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Part Number: [0876781001](#)
Status: **Active**
Description: 1.27mm (.050") Pitch Serial ATA Backplane Receptacle, Through Hole, Vertical, Extended Height, 0.76µm (30µ") Gold (Au) Selective, 22 Circuits, Leadfree

Documents:

3D Model	Product Specification PS-87678-029 (PDF)
Drawing (PDF)	RoHS Certificate of Compliance (PDF)

Agency Certification

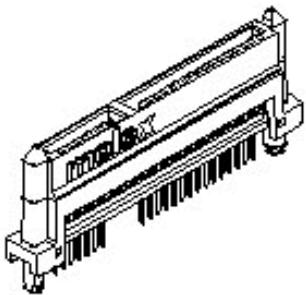
CSA	LR 19980
UL	E29179

General

Product Family	PCB Receptacles
Series	87678
Application	Board-to-Board
Product Literature Order No	SNG-029
Product Name	Serial ATA

Physical

Circuits (Loaded)	22
Circuits Detail	Power 15 pins Signal 7 pins
Durability (mating cycles max)	500
Flammability	94V-0
Glow-Wire Compliant	No
Guide to Mating Part	Yes
Lock to Mating Part	Yes
Material - Metal	Copper
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Number of Rows	1
Orientation	Vertical
PC Tail Length (in)	0.136 In
PC Tail Length (mm)	3.45 mm
PCB Locator	Yes
PCB Retention	None
PCB Thickness Recommended (in)	0.031 In, 0.035 In, 0.040 In, 0.042 In, 0.045 In, 0.050 In, 0.055 In, 0.060 In, 0.061 In, 0.062 In, 0.070 In, 0.075 In, 0.080 In, 0.086 In, 0.093 In, 0.098 In
PCB Thickness Recommended (mm)	0.80 mm, 0.90 mm, 1.00 mm, 1.07 mm, 1.20 mm, 1.27 mm, 1.40 mm, 1.50 mm, 1.55 mm, 1.60 mm, 1.80 mm, 1.90 mm, 2.00 mm, 2.20 mm, 2.40 mm, 2.50 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.050 In
Pitch - Mating Interface (mm)	1.27 mm
Plating min: Mating (µin)	30
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	101.6
Plating min: Termination (µm)	2.54
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole - Compliant Pin



Series

image - Reference only

EU RoHS

**ELV and RoHS
Compliant**
REACH SVHC
Not Reviewed
**Halogen-Free
Status**

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
[87678Series](#)

Mates With
[87679](#) , [87799](#) , [87703](#)

Electrical

Current - Maximum per Contact	1.5A
Voltage - Maximum	30V

Solder Process Data

Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

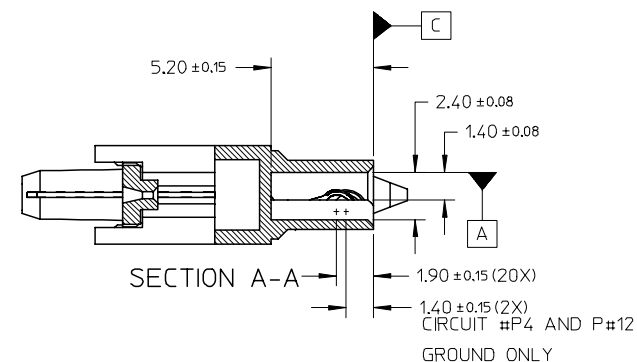
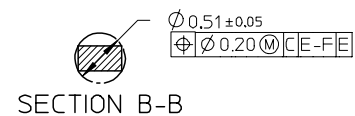
Material Info

Reference - Drawing Numbers

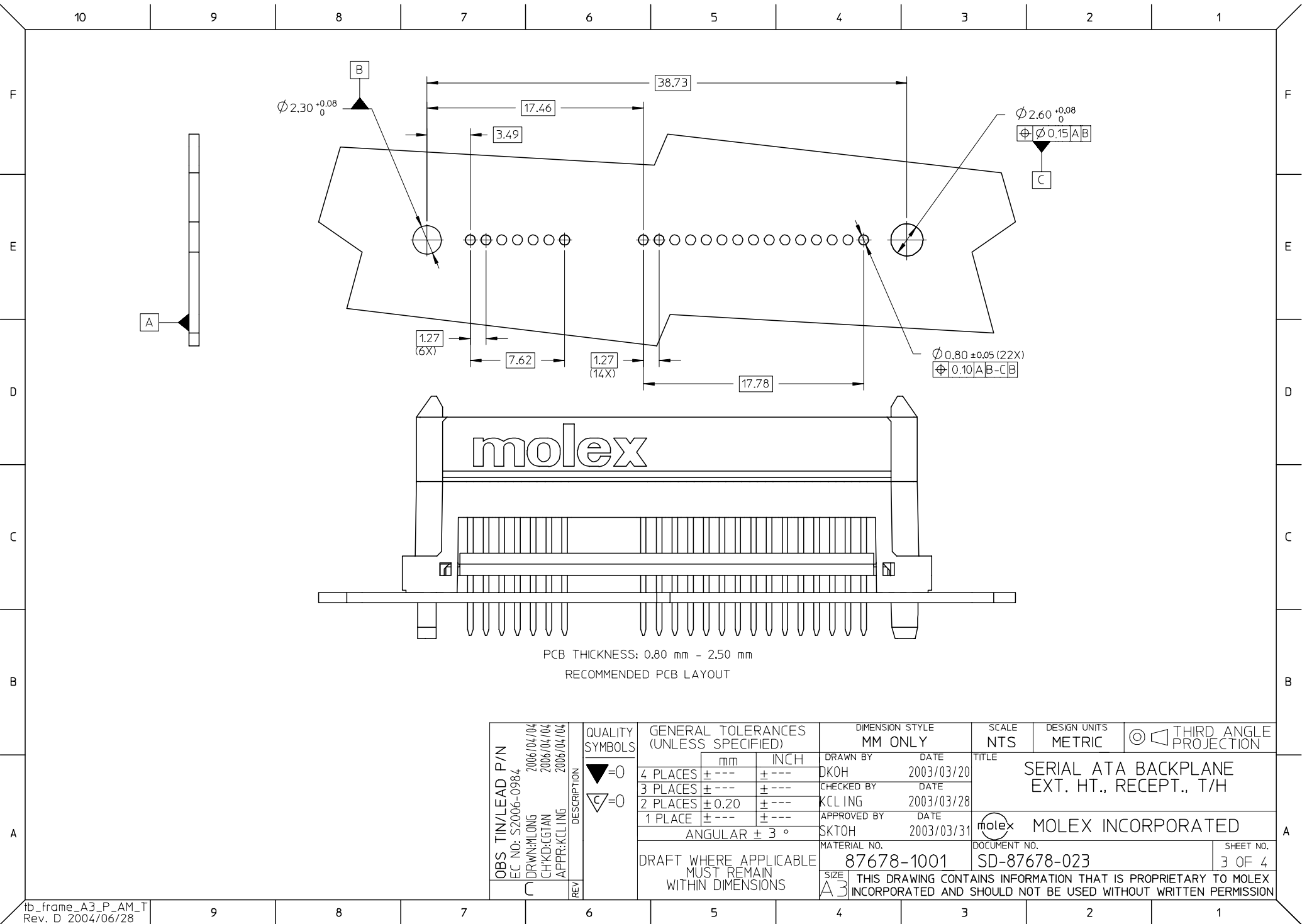
Product Specification	PS-87678-029
Sales Drawing	SD-87678-023

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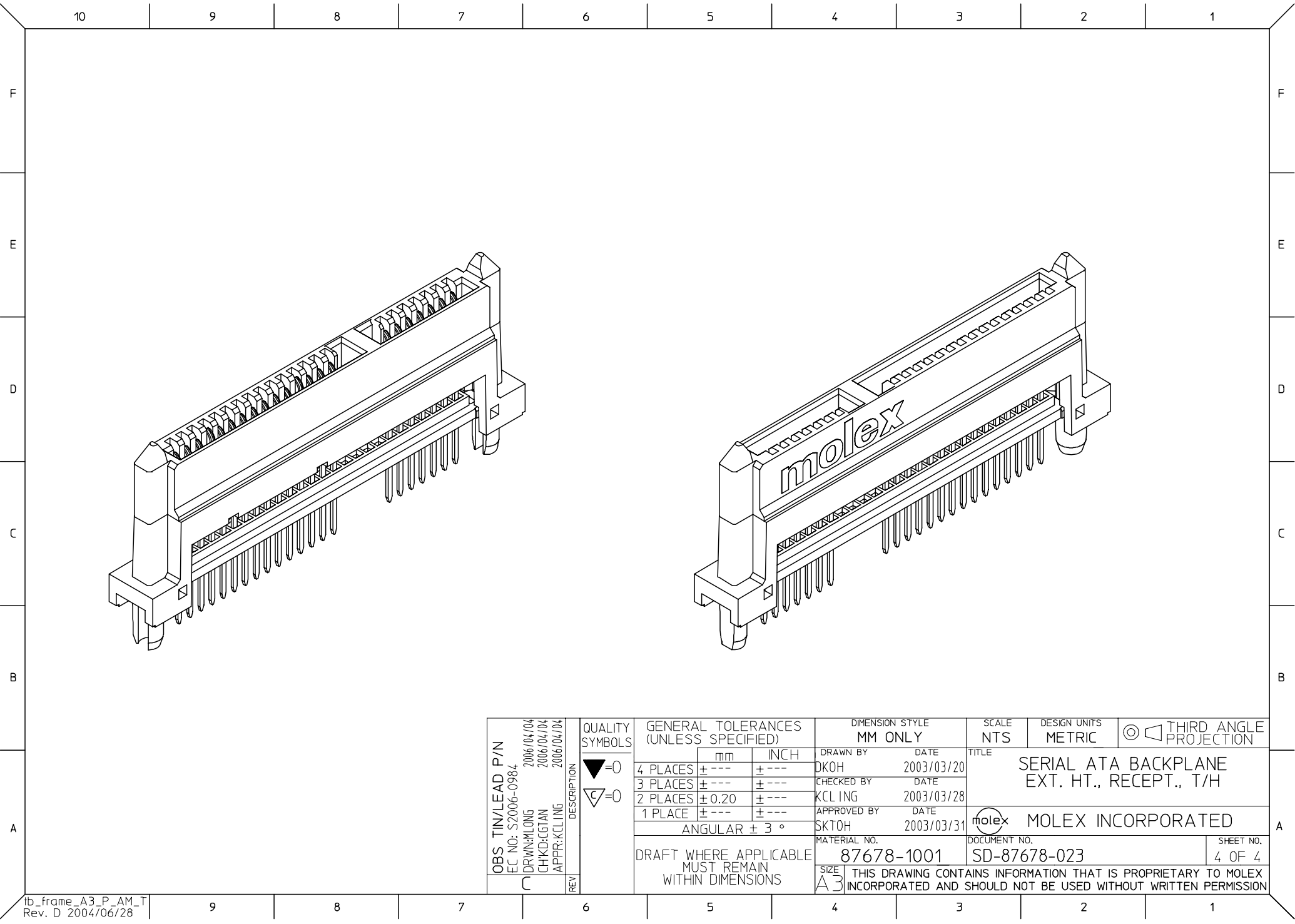
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OBS. TIN/LEAD P/N EC NO: S2006-0984 DRAWN BY: DRWN:MJL CHKD:CGTAN APPR:KCLING	2006/04/04 2006/04/04 2006/04/04	QUALITY SYMBOLS ▽=0 ▽=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
					mm	INCH	DRAWN BY DKOH	DATE 2003/03/20	TITLE SERIAL ATA BACKPLANE EXT. HT., RECEPT., T/H			
				3 PLACES	± ---	± ---	CHECKED BY KCLING	DATE 2003/03/28				
				2 PLACES	± 0.20	± ---	APPROVED BY SKTOH	DATE 2003/03/31	molex MOLEX INCORPORATED			
				ANGULAR ± 3 °		MATERIAL NO. 87678-1001		DOCUMENT NO. SD-87678-023		SHEET NO. 2 OF 4		
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						



OBS TIN/LEAD P/N EC NO: S2006-0984 DRWN:MLNG 2006/04/04 CHKD:CGTAN 2006/04/04 APPR:KCLING 2006/04/04	DESCRIPTION	QUALITY SYMBOLS ▽=0 C=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
			mm	INCH	DRAWN BY DKOH	DATE 2003/03/20	TITLE SERIAL ATA BACKPLANE EXT. HT., RECEPT., T/H					
			4 PLACES	± ---	± ---	CHECKED BY KCLING						DATE 2003/03/28
			3 PLACES	± ---	± ---	APPROVED BY SKTOH						DATE 2003/03/31
			2 PLACES	± 0.20	± ---	ANGULAR ± 3 °		MATERIAL NO. 87678-1001		DOCUMENT NO. SD-87678-023	SHEET NO. 3 OF 4	
1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						



OBS TIN/LEAD P/N EC NO: S2006-0984 DRWN:MLONG 2006/04/04 CHKD:CGTAN 2006/04/04 APPR:KCLING 2006/04/04	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY DKOH	DATE 2003/03/20	TITLE SERIAL ATA BACKPLANE EXT. HT., RECEPT., T/H				
			4 PLACES ± ---	± ---	CHECKED BY KCLING	DATE 2003/03/28					
			3 PLACES ± ---	± ---	APPROVED BY SKTOH	DATE 2003/03/31					
			2 PLACES ± 0.20	± ---	ANGULAR ± 3 °		MOLEX MOLEX INCORPORATED				
1 PLACE ± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. 87678-1001		DOCUMENT NO. SD-87678-023		SHEET NO. 4 OF 4			
				SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						