

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0879700001](#)
Status: **Active**
Description: 1.27mm (.050") Signal Pitch, 0.80mm (.031") SCSI Pitch, 1.27mm (.050") Power Pitch
SAS Receptacle, Vertical, Through Hole, with Straight Solder Tab, 29 Circuits, Lead free

Documents:

[3D Model](#) [Product Specification PS-87970-003 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

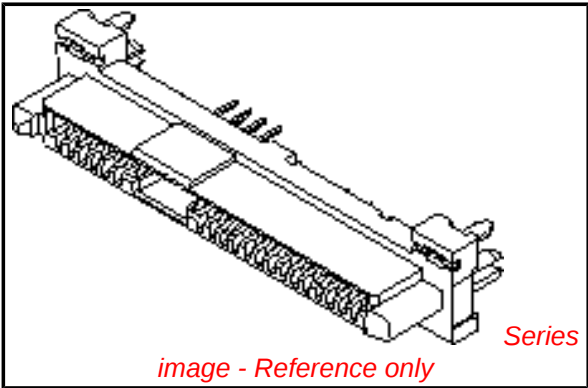
CSA LR19980
UL E29179

General

Product Family I/O Connectors
Series [87970](#)
Application Board-to-Board
Comments No pick and place cap
Component Type Receptacle
Product Name SAS
Type N/A

Physical

Boot Color N/A
Circuits (Loaded) 29
Circuits (maximum) 29
Circuits Detail Signal 7, SCSI 7, Power 15
Color - Resin Black
Durability (mating cycles max) 500
Flammability 94V-0
Gender Female
Keying to Mating Part Yes
Lock to Mating Part None
Material - Plating Mating Gold
Material - Plating Termination Tin
Number of Rows 2
Orientation Vertical
PC Tail Length (in) 0.087 In, 0.106 In
PC Tail Length (mm) 2.20 mm, 2.70 mm
PCB Locator Yes
PCB Retention Yes
PCB Thickness Recommended (in) 0.070 In
PCB Thickness Recommended (mm) 1.80 mm
Packaging Type Tray
Panel Mount Yes
Pitch - Mating Interface (in) 0.031 In, 0.050 In
Pitch - Mating Interface (mm) 0.80 mm, 1.27 mm
Pitch - Term. Interface (in) 0.031 In, 0.050 In
Pitch - Term. Interface (mm) 0.80 mm, 1.27 mm
Plating min: Mating (µin) 30
Plating min: Mating (µm) 0.76
Plating min: Termination (µin) 102
Plating min: Termination (µm) 2.54
Polarized to Mating Part Yes
Polarized to PCB Yes



EU RoHS

**ELV and RoHS
Compliant**
REACH SVHC
Contains SVHC: No
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
[87970Series](#)

Mates With
[87679](#) , [87799](#) , [87703](#) , SFF 8482 Hard
Disk Drive and Backplane Plug

Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	0°C to +55°C
Termination Interface: Style	Through Hole
Waterproof / Dustproof	No
Wire Size AWG	N/A

Electrical

Current - Maximum per Contact	1.5A
Shielded	No
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

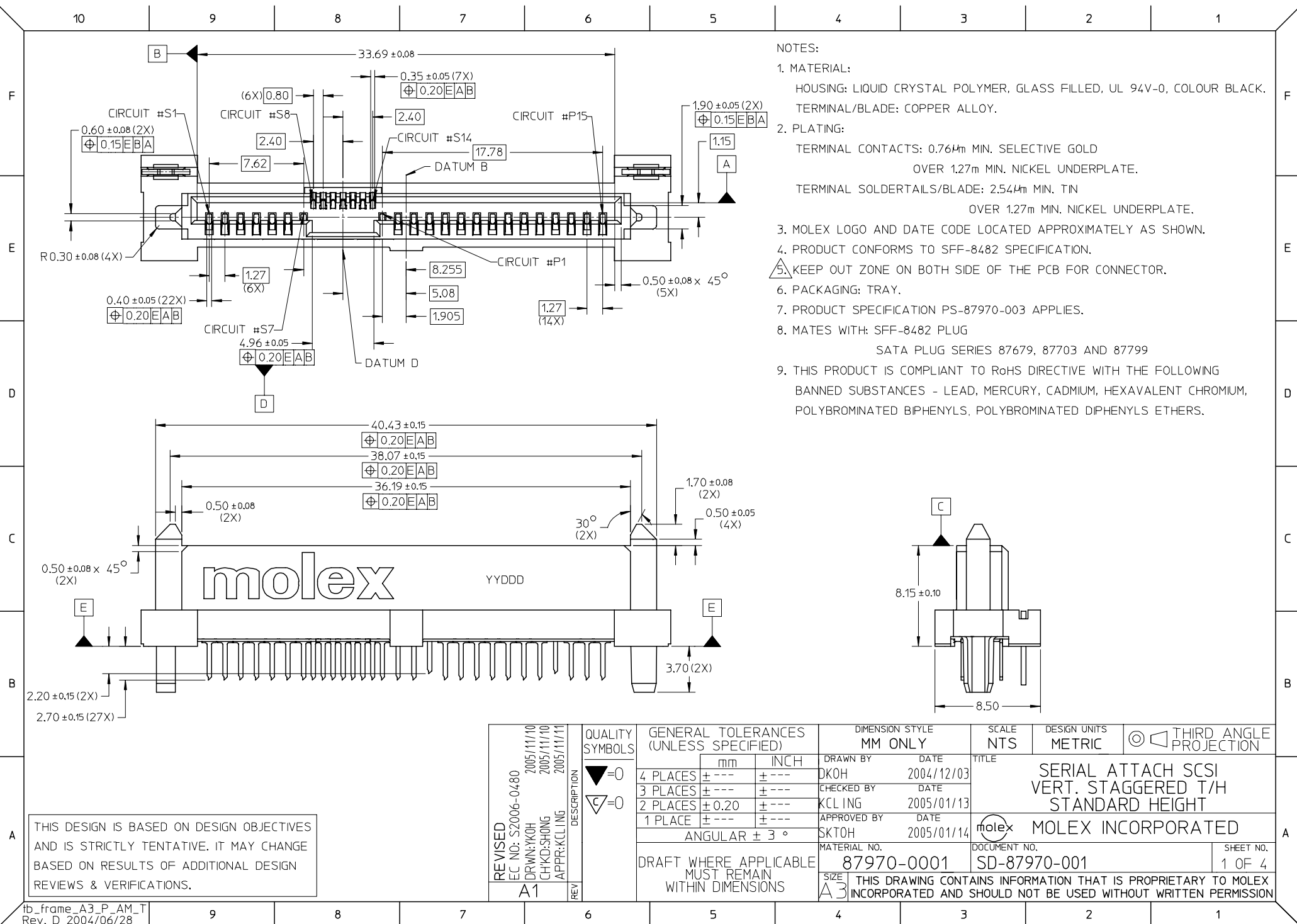
Material Info

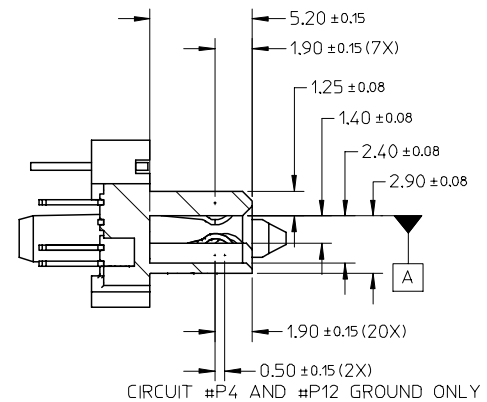
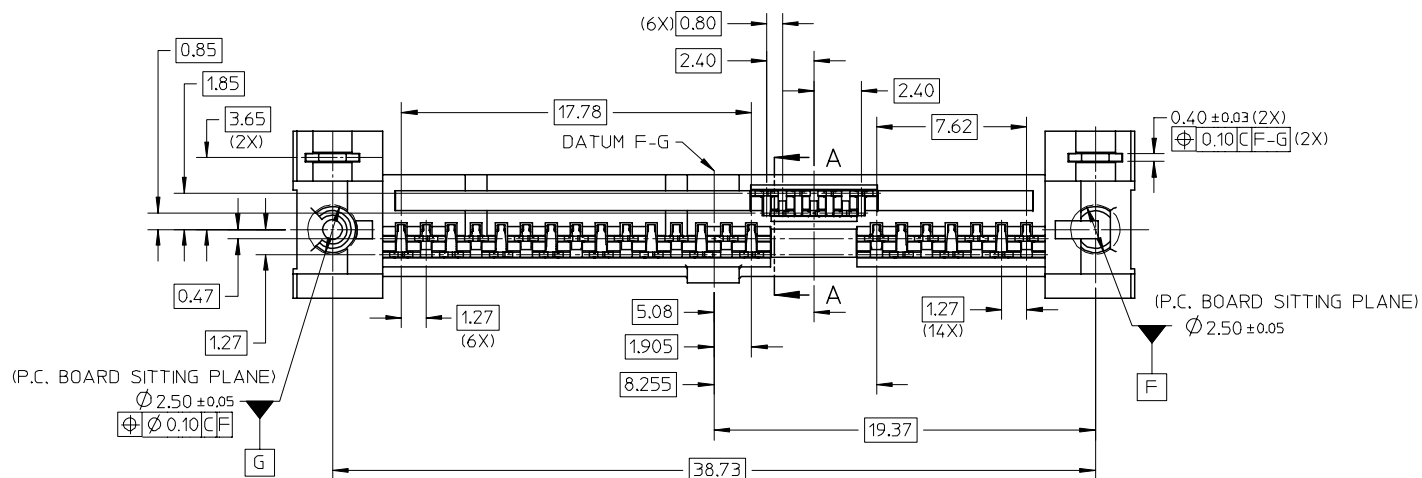
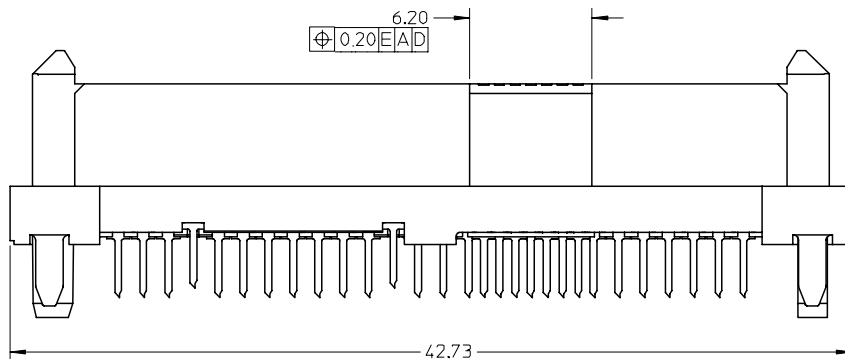
Reference - Drawing Numbers

Product Specification	PS-87970-003
Sales Drawing	SD-87970-001

This document was generated on 04/02/2010

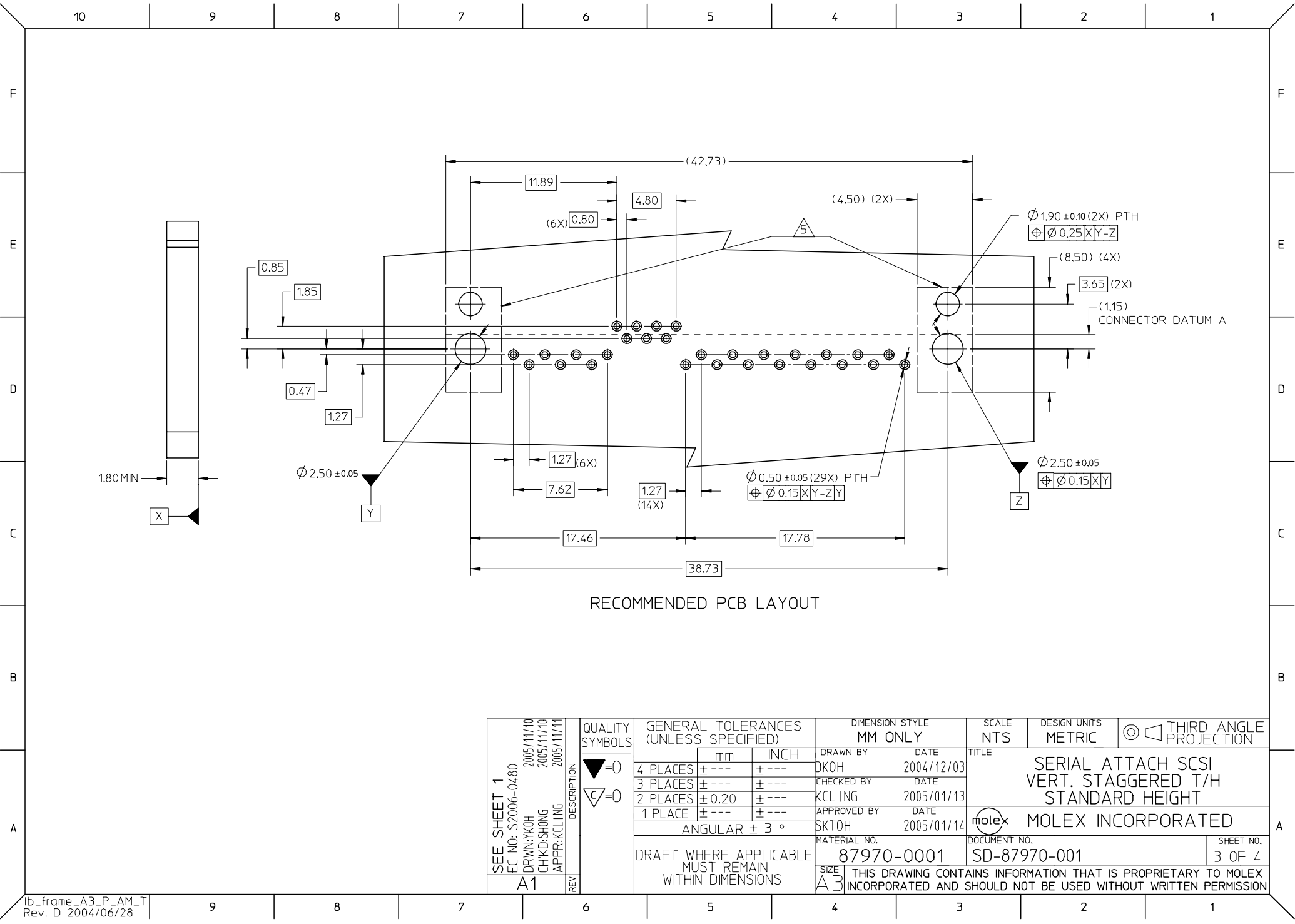
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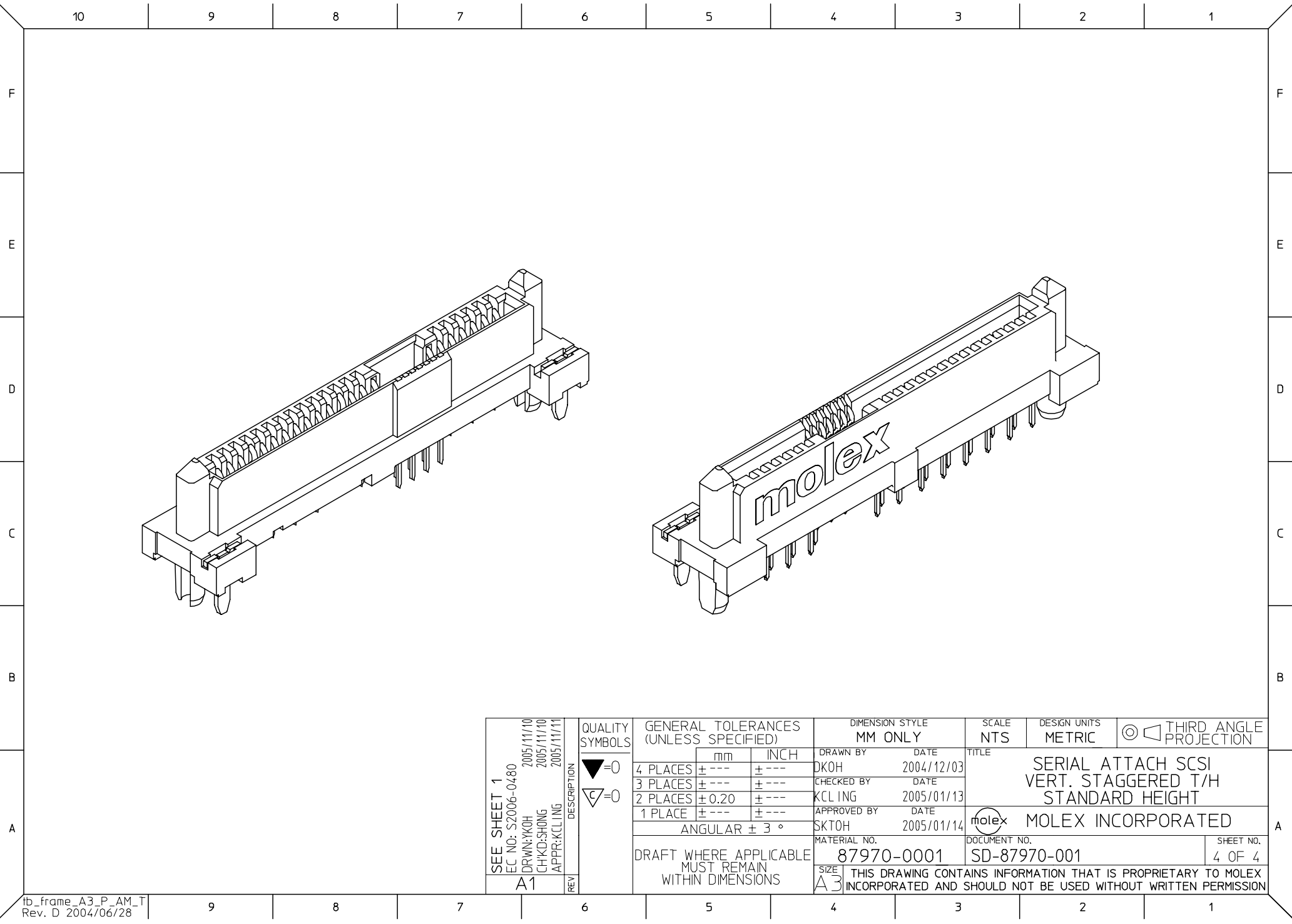
SECTION A-A

SEE SHEET 1 EC NO: S2006-0480 DRWN:YKH CHKD:SHONG APPR:KCLING A1	2005/11/10 2005/11/10 2005/11/11 2005/11/11	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 2004/12/03	TITLE SERIAL ATTACH SCSI VERT. STAGGERED T/H STANDARD HEIGHT				
				4 PLACES	± ---	± ---	CHECKED BY	DATE					
				3 PLACES	± ---	± ---	KCLING	2005/01/13	MOLEX INCORPORATED				
				2 PLACES	± 0.20	± ---	APPROVED BY	DATE					
1 PLACE	± ---	± ---	SKTOH	2005/01/14	DOCUMENT NO. SD-87970-001								
ANGULAR ± 3 °			MATERIAL NO. 87970-0001							SHEET NO. 2 OF 4			
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								



RECOMMENDED PCB LAYOUT

SEE SHEET 1 EC NO: S2006-0480 DRWN:YKH CHKD:SHONG APPR:KCLING A1	DESCRIPTION 2005/11/10 2005/11/10 2005/11/11	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
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			4 PLACES	± ---	± ---	DKOH	2004/12/03				
			3 PLACES	± ---	± ---	CHECKED BY	DATE				
			2 PLACES	± 0.20	± ---	KCLING	2005/01/13	MOLEX MOLEX INCORPORATED			
			1 PLACE	± ---	± ---	APPROVED BY	DATE				
ANGULAR ± 3 °		SKTOH		2005/01/14	MATERIAL NO. 87970-0001						
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				SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
						SHEET NO. 3 OF 4					



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			2 PLACES	± 0.20	± ---	MATERIAL NO. 87970-0001					
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