

Lead-Free Practice Kits



Lead-Free Alloy



BGA	Sn96.5/Ag3.5 Solder Balls
QFP	Nickel-Palladium (Ni-Pd)
SOIC	Nickel-Palladium (Ni-Pd)
SOT23	Tin Plated
Chip Capacitors	100% Sn
PC Boards	White Tin Plated (100% Sn)



TopLineTM

in cooperation with



TopLineTM

www.toplinedummy.com
sales@toplinedummy.com

HOW TO ORDER

PAYMENT TERMS

- Instant credit up to \$500 for USA companies. Ask for details.
- Credit Terms (Net 30) for established customers.
- American Express, Mastercard and VISA accepted.



INTERNATIONAL ORDERS

- Contact TopLine Distributor in your country.

F.O.B. POINT AND SHIPPING

- F.O.B. Garden Grove, California.
- Please specify preferred method of shipment when placing order.

INTERNET ORDERS

- Order online via SOLDERTEC at www.lead-free.org/eshop/



P.O. Box 5100, Garden Grove, CA 92846 USA

Toll Free USA/Canada 1-800-776-9888

Tel 1-714-898-3830

Fax 1-714-891-0321

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LEAD FREE FINE PITCH MULTICOMPONENTS

©1999 TopLine PN986001 Rev A
www.TopLineDummy.com

FR4 Plating White Tin
BGA Sn96.5/Ag3.5
QFP Nickel Palladium
Chip Sn 100%

BGA196-DC149
1.0mm

BGA256/272/292
DC200/202/204
1.27mm

BGA225
DC15
1.5mm

0402

0603

0805

1206

QFP208 .5mm

Actual Size 4" x 5.5 (100 x 140mm)

Practice Lead free assembly using fine-pitch components. Each kit includes four QFP208 with Nickel-Palladium (Ni-Pd) leads and tin plated PC board.

ORDER INFO

Quantity	Kit Nbr
1	986000
6	986006
24	986024

PC BOARD FEATURES

White Tin Plated (100% Sn)
LPI Solder Mask
FR4 Board .062"
Double Sided
Tooling Holes .125"
Fiducial Marks

Kits include free Gerber file for stencil and parts placement data.

ASSEMBLY METHODS

Machine Run
Hand Solder
Rework

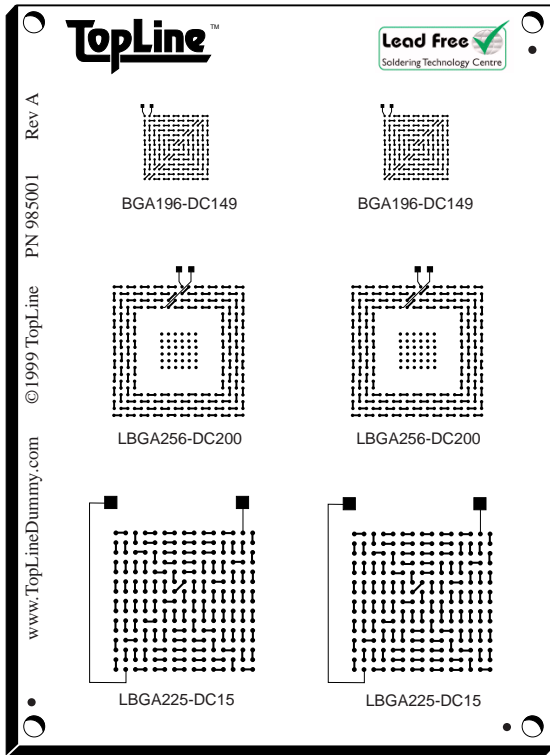
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BALL GRID ARRAY

CHIP CAPACITOR KIT 0805 AND 1206



Actual Size 4" x 5.5 (100 x 140mm)

Each kit includes 2 each of popular ball counts in 1.0mm, 1.27mm and 1.5mm pitch with daisy chain test. BGAs are unencapsulated FR4 substrates with Sn96.5/Ag3.5 eutectic solder balls.

ORDER INFO	
Quantity	Kit Nbr
1	985000
10	985010

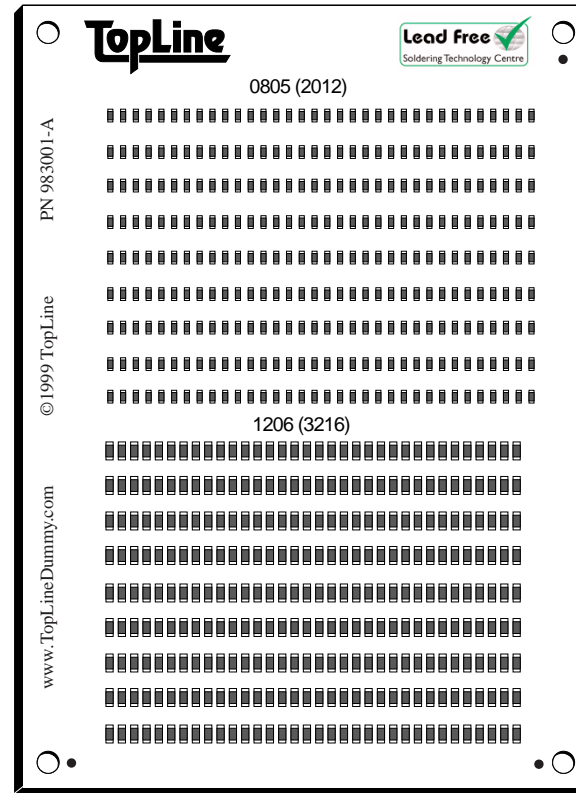
PC BOARD FEATURES

- White Tin Plated (100%Sn)
- LPI Solder Mask
- FR4 Board .062"
- Double Sided
- Tooling Holes .125"
- Fiducial Marks

Kits include free Gerber file for stencil and parts placement data.

ASSEMBLY METHODS

- Machine Run
- Hand Solder
- Rework



Actual Size 4" x 5.5 (100 x 140mm)

Kit includes large quantity of chip capacitors with 100% tin terminations and a white tin plated PC Board. Capacitors presented on 4mm pitch plastic tape.

ORDER INFO	
Quantity	Kit Nbr
1	983000
10	983010
25	983025

PC BOARD FEATURES

- White Tin Plated (100% Sn)
- LPI Solder Mask
- FR4 Board .062"
- Double Sided
- Tooling Holes .125"
- Fiducial Marks

Kits include free Gerber file for stencil and parts placement data.

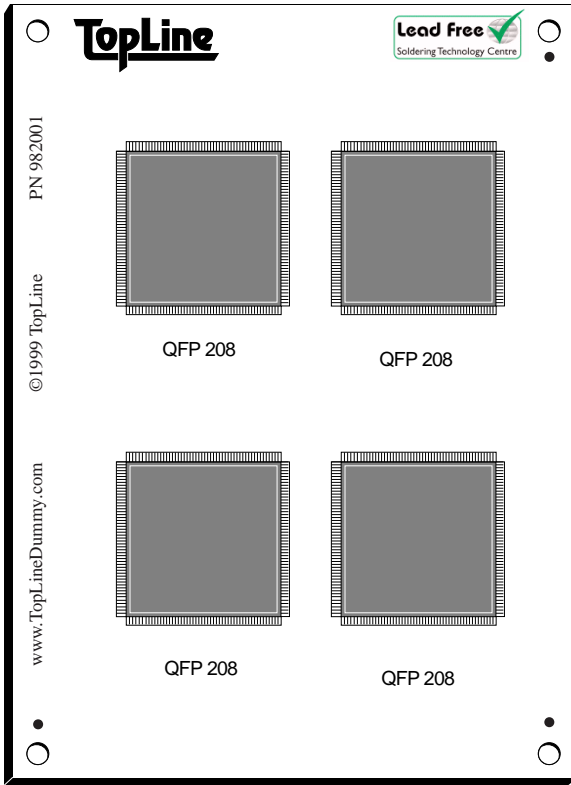
ASSEMBLY METHODS

- Machine Run
- Hand Solder
- Rework



QFP 208 KIT 0.5MM PITCH

CHIP CAPACITOR KIT 0402 AND 0603



Actual Size 4" x 5.5 (100 x 140mm)

Practice Lead free assembly using fine-pitch components. Each kit includes four QFP208 with Nickel-Palladium (Ni-Pd) leads and tin plated PC board.

ORDER INFO	
Quantity	Kit Nbr
1	982000
6	982006
24	982024

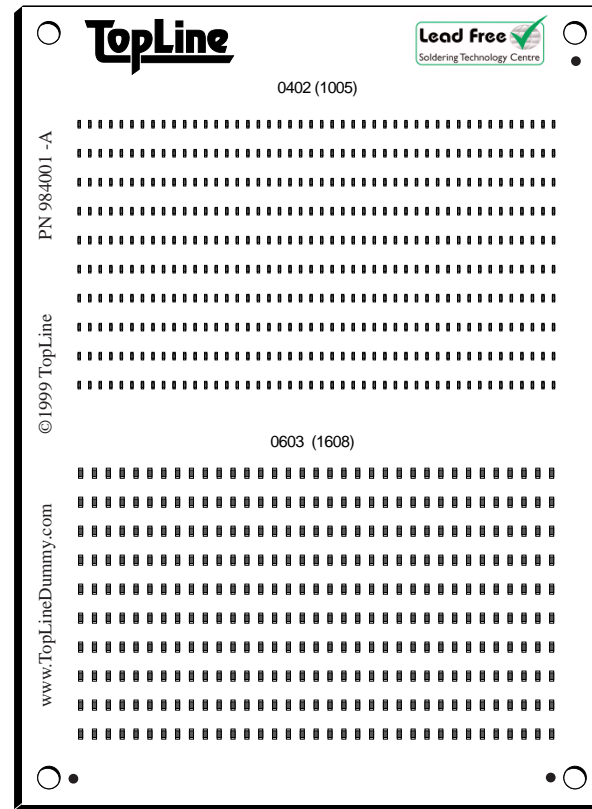
PC BOARD FEATURES

White Tin Plated (100% Sn)
LPI Solder Mask
FR4 Board .062"
Double Sided
Tooling Holes .125"
Fiducial Marks

Kits include free Gerber file for stencil and parts placement data.

ASSEMBLY METHODS

Machine Run
Hand Solder
Rework



Actual Size 4" x 5.5 (100 x 140mm)

Kit includes large quantity of chip capacitors with 100% tin terminations and a white tin plated PC Board. Capacitors presented on 4mm pitch plastic tape.

ORDER INFO	
Quantity	Kit Nbr
1	984000
10	984010
25	984025

PC BOARD FEATURES

White Tin Plated (100% Sn)
LPI Solder Mask
FR4 Board .062"
Double Sided
Tooling Holes .125"
Fiducial Marks

Kits include free Gerber file for stencil and parts placement data.

ASSEMBLY METHODS

Machine Run
Hand Solder