

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

**Part Number:** [0479890142](#)  
**Status:** **Active**  
**Description:** 1.00mm (.039") by 1.00mm (.039") Pitch rPGA 989 Notebook PC CPU Socket, with Pick-and-Place Cover, Tape on Reel Packaging, 989 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	rPGA989

**Physical**

Circuits (Loaded)	989
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**

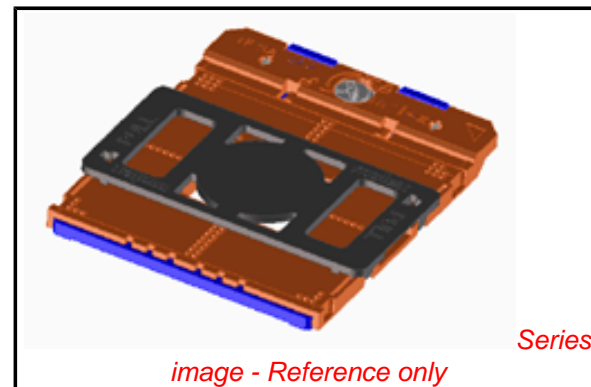
Duration at Max. Process Temperature (seconds)	3
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	245

**Material Info**

**Reference - Drawing Numbers**

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

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**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](#)

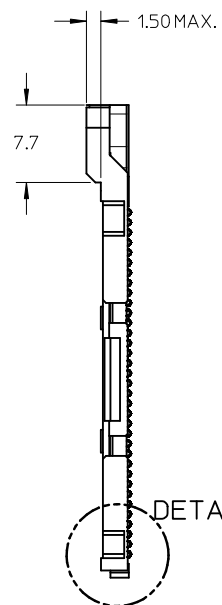
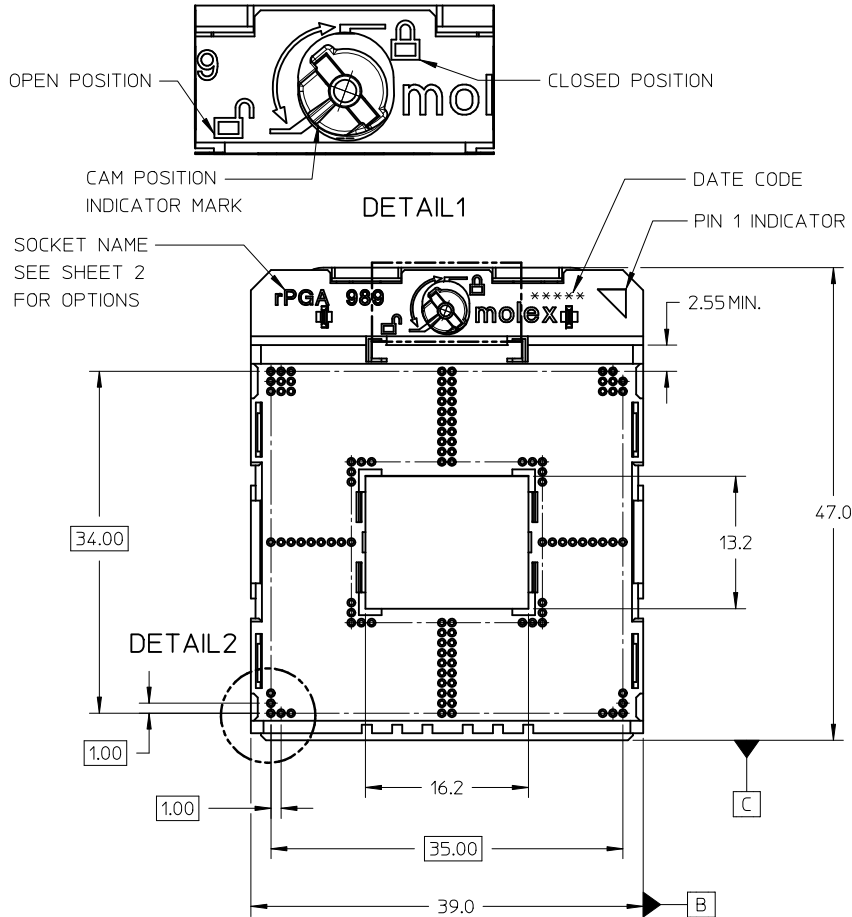
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

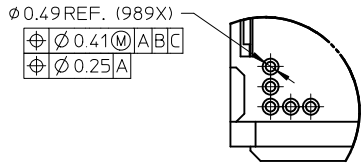
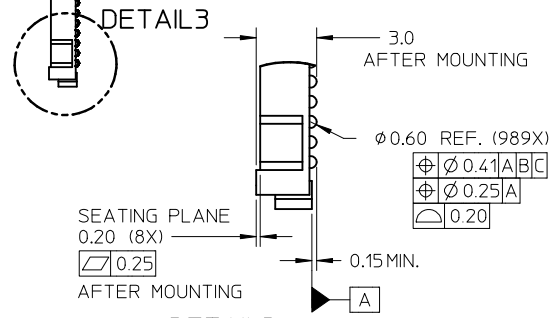
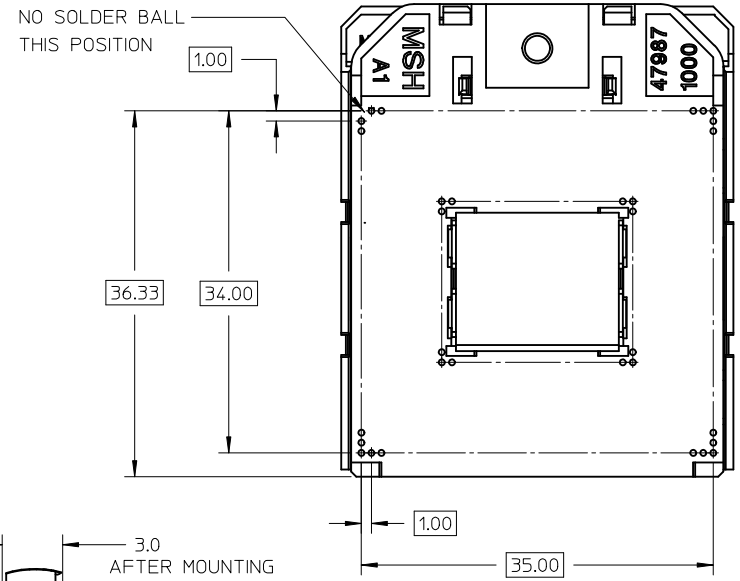
[47989Series](#)

**Mates With**

Intel\* Nehalem Processor



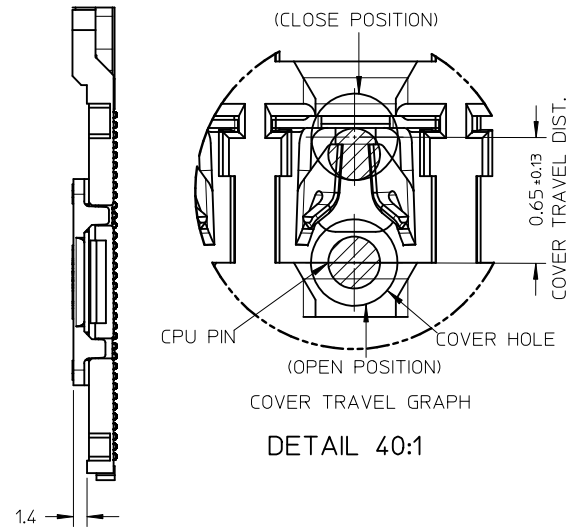
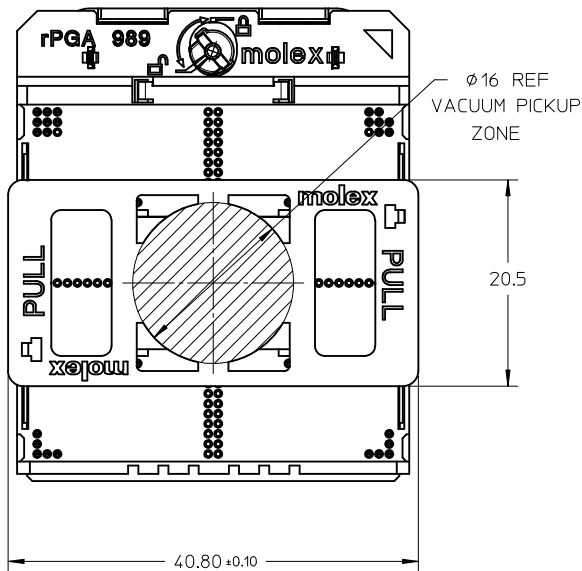
- NOTES:
- 1) THIS SOCKET COMPLIES WITH ALL SPECIFICATIONS AND PERFORMANCE REQUIREMENTS FOR INTEL rPGA98X SERIES CPU PROCESSORS.
  - 2) SOCKET SHOWN IN OPEN POSITION.
  - 3) SEE SHEET 2 FOR DETAILS PERTAINING TO KEYING, MATERIAL AND PACKAGING OPTIONS.
  - 4) THIS PRODUCT SERIES COMPLIANT TO RoHS DIRECTIVE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



DETAIL 2

<b>ENTER DESCRIPTION</b> EC NO: SH2010-0084 DRWN: JZHANG11 2009/09/25 CHKD: 2009/09/25 APPR: WEDENG 2009/10/12	<b>QUALITY SYMBOLS</b> $F_A=0$ $F_C=0$ $F_P=0$	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> MM ONLY	<b>SCALE</b> 2:1	<b>DESIGN UNITS</b> METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.10 ± ---	1 PLACE ± 0.20 ± ---	DRAWN BY: QWFANG CHECKED BY: JKACH LIC APPROVED BY: CL IANG	DATE: 2008/04/25 DATE: 2008/05/29 DATE: 2008/05/29	<b>TITLE</b> RPGA989 SOCKET ASSEMBLY	
		ANGULAR ± 2 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE	MOLEX INCORPORATED		SHEET NO. 1 OF 3
		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

REMOVEABLE PICK & PLACE CAP



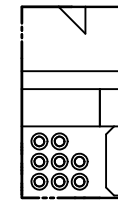
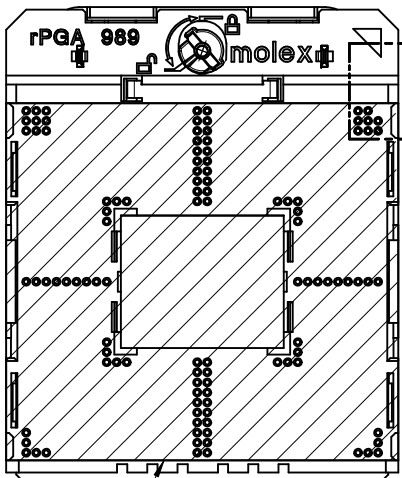
DETAIL 40:1

NOTES:

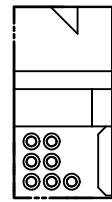
- MATERIALS:
  - MOLDED COMPONENTS: LIQUID CRYSTAL POLYMER (LCP) UL 94V-0
  - BASE HOUSING COLOR: BLACK
  - COVER COLOR: NATURAL
  - MYLAR(POLYIMIDE; COLOR:ORANGE) OR PnP COVER(LCP; COLOR: BLACK) FOR PICK & PLACE.
  - CONTACTS: HIGH STRENGTH COPPER ALLOY
  - PLATING: 0.38um GOLD IN CONTACT AREA, 1.3um NICKEL OVERALL
  - CAM COMPONENTS: STAINLESS STEEL
  - SOLDER BALL: LEAD-FREE BALL SnAg3.0Cu0.5
- DATE CODE \*\*\*\*\*
  - MOLEX INTERNAL USE
  - WORKING DAY
  - MONTH
  - YEAR
- PRODUCT SPECIFICATION 47989-001 APPLIES
- PACKAGING SPECIFICATION: PK-47989-001 (TAPE & REEL)  
PK-47989-002 (HARD TRAY)

SOCKET KEYING OPTIONS

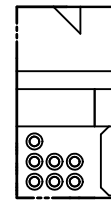
MYLAR PICK & PLACE OPTION



rPGA989  
47989-01\*\*



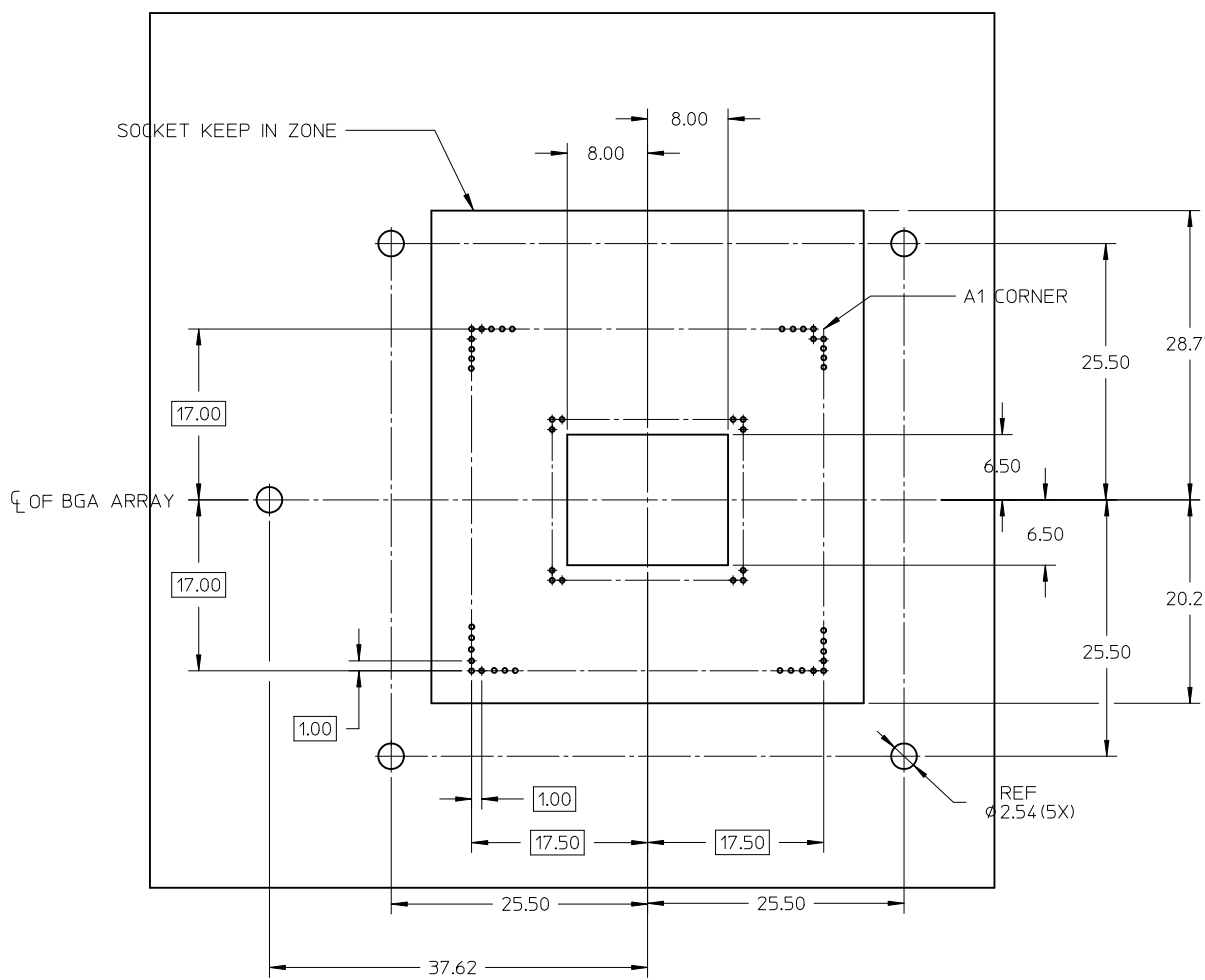
rPGA988A  
47989-02\*\*



rPGA988B  
47989-03\*\*

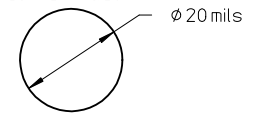
PART NUMBER	PICK UP TYPE		PACKAGE TYPE	
	MYLAR	CAP	T&R	HARD TRAY
47989-0112	◆			◆
47989-0122	◆		◆	
47989-0132		◆		◆
47989-0142		◆	◆	
47989-0212	◆			◆
47989-0222	◆		◆	
47989-0232		◆		◆
47989-0242		◆	◆	
47989-0312	◆			◆
47989-0322	◆		◆	
47989-0332		◆		◆
47989-0342		◆	◆	

ENTER DESCRIPTION EC NO: SHZ010-0084 DRWN: JZHANG11 CHKD: APPR: WFDENG REV A	DESCRIPTION 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	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.10 ± --- 1 PLACE ± 0.20 ± ---	mm INCH ± --- ± --- ± 0.10 ± --- ± 0.20 ± ---	DRAWN BY QWFANG	DATE 2008/04/25	TITLE RPGA989 SOCKET ASSEMBLY			
		ANGULAR ± 2 °		CHECKED BY JKACH LIC	DATE 2008/05/29	MOLEX INCORPORATED			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY CL IANG	DATE 2008/05/29	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-47989-001	SHEET NO. 2 OF 3	

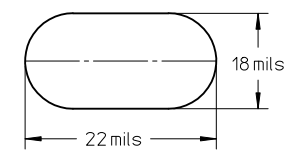


NOTES:  
shape pada of PCB are recommended

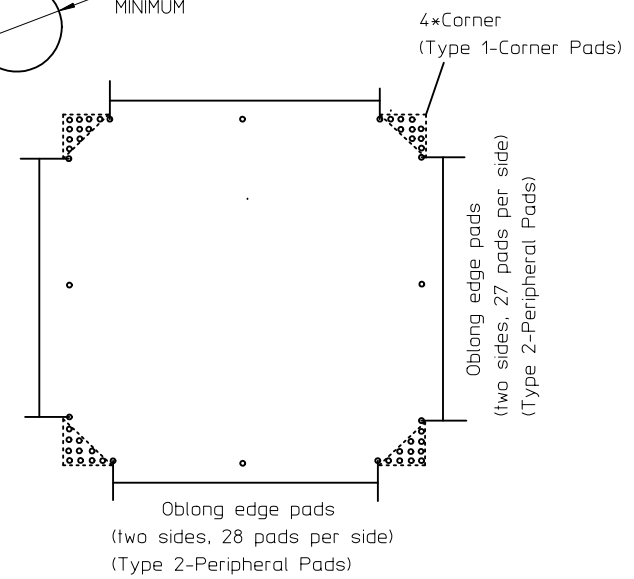
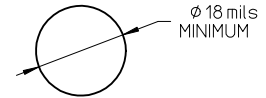
TYPE1-Corner Pads



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: WFDENG 2009/10/12	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$F_A = 0$ $F_C = 0$ $F_P = 0$	mm    INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.10 ± --- 1 PLACE ± 0.20 ± --- ANGULAR ± 2 °	MM ONLY	2:1	METRIC	TITLE	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: QWFANG    DATE: 2008/04/25 CHECKED BY: JKACH LIC    DATE: 2008/05/29 APPROVED BY: CL IANG    DATE: 2008/05/29	RPGA989 SOCKET ASSEMBLY			
			MATERIAL NO.    SEE TABLE SIZE A3    THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	MOLEX INCORPORATED DOCUMENT NO. SD-47989-001 SHEET NO. 3 OF 3			