 \(PDF\)](#)  
[Drawing \(PDF\)](#)      [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	Backplane Connectors
Series	<a href="#">75517</a>
Application	Backplane
Application Tooling Documents	<a href="http://www.molex.com/pdm_docs/ats/TM-622022099.pdf">Tooling Manual</a>
Comments	Blade Length A 7.50mm, B 7.50mm, C 6.00mm, D 4.50mm, E 4.50mm
Component Type	Power Header
Overview	<a href="#">gbx_backplane_connector_system</a>
Product Name	GbX®
Style	N/A

**Physical**

Circuits (Loaded)	10
Circuits (maximum)	10
Circuits Detail	Rows A, B, C, D & E
Color - Resin	Gray (Dark)
Durability (mating cycles max)	200
First Mate / Last Break	Yes
Guide to Mating Part	No
Keying to Mating Part	None
Material - Metal	High Performance Alloy (HPA)
Material - Plating Mating	Gold
Material - Plating Termination	Tin-Lead
Material - Resin	High Temperature Thermoplastic
Number of Columns	N/A
Number of Pairs	5
Number of Rows	5
Orientation	Vertical
PC Tail Length (in)	0.094 In
PC Tail Length (mm)	2.40 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.063 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Tube
Pitch - Mating Interface (in)	0.102 In
Pitch - Mating Interface (mm)	2.60 mm
Pitch - Term. Interface (in)	0.102 In
Pitch - Term. Interface (mm)	2.60 mm
Plating min: Mating (µin)	50
Plating min: Mating (µm)	1.25
Plating min: Termination (µin)	30
Plating min: Termination (µm)	0.75
Polarized to PCB	Yes



Series

image - Reference only

**EU RoHS**

**RoHS Compliant by Exemption**

**REACH SVHC**

**Contains SVHC: No**

**Halogen-Free**

**Status**

**Halogen-Free**

**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.

**China RoHS**



Pb

**Search Parts in this Series**

[75517Series](#)

**Mates With**

[75292 GbX® Daughtercard](#)

**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 #
Insertion Module, GbX® 5 pair 1 - Up Power Module	<a href="#">0622022007</a>

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

### **Electrical**

Current - Maximum per Contact	6A
Data Rate	8.0 Gbps
Real Signals (per 25mm)	48
Shielded	No
Voltage - Maximum	120V AC (RMS)/DC

### **Material Info**

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

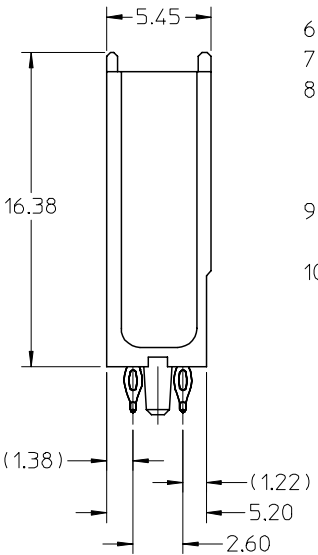
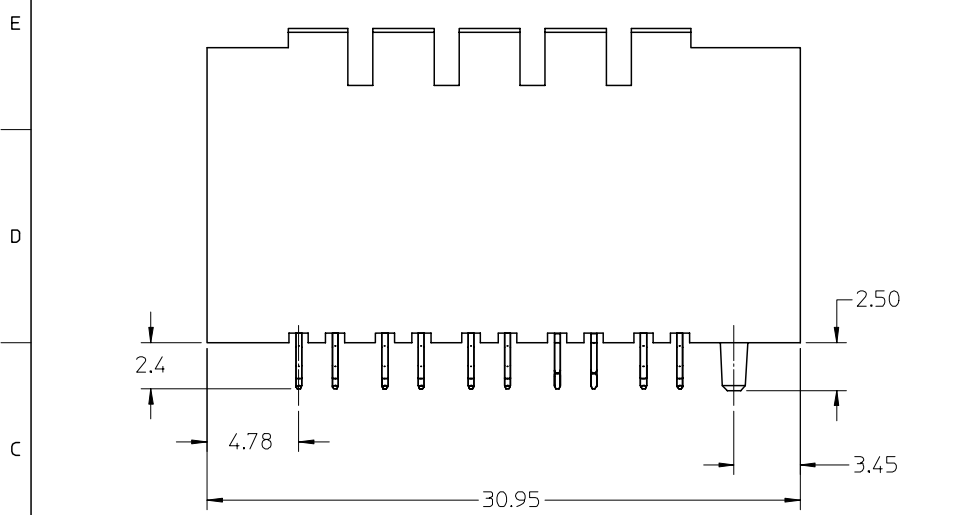
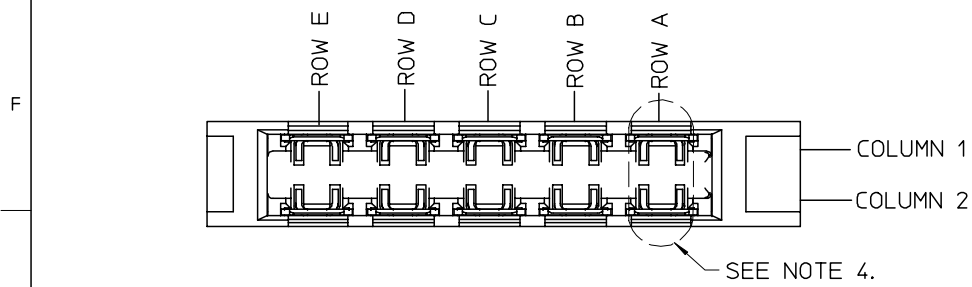
Packaging Specification	PK-70873-566
Product Specification	PS-75221-999
Sales Drawing	SD-75510-001

GbX is a registered trademark of Amphenol Corporation.

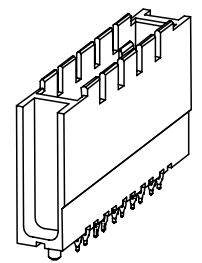
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10 9 8 7 6 5 4 3 2 1



- NOTES:
1. MATERIALS: HOUSING - LIQUID CRYSTAL POLYMER (LCP), UL 94V-0, GRAY; CONTACT - COPPER ALLOY.
  2. FINISH: SELECT GOLD IN CONTACT AREA, 50 μ" THICK; TIN/LEAD OR MATTE TIN IN COMPLIANT AREA.
  3. PACKAGING PER PK-70873-566.
  4. CONTACTS IN EACH ROW HAVE THE SAME WIPE LENGTH.
  5. BACKPLANE ASSEMBLY MATES WITH DAUGHTERCARD POWER MODULE 75292-5\*\*\*.
  6. PART SHOWN IS 75514-0467 (SHEET 4).
  7. SEE OTHER SHEETS FOR ADDITIONAL NOTES.
  8. WHEN INSERTING OPEN SIGNAL MODULES NEXT TO COLUMN 1 SIDE OF POWER MODULES, SIGNAL MODULES MUST BE INSERTED BEFORE THE POWERS TO AVOID INTERFERENCE BETWEEN THE TWO CONNECTOR HOUSINGS.
  9. THESE PARTS CONFORM TO MOLEX PRODUCT SPECIFICATION PS-75221-999.
  10. THESE PARTS CONFORM TO MOLEX COSMETIC SPECIFICATION PS-45499-002 CLASS B.



1-UP ASSEMBLY PART NUMBER

7 5 5 1 A - B C D E  
 - TIN/LEAD PLATED PRODUCT -  
 FOR EACH ROW LOCATION A, B, C, D, E:  
 0 = VOID  
 4 = 4.5 mm WIPE  
 6 = 6.0 mm WIPE  
 7 = 7.5 mm WIPE  
 - LEAD-FREE PLATED PRODUCT -  
 FOR EACH ROW LOCATION A, B, C, D, E:  
 0 = VOID  
 2 = 4.5 mm WIPE  
 3 = 6.0 mm WIPE  
 5 = 7.5 mm WIPE

ADDED NOTES 9 & 10  
 EC NO: UCP2008-0426  
 DRWNG: STEWART 2007/08/29  
 CHKD: BINGHAM 2007/08/30  
 APPR: BINGHAM 2007/08/31

QUALITY SYMBOLS
▽=0
▽=0
DESCRIPTION
REV

GENERAL TOLERANCES (UNLESS SPECIFIED)	
4 PLACES	± ---
3 PLACES	± ---
2 PLACES	± ---
1 PLACE	± ---
ANGULAR ± ---°	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
ELO	2006/04/13
CHECKED BY	DATE
ELO	2006/04/13
APPROVED BY	DATE
CUNNINGHAM	2006/04/17
MATERIAL NO.	
SEE CHART	

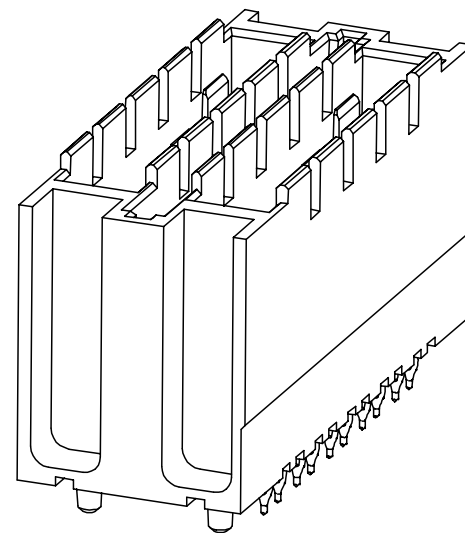
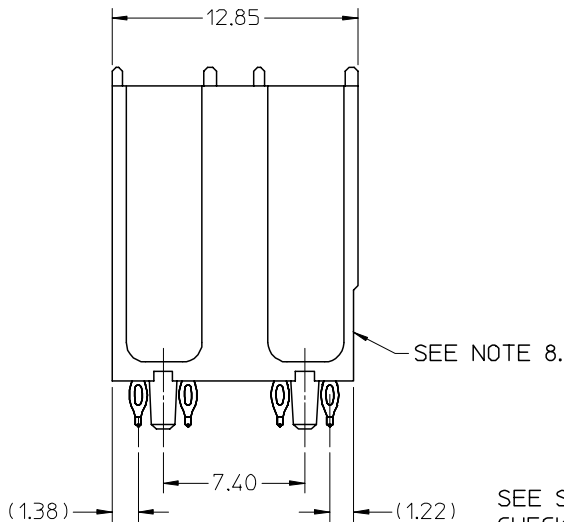
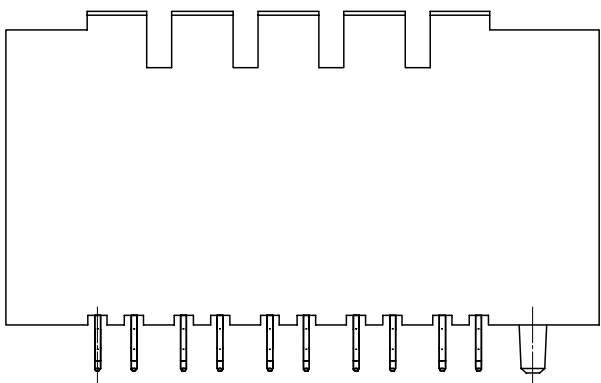
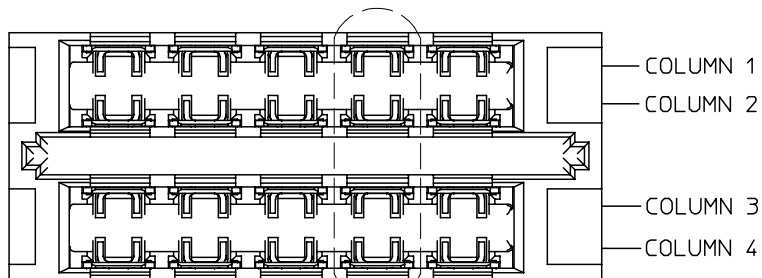
SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
4:1	METRIC	
TITLE		
GBX 5 PAIR BACKPLANE POWER SALES ASSEMBLY		
MATERIAL NO.		
SEE CHART		
DOCUMENT NO.		SHEET NO.
SD-75510-001		1 OF 4
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

2-UP ASSEMBLY PART NUMBER

7 5 5 2 A - B C D E  
 - TIN/LEAD PLATED PRODUCT -  
 FOR EACH ROW LOCATION A, B, C, D, E:  
 0 = VOID  
 4 = 4.5 mm WIPE  
 6 = 6.0 mm WIPE  
 7 = 7.5 mm WIPE  
 - LEAD-FREE PLATED PRODUCT -  
 FOR EACH ROW LOCATION A, B, C, D, E:  
 0 = VOID  
 2 = 4.5 mm WIPE  
 3 = 6.0 mm WIPE  
 5 = 7.5 mm WIPE

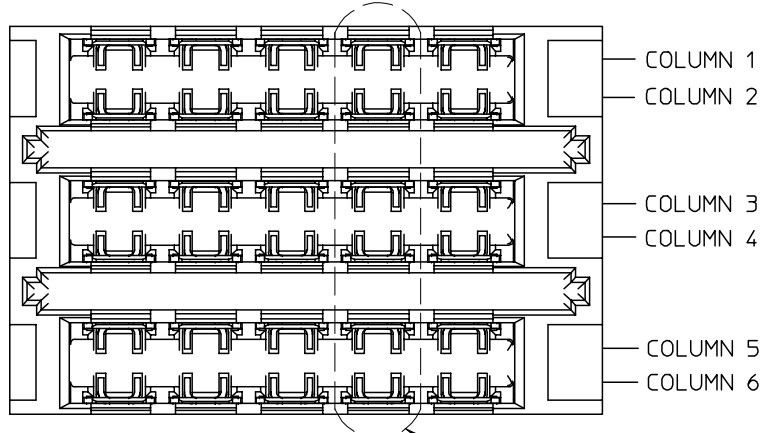


SEE SHEET 1 FOR ADDITIONAL INFORMATION  
 CHECK WITH PRODUCT MANAGER FOR AVAILABILITY

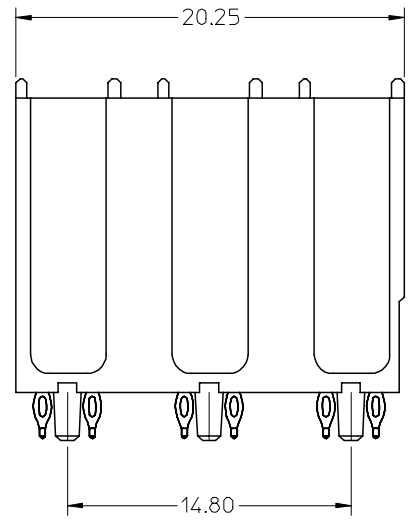
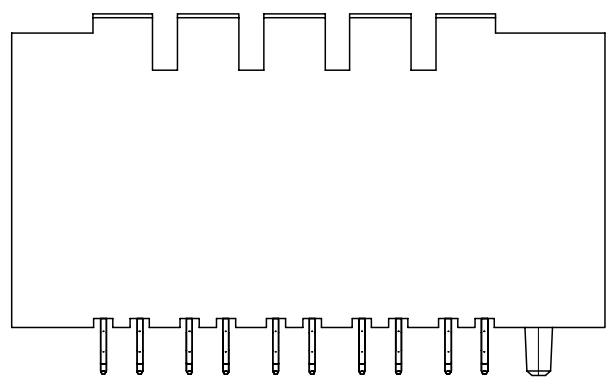
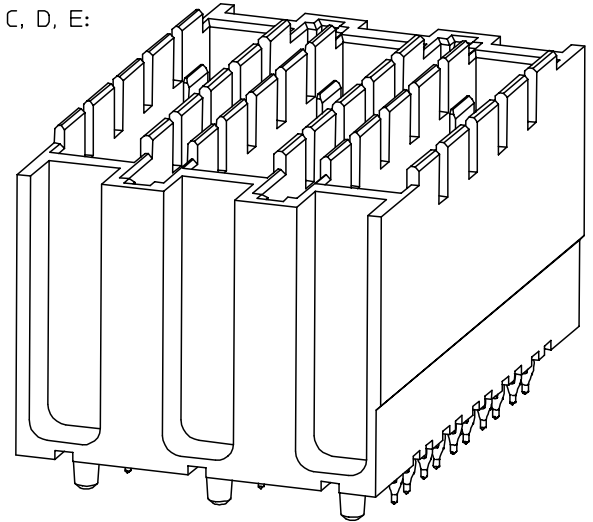
SEE SHEET ONE EC NO: UCP2008-0426 DRWN: STEWART 2007/08/29 CHKD: BINGHAM 2007/08/30 APPR: BINGHAM 2007/08/31	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY ELO	DATE 2006/04/13	TITLE GBX 5 PAIR BACKPLANE POWER SALES ASSEMBLY		
		4 PLACES	±----	±----	CHECKED BY ELO	DATE 2006/04/13			
		3 PLACES	±----	±----	APPROVED BY CUNNINGHAM	DATE 2006/04/17	MOLEX INCORPORATED		
2 PLACES	±----	±----	ANGULAR ±----		MATERIAL NO. SEE CHART	DOCUMENT NO. SD-75510-001	SHEET NO. 2 OF 4		
1 PLACE	±----	±----	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE B	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1



**3-UP ASSEMBLY PART NUMBER**  
**7 5 5 3 A - B C D E**  
 - TIN/LEAD PLATED PRODUCT -  
 FOR EACH ROW LOCATION A, B, C, D, E:  
 0 = VOID  
 4 = 4.5 mm WIPE  
 6 = 6.0 mm WIPE  
 7 = 7.5 mm WIPE  
 - LEAD-FREE PLATED PRODUCT -  
 FOR EACH ROW LOCATION A, B, C, D, E:  
 0 = VOID  
 2 = 4.5 mm WIPE  
 3 = 6.0 mm WIPE  
 5 = 7.5 mm WIPE



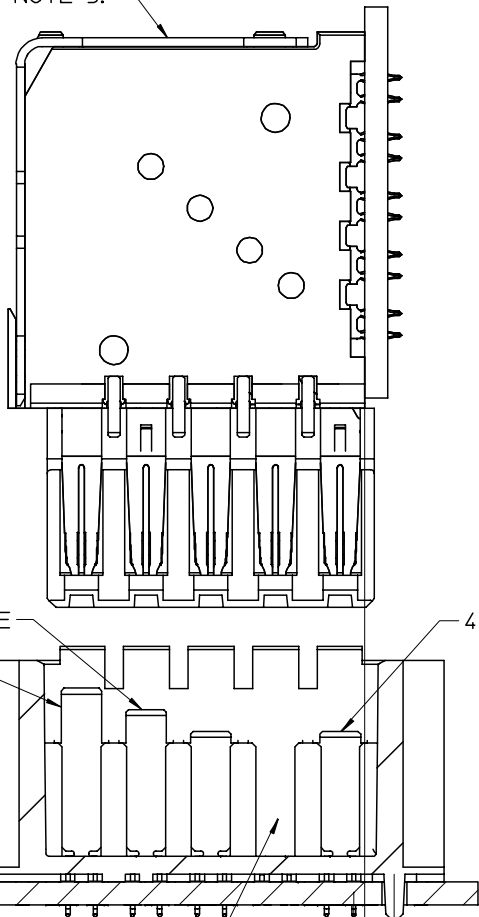
SEE SHEET 1 FOR ADDITIONAL INFORMATION  
 CHECK WITH PRODUCT MANAGER FOR AVAILABILITY

SEE SHEET ONE EC NO: UCP2008-0426 DRW: J.C. STEWART 2007/08/29 CHKD: J.B. INGHAM 2007/08/30 APPR: J.B. INGHAM 2007/08/31	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± ---	mm    INCH	DRAWN BY ELO	DATE 2006/04/13	TITLE GBX 5 PAIR BACKPLANE POWER SALES ASSEMBLY					
		ANGULAR ± ---°		CHECKED BY ELO	DATE 2006/04/13	APPROVED BY CUNNINGHAM					
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DATE 2006/04/17	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-75510-001		SHEET NO. 3 OF 4			

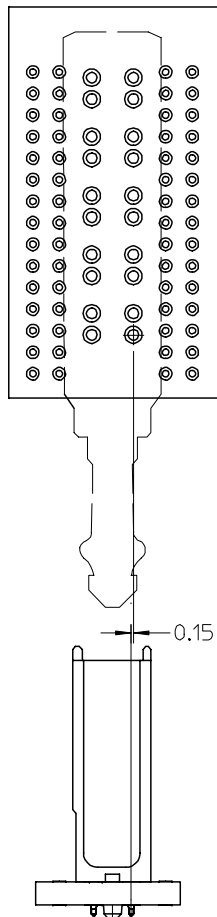
9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

SEE NOTE 5.

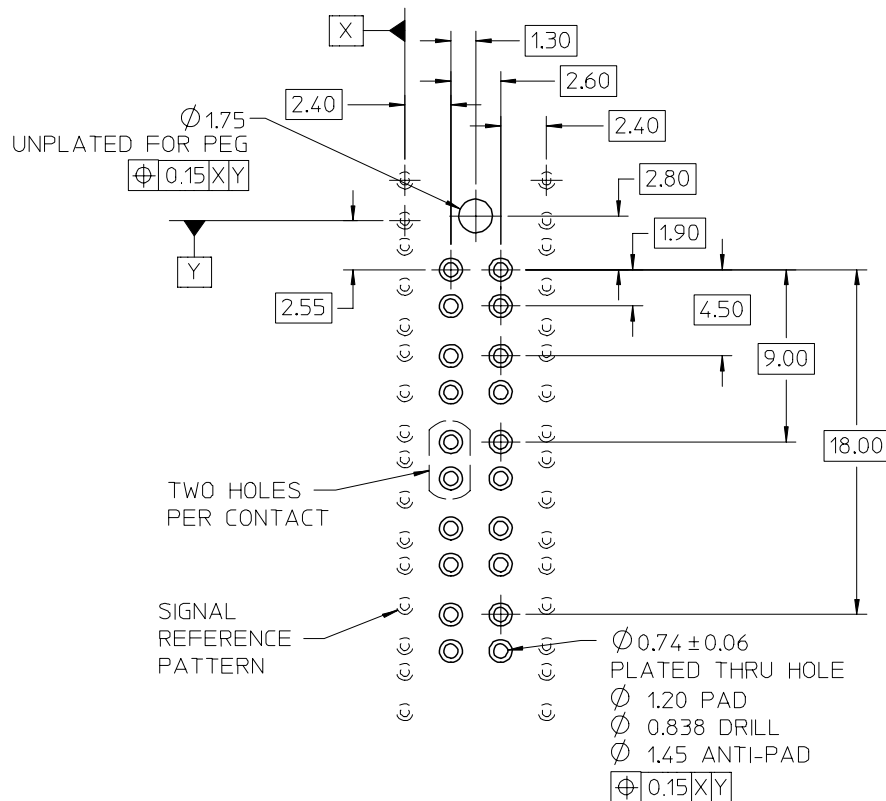


DC BOARD EDGE TO CENTERLINE OF BP TAIL



### HOLE PATTERN FOR 1-UP ASSEMBLY

- 1.) ADD 7.40 FROM CENTERLINES OF PEG FOR MULTIPLE UP ASSEMBLIES.
- 2.) ADD 5.55 FROM CENTERLINE TO CENTERLINE OF PEG FOR INDIVIDUAL POWER MODULES STACKED NEXT TO EACH OTHER.



SEE SHEET ONE EC NO: UCP2008-0426 DRWN: STEWART 2007/08/29 CHKD: BINGHAM 2007/08/30 APPR: BINGHAM 2007/08/31	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY ELO	DATE 2006/04/13	TITLE GBX 5 PAIR BACKPLANE POWER SALES ASSEMBLY		
					CHECKED BY ELO	DATE 2006/04/13			
					APPROVED BY CUNNINGHAM		DATE 2006/04/17	MOLEX INCORPORATED DOCUMENT NO. SD-75510-001	
			MATERIAL NO.		SHEET NO.				
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE PREVIOUS		4 OF 4		
					THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

9 8 7 6 5 4 3 2 1