

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

**Part Number:** [0479890342](#)  
**Status:** **Active**  
**Description:** 1.00mm (.039") by 1.00mm (.039") Pitch rPGA 988B Notebook PC CPU Socket, with Pick-and-Place Cover, Tape-on-Reel Packaging, 988 Circuits, Lead-free

**Documents:**

[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-47989-001 \(PDF\)](#)

**General**

Product Family	Processor Sockets
Series	<a href="#">47989</a>
Comments	Pick-and-Place Cap
Component Type	Socket
Product Name	rPGA988B, rPGA989

**Physical**

Circuits (Loaded)	988
Color - Resin	Black, Natural
Durability (mating cycles max)	30
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
Material - Plating Termination	Copper, Silver, Tin
Material - Resin	High Temperature Thermoplastic
Packaging Type	Embossed Tape on Reel
Pitch - Mating Interface (in)	0.039 In
Pitch - Mating Interface (mm)	1.00 mm
Plating min: Mating (µin)	15
Plating min: Mating (µm)	0.38
Temperature Range - Operating	-20°C to +90°C
Termination Interface: Style	Solder or Weld

**Electrical**

Current - Maximum per Contact	.5A
Voltage - Maximum	5V

**Solder Process Data**

Duration at Max. Process Temperature (seconds)	3
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	245

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification	PK-47989-001
Product Specification	PS-47989-001
Sales Drawing	SD-47989-001

Intel and Nehalem and relevant names are either trademarks or registered trademarks of Intel Corporation



**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](mailto:productcompliance@molex.com)  
For a multiple part number RoHS Certificate of Compliance, [click here](#)

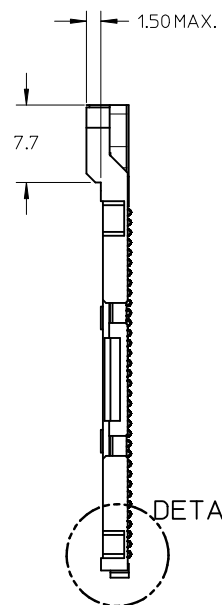
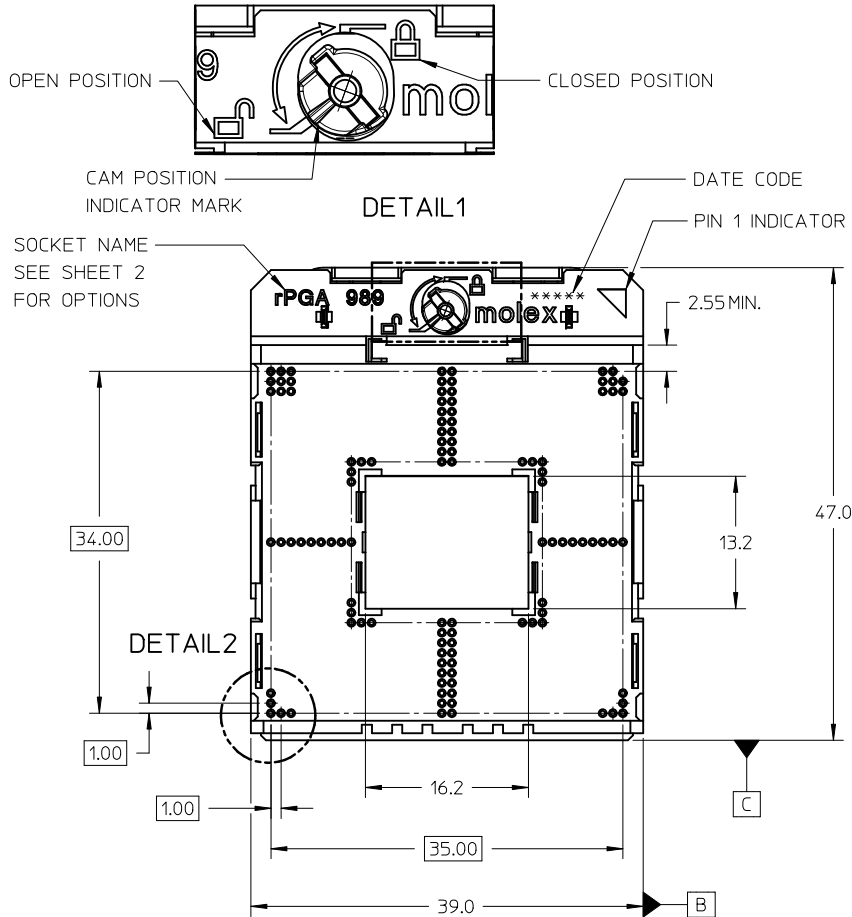
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

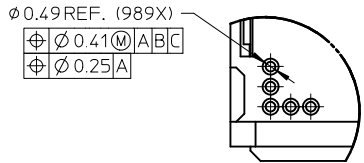
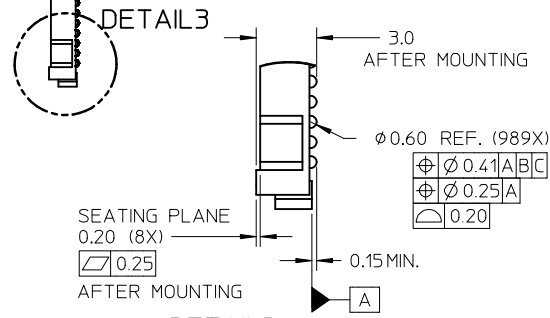
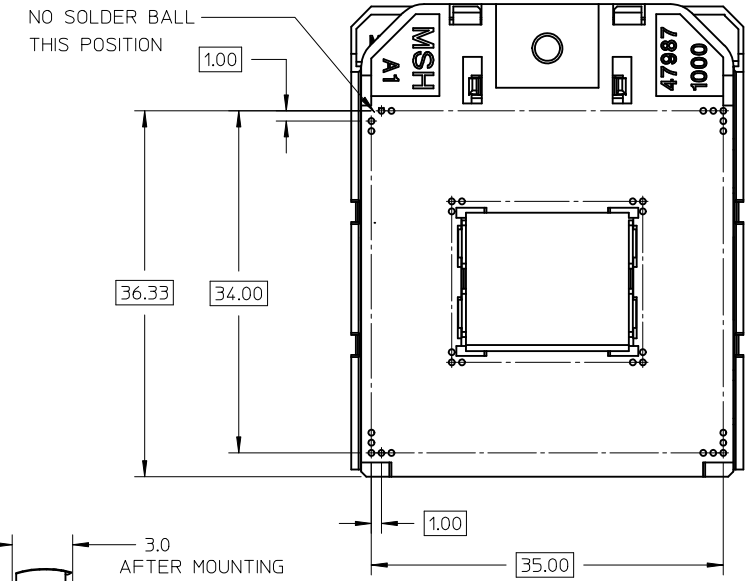
[47989Series](#)

**Mates With**

Intel\* Nehalem Processor



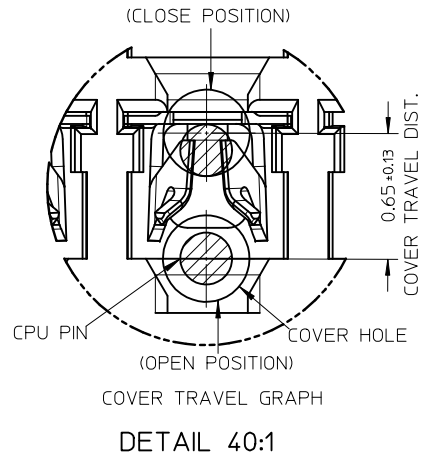
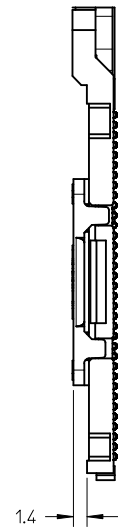
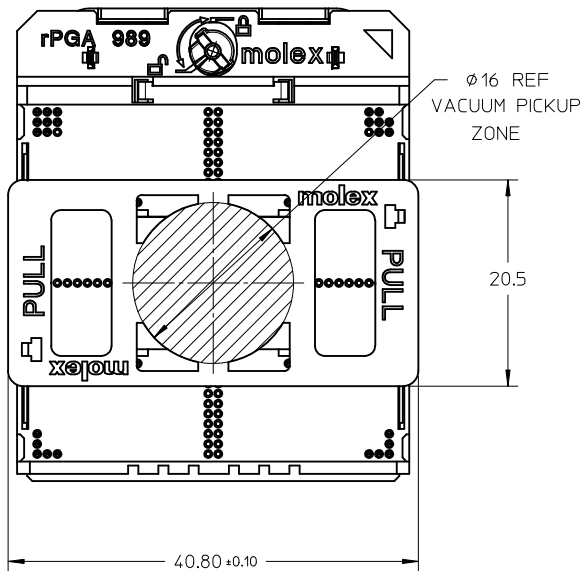
NOTES:  
 1) THIS SOCKET COMPLIES WITH ALL SPECIFICATIONS AND PERFORMANCE REQUIREMENTS FOR INTEL rPGA98X SERIES CPU PROCESSORS.  
 2) SOCKET SHOWN IN OPEN POSITION.  
 3) SEE SHEET 2 FOR DETAILS PERTAINING TO KEYING, MATERIAL AND PACKAGING OPTIONS.  
 4) THIS PRODUCT SERIES COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV DIRECTIVE 2000/53/EC.



DETAIL2

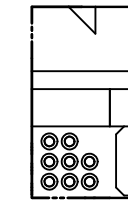
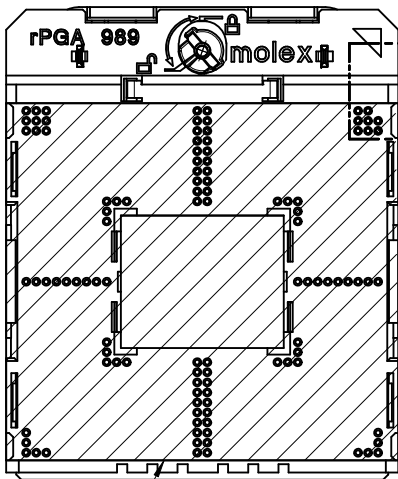
ENTER DESCRIPTION EC NO: SH2010-0084 DRWN: JZHANG11 CHKD: W2009/09/25 APPR: WFDENG 2009/10/12	QUALITY SYMBOLS $F_A=0$ $F_C=0$ $F_P=0$	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.10 ± --- 1 PLACE ± 0.20 ± --- ANGULAR ± 2 °	DIMENSION STYLE MM ONLY DRAWN BY: QWFANG CHECKED BY: JKACHLIC APPROVED BY: CL IANG DATE: 2008/04/25 DATE: 2008/05/29 DATE: 2008/05/29	SCALE: 2:1 DESIGN UNITS: METRIC THIRD ANGLE PROJECTION	TITLE: RPGA989 SOCKET ASSEMBLY MOLEX INCORPORATED DOCUMENT NO. SD-47989-001 SHEET NO. 1 OF 3
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

REMOVEABLE PICK & PLACE CAP

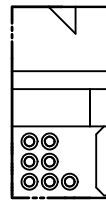


SOCKET KEYING OPTIONS

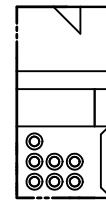
MYLAR PICK & PLACE OPTION



rPGA989  
47989-01\*\*



rPGA988A  
47989-02\*\*



rPGA988B  
47989-03\*\*

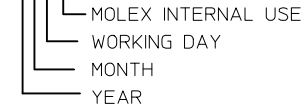
NOTES:

1) MATERIALS:

MOLDED COMPONENTS: LIQUID CRYSTAL POLYMER (LCP) UL 94V-0  
 BASE HOUSING COLOR: BLACK  
 COVER COLOR: NATURAL  
 MYLAR(POLYIMIDE; COLOR:ORANGE) OR PnP COVER(LCP; COLOR: BLACK)  
 FOR PICK & PLACE.

CONTACTS: HIGH STRENGTH COPPER ALLOY  
 PLATING: 0.38um GOLD IN CONTACT AREA, 1.3um NICKEL OVERALL  
 CAM COMPONENTS: STAINLESS STEEL  
 SOLDER BALL: LEAD-FREE BALL SnAg3.0Cu0.5

2) DATE CODE \*\*\*\*\*

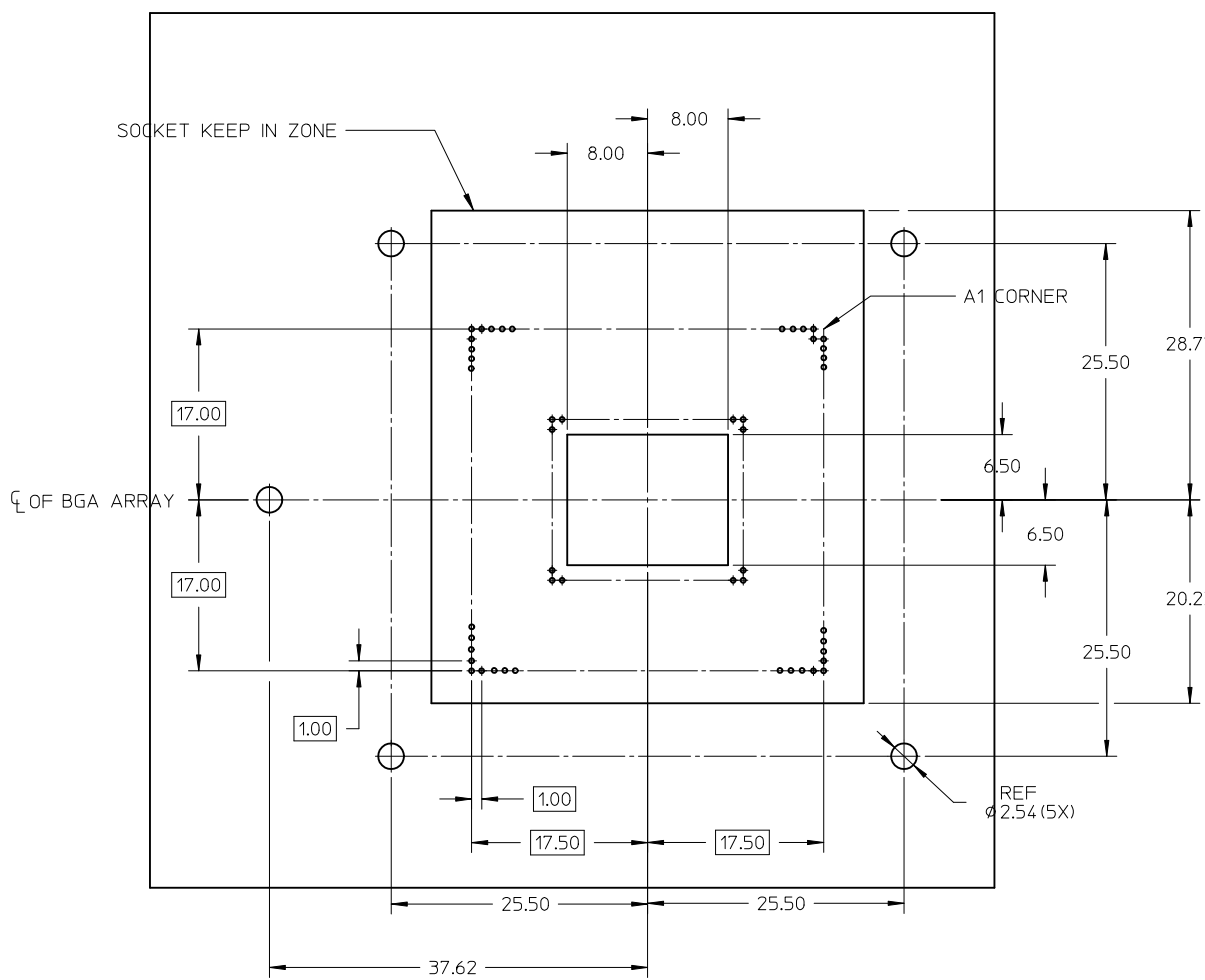


3) PRODUCT SPECIFICATION 47989-001 APPLIES

4) PACKAGING SPECIFICATION: PK-47989-001 (TAPE & REEL)  
 PK-47989-002 (HARD TRAY)

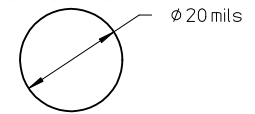
PART NUMBER	PICK UP TYPE		PACKAGE TYPE	
	MYLAR	CAP	T&R	HARD TRAY
47989-0112	◆			◆
47989-0122	◆		◆	
47989-0132		◆		◆
47989-0142		◆	◆	
47989-0212	◆			◆
47989-0222	◆		◆	
47989-0232		◆		◆
47989-0242		◆	◆	
47989-0312	◆			◆
47989-0322	◆		◆	
47989-0332		◆		◆
47989-0342		◆	◆	

ENTER DESCRIPTION EC NO: SHZ010-0084 DRWN: JZHANG11 CHKD: APPR: WFDENG 2009/09/25 2009/09/25 2009/10/12	QUALITY SYMBOLS $F_A=0$ $F_G=0$ $F_P=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
				mm	INCH	DRAWN BY QWFANG	DATE 2008/04/25	TITLE RPGA989 SOCKET ASSEMBLY		
		4 PLACES	± ---	± ---	CHECKED BY JKACHLIC	DATE 2008/05/29	MOLEX INCORPORATED DOCUMENT NO. SD-47989-001 SHEET NO. 2 OF 3			
		3 PLACES	± ---	± ---	APPROVED BY CL IANG	DATE 2008/05/29				
2 PLACES	± 0.10	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE					
1 PLACE	± 0.20	± ---			MATERIAL NO.					

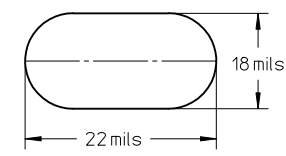


NOTES:  
shape pada of PCB are recommended

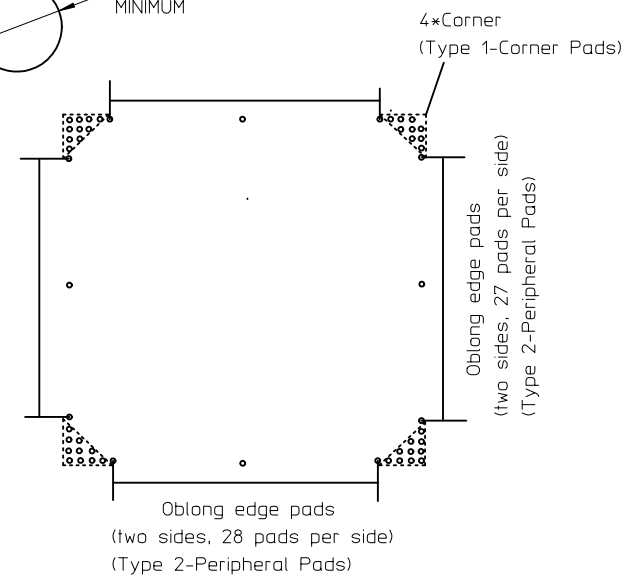
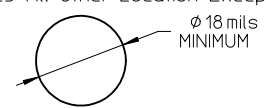
TYPE1-Corner Pads



TYPE2-Peripheral Pads(Oblong-shape pada are recommended)



TYPE3-All Other Location Except for those of Type1 and Type2 Locations)



MOTHERBOARD KEEP IN ZONE (KIZ)

ENTER DESCRIPTION EC NO: SH2010-0084 DRWN: JZHANG11 CHKD: 2009/09/25 APPR: WEDENG 2009/10/12	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$F_A = 0$	mm	INCH	MM ONLY	2:1	METRIC		
	$F_C = 0$	4 PLACES ± ---	± ---	DRAWN BY	DATE	TITLE		
	$F_P = 0$	3 PLACES ± ---	± ---	QWFANG	2008/04/25	RPGA989 SOCKET ASSEMBLY		
	2 PLACES ± 0.10	± ---	CHECKED BY	DATE				
	1 PLACE ± 0.20	± ---	JKACH LIC	2008/05/29				
	ANGULAR ± 2 °		APPROVED BY	DATE				
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		CL IANG	2008/05/29	MOLEX INCORPORATED			
			MATERIAL NO.	SEE TABLE	DOCUMENT NO.	SD-47989-001	SHEET NO.	
			SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			3 OF 3	