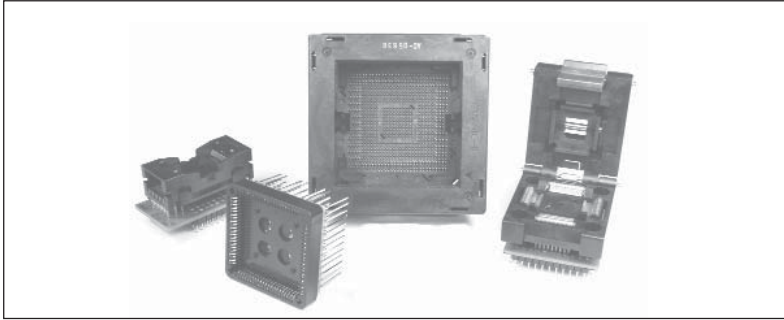


# PROTOTYPING ADAPTERS - FULLY ASSEMBLED & TESTED



## Ordering Information Example

Pin Count \_\_\_\_\_  
 Product Code \_\_\_\_\_ **AB-120-QF05 (Z)-P10-M-(1)**  
 Chip Pkg Socket Footprint \_\_\_\_\_  
 Top Socket Configurations \_\_\_\_\_  
 CQFP & PQFP only:

S = SMT Pads  
 P = Production  
 Z = ZIF Socket

Prototyping PC Board Configurations (see below)  
 Optional:  
 1 = Socket Included  
 0 = Socket Not Included

Bottom Male Pin Type:  
 M = Screw Machine Pin  
 W = Wire Wrap Post

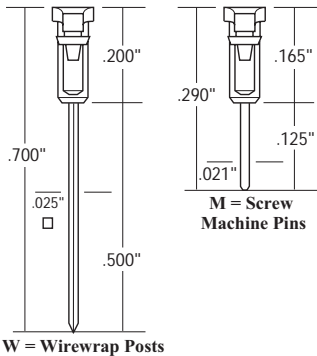
Adapt-A-Boards make it easy to adapt standard or high-density prototyping boards to a variety of packages including BGA, PLCC, PGA, PQFP, SOIC and more...

## FEATURES & BENEFITS

- Bottom configurations adapt to wire wraps or screw machine pins
- Over 300 varieties available
- Pins conform to MIL-C-45204
- Pins and sockets are gold plated; 10 u gold over 100 u nickel
- Available in standard sizes or custom designs.

## HOW TO ORDER

- 1) Determine your board configuration using the diagrams on this page (type A, B, C, or P)
- 2) Determine if you need a machine screw pins (M) or wire wrap (W) post version (see Bottom Male Pin Types below)
- 3) Determine your IC package type and locate it on the following pages
- 4) Determine your pin count



**M - Machine screw version**  
 Adapt-A-Boards are used on prototyping boards that have wire wrap posts already installed on the back side of the prototyping board. The pins on the back of these Adapt-A-Boards plug directly into these posts.

**W - Wire-wrappable Adapt-A-Boards**  
 are used in prototyping boards that have holes with nothing in them. The wire-wrap posts go through the holes and can then be wire-wrapped on the back side of the board.

## EMULATION TECHNOLOGY RECOMMENDS:

Safely handle your fine-pitch devices with a product from Emulation Technology's Vacuum handling systems.

### Vacuum Pens

ET's vacuum pens are hand-held, manually operated handling tools that allow you to lift and move fine pitch devices.



- Easily lift ICs without damaging device
- Eliminates need to touch fragile packages
- Built-in vacuum
- All pens come with tips

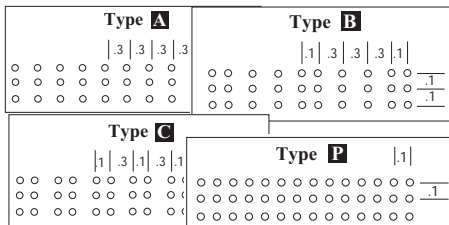
For a complete list of vacuum specifications, pricing and delivery information, please see:

**Web Link: [www.1800adapter.com/086](http://www.1800adapter.com/086)**

For a complete list of prototyping adapters, pricing and delivery information, please see:

**Web Link: [www.1800adapter.com/004](http://www.1800adapter.com/004)**

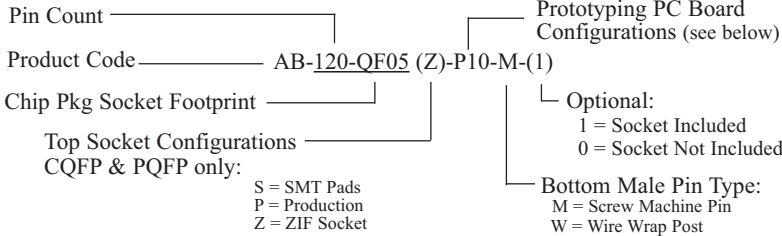
## Prototyping PC Board Configurations



P5= PGA 8X8	P10= PGA 17X17	P19= PGA 26X26
P6= PGA 9X9	P11= PGA 18X18	P20= PGA 27x27
P2= PGA 10X10	P12= PGA 19X19	P21= PGA 28X28
P1= PGA 11X11	P13= PGA 20X20	P22= PGA 29x29
P7= PGA 12X12	P14= PGA 21X21	P23= PGA 30X30
P3= PGA 13X13	P15= PGA 22X22	P24= PGA 31X31
P8= PGA 14X14	P16= PGA 23X23	P25= PGA 32X32
P4= PGA 15X15	P17= PGA 24X24	P26= PGA 33x33
P9= PGA 16X16	P18= PGA 25X25	P27= PGA 34x34

# FULLY ASSEMBLED & TESTED - PROTOTYPING ADAPTERS

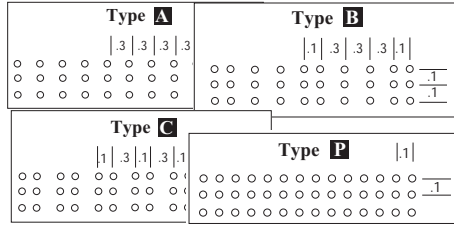
## Ordering Information Example



For a complete list of prototyping adapter specifications, pricing and delivery information, please see

Web Link: [www.1800adapter.com/004](http://www.1800adapter.com/004)

## Prototyping PC Board Configurations



P5= PGA 8X8	P10= PGA 17X17	P19= PGA 26X26
P6= PGA 9X9	P11= PGA 18X18	P20= PGA 27x27
P2= PGA 10X10	P12= PGA 19X19	P21= PGA 28X28
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P4= PGA 15X15	P17= PGA 24X24	P26= PGA 33x33
P9= PGA 16X16	P18= PGA 25X25	P27= PGA 34x34

## BGA / CSP

Pin Count	Lead Pitch (mm)	Adapter Top Female Config.	Adapter Bottom Male Config.	Pin Type	ET Part #	Drawing #
40	0.75	Surface Mount	P5	Screw Machine	AB-040-4BG5X8S-P5-M	F5362
40	0.75	Surface Mount	P5	Wire Wrap	AB-040-4BG5X8S-P5-W	F5363
48	0.75	Surface Mount	P5	Screw Machine	AB-048-4BG6X8S-P5-M	F5353
48	0.75	Surface Mount	P5	Wire Wrap	AB-048-4BG6X8S-P5-W	F5364
56	0.75	Surface Mount	P5	Screw Machine	AB-056-4BG9X8S-P5-M	F5360
56	0.75	Surface Mount	P5	Wire Wrap	AB-056-4BG9X8S-P5-W	F5361
60	0.75	Zero Insertion Socket	A	Screw Machine	AB-060-4BG11X8Z-A-M	F3057
60	0.75	Zero Insertion Socket	A	Wire Wrap	AB-060-4BG11X8Z-A-W	F2676
144	0.80	Zero Insertion Socket	P25	Screw Machine	AB-144-6BG013Z-P25-M-1	F6758
144	0.80	Zero Insertion Socket	P25	Wire Wrap	AB-144-6BG013Z-P25-W-1	F6755
168	1.27	Zero Insertion Socket	P3	Screw Machine	AB-0168-2BG016Z-P3-M-1	F4755
196	1.00	Surface Mount	P13	Screw Machine	AB-0196-3BG014S-P13-M	F6803
223	1.00	Surface Mount	P11	Screw Machine	AB-0223-3BG018S-P11-M	F6845
223	1.00	Zero Insertion Socket	P11	Screw Machine	AB-0223-3BG018Z-P11-M-1	F6706
256	1.27	Surface Mount	P9	Screw Machine	AB-0256-2BG016S-P9-M	F5318
256	1.27	Zero Insertion Socket	P9	Screw Machine	AB-0256-2BG016Z-P9-M-1	F5810
256	1.27	Zero Insertion Socket	P9	Wire Wrap	AB-0256-2BG016Z-P9-W-1	F6179
256	1.27	Production Socket	P9	Screw Machine	AB-0256-2BG020P-P9-M-1	F4222
256	1.27	Production Socket	P9	Wire Wrap	AB-0256-2BG020P-P9-W-1	F4415
256	1.27	Surface Mount	P9	Screw Machine	AB-0256-2BG020S-P9-M	F4439
256	1.27	Zero Insertion Socket	P9	Screw Machine	AB-0256-2BG020Z-P9-M-1	F4222
256	1.27	Zero Insertion Socket	P9	Wire Wrap	AB-0256-2BG020Z-P9-W-1	F4415
256	1.00	Zero Insertion Socket	P13	Screw Machine	AB-0256-3BG016Z-P13-M-1	F5342
256	1.00	Zero Insertion Socket	P13	Wire Wrap	AB-0256-3BG016Z-P13-W-1	F6847
272	1.27	Zero Insertion Socket	P10	Screw Machine	AB-0272-2BG020Z-P10-M-1	F5032
304	1.27	Production Socket	P11	Screw Machine	AB-0304-2BG023P-P11-M-1	F5064
304	1.27	Zero Insertion Socket	P11	Wire Wrap	AB-0304-2BG023Z-P11-W-1	F6244
352	1.27	Zero Insertion Socket	P19	Screw Machine	AB-0352-2BG026Z-P19-M-1	F5547
357	1.27	Production Socket	P13	Screw Machine	AB-0357-2BG019P-P13-M-1	F5446
361	1.27	Zero Insertion Socket	P12	Screw Machine	AB-0361-2BG019Z-P12-M-1	F5028
388	1.27	Production Socket	P14	Screw Machine	AB-0388-2BG026P-P14-M-1	F5158
400	1.27	Zero Insertion Socket	P13	Screw Machine	AB-0400-2BG020Z-P13-M-1	F5103
432	1.27	Zero Insertion Socket	P14	Screw Machine	AB-0432-2BG031Z-P14-M-1	35708
441	1.27	Zero Insertion Socket	P14	Screw Machine	AB-0441-2BG027Z-P14-M-1	F4448
456	1.27	Production Socket	P15	Screw Machine	AB-0456-2BG026P-P15-M-1	F6018
456	1.27	Production Socket	P15	Wire Wrap	AB-0456-2BG026P-P15-W-1	F4504
456	1.27	Zero Insertion Socket	P15	Wire Wrap	AB-0456-2BG026Z-P15-W-1	F6709
560	1.27	Zero Insertion Socket	P42	Screw Machine	AB-0560-2BG033Z-P42-M-1	F6296
600	1.27	Zero Insertion Socket	P20	Screw Machine	AB-0600-2BG035Z-P20-M-1	F5478
600	1.27	Zero Insertion Socket	P20	Wire Wrap	AB-0600-2BG035Z-P20-W-1	F5477
625	1.27	Zero Insertion Socket	P18	Screw Machine	AB-0625-2BG025Z-P18-M-1	F5324
652	1.27	Zero Insertion Socket	P50	Screw Machine	AB-0652-2BG035Z-P50-M-1	F6354
652	1.27	Zero Insertion Socket	P50	Wire Wrap	AB-0652-2BG035Z-P50-W-1	F6355
672	1.00	Production Socket	P21	Screw Machine	AB-0672-3BG026P-P21-M-1	F5511

PROTOTYPING ADAPTERS, EXTENDERS & PROTOTYPING BOARDS

For a complete list of prototyping adapters, pricing and delivery information, please see:

Web Link: [www.1800adapter.com/004](http://www.1800adapter.com/004)