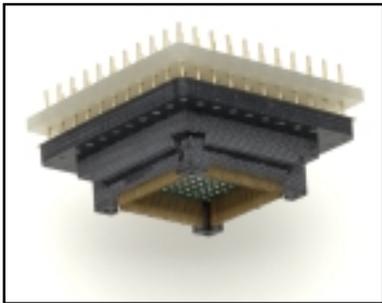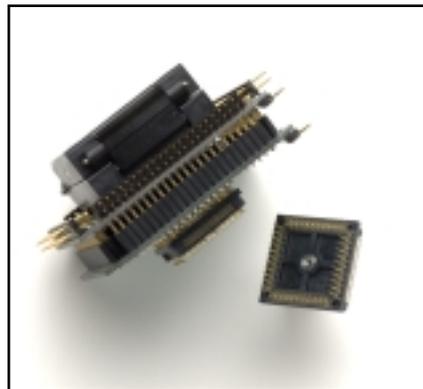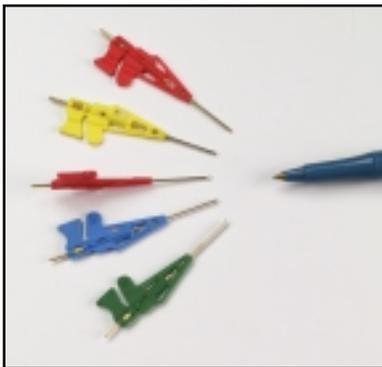*BGA Adapters for TLA700 Analyzers*
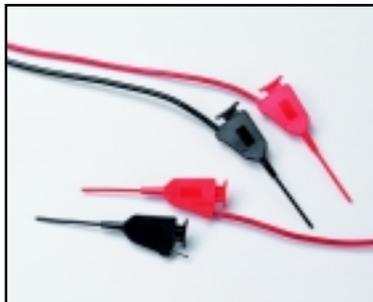

Scope adapters and probes

Clip-on probing for QFP devices

Surface mount QFP Logic Analyzer adapters

MicroClips for fine pitch QFP devices

Large variety of scope accessories

Logic Analyzer Adapters

Logic Analyzer and scope adapters are designed to give access to each signal pin on a high-density IC. Some variations are specifically adapted to connect to a specific logic analyzer such as using MICTOR connectors for Agilent and Tektronix analyzers.

INTERCONNECTIONS

Socketable
Use a socketable adapter when you have a socket for the device on your target board. The adapter plugs into the socket and another socket exists on top to plug in the IC.

Solder-Down
In some cases, you have to solder the adapter onto the target board in place of the actual IC. Then, place the IC in the adapter. For many QFP devices, we have the PolyPod line that acts as a socket for the device.

Clip-On
The clip-on test clip attaches to the device directly on the target and breaks its pins out to .025 wire wrap test points or to Amp Mictor connectors.

Pin Isolators
Pin Isolators allow you to isolate the device pins from the target and condition them according to your requirements. They also allow easy rewiring of connections if necessary.

Scope Probes and Accessories
A full-line of Grabbers, Microclips, Scope Probes, and Probe kits compliment our complete support for logic analysis.

WHAT ARE YOU GOING TO DO?

Let Adapters.com sales staff guide you through from start to finish. We offer a wide array of adapters to choose from and our team will deliver custom solutions to suit whatever your requirements.

BGA Bug Catchers

With BGA packages the simple task of breaking out the signals for debugging becomes an overwhelming task for the unsuspecting engineer. How do I solder my device to the target? Will the adapter I bought handle my testing speed? Will coplanarity be an issue? Adapters.com BGA adapters are designers best friend. BGA Bug Catchers typically come in two categories. Generic break outs for signal access, probing and device and Analyzer specific for more in depth testing and signal monitoring.

TARGET INTERFACE
Both types begin with a surface mount base that emulates the physical characteristics of the actual device to be tested. This virtually eliminates keep out area (some adapters require more space), while at the same time makes installing the adapter as easy as mounting the device. Gold plated interface contacts and eutectic solder balls make for reliable mounting and subsequent testing.

SIGNAL ACCESS
The break out or probe board can be provide with generic .025 wire wrap post spaced on .100 mil or the 38 pin Amp Mictor connectors depending on the application. In some designs controlled impedance, and matched pair signal traces are standard on the probe boards.

SOCKETING THE DEVICE
The last assembly consist of the actual IC socket. Due to our good association with the industries leading socket designers and manufactures no matter what your package conforms to we can find a socket or have a custom one designed for you to get up to speed ASAP.
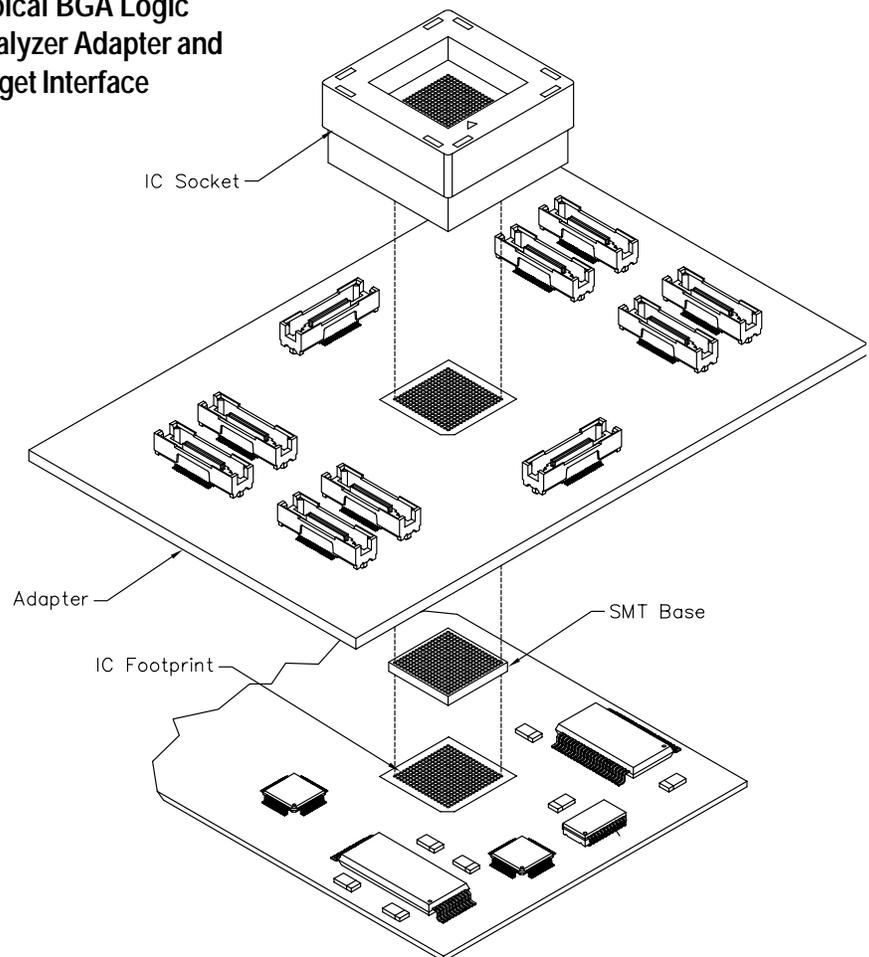
PACKAGE SUPPORT
Due to the ever expanding array of grids, body sizes and ball spacing we ask that you go to our web site www.adapters.com and browse our complete list of the IC sizes and package types we support.
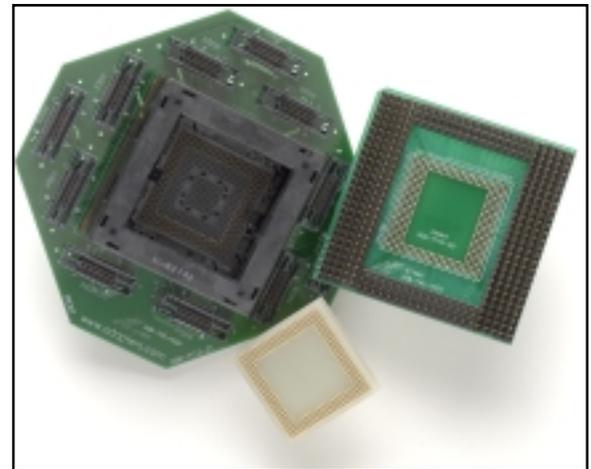
BGA Logic Analyzer Adapters

Typical BGA Logic Analyzer Adapter and Target Interface

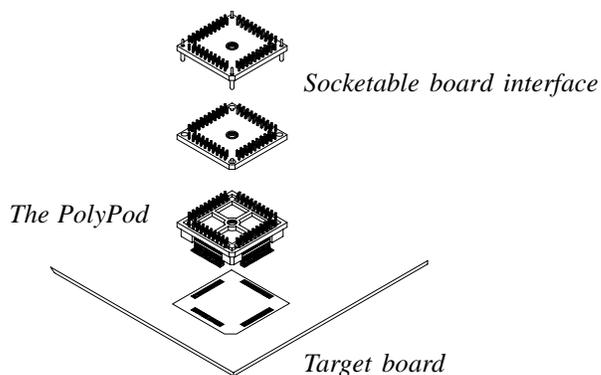IC Socket

Adapter

IC Footprint

SMT Base

QUICK ORDER GUIDE: DETERMINE
• Acquire mechanical spec's of the device under test
• Generic breakout or device specific pin assignment required
• Logic analyzer manufacturer and probe model number and user's guide .pdf
• Additional requirements: ie size and height restrictions, electrical performance characteristics

27

Typical QFP Analyzer adapter

Device Zif Socket

Test Interface

Mid Sub Assembly

Target Interface " Tht PolyPod"
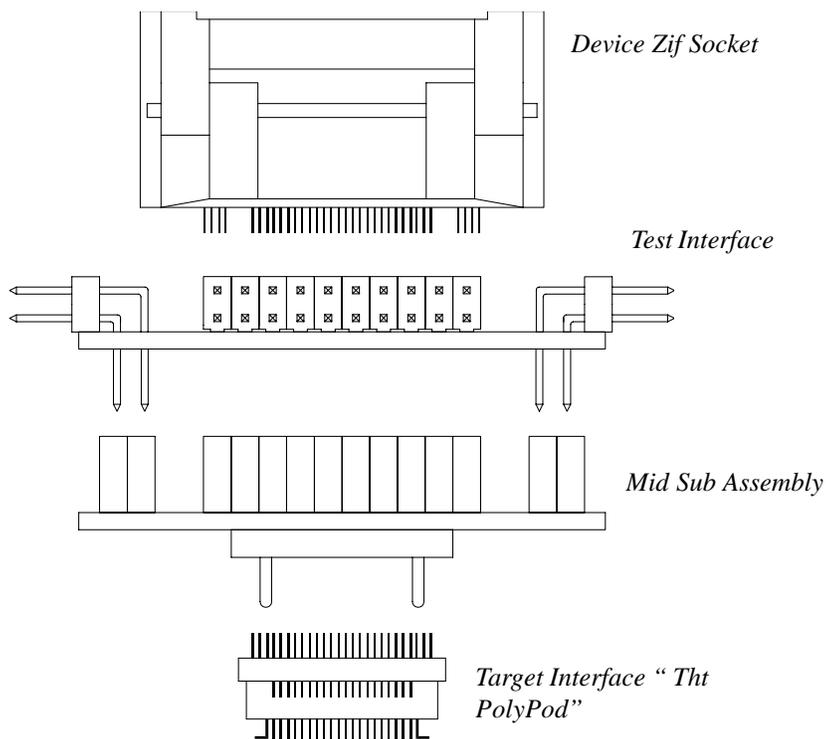
The PolyPod Surface mountable Interface

Socketable board interface

The PolyPod

Target board

QFP Bug Catchers

Adapters.com has made a commitment to offer developers a wide array of cost saving solutions to fit in their ever changing world. In this case it means offering the most versatile products for standard QFP technologies and constant innovations for newer emerging technologies.

THE POLYPOD
Our line of QFP logic analyzer adapters are just that both innovative and versatile. First we start with the PolyPod surface mount base. This product revolutionized the QFP market since its introduction 5 years ago. With cost of these adapters at less than half the competition, better reliability, and the ease of installation -- we ask why buy another QFP solder down base? With all the pin counts supported, and the large inventory we have got what you need, and it's in stock!

Adapters.com adapters are designed to be modular in design to allow for multiple board testing with the minimum amount of extra hardware

TEST INTERFACE
Breaking out the signals is done via the use of probe boards. These boards are similar in design and concept as the probe boards for the BGA adapters on the proceeding pages. They can be generic in design or have all the signal integrity characteristics of our high-end adapters.

SOCKETING THE DEVICE
Our adapters come with a most impressive array of socket styles and choices. Typically the first choice is a lidded ZIF socket but some developers prefer open-top designs. Our designers utilize both styles to accommodate every engineers preferences. Let one of our sales pro's help you select the adapter that best fits your design environment.

MODULAR DESIGN
Most of our adapters are designed with flexibility in mind, this allows you to field configure iyour solutions. Your design world is ever changing and your test adapters should be able to adapt.

QUICK ORDER GUIDE: DETERMINE
• Acquire mechanical spec's of the device under test
• Generic breakout or device specific pin assignment required
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• Additional requirements: ie size and height restrictions, electrical performance characteristics

28

QFP Bug Logic Analyzer Adapters

Adapters.com offers one of the most extensive lines of QFP logic analyzer adapters in the industry. By using the PolyPod surface mountable base this line is the most field configurable adapter money can buy.

The engineer solders a modular surface mount base to their target in place of the IC. to be tested. Depending on the configuration the base can also be used as a socket by inserting the IC. and using an optional cover. The top assembly or break out board translates the signals to .100 mil spaced .025″ wire wrap test points or with custom adapters have the analyzers specific probe connector designed in.
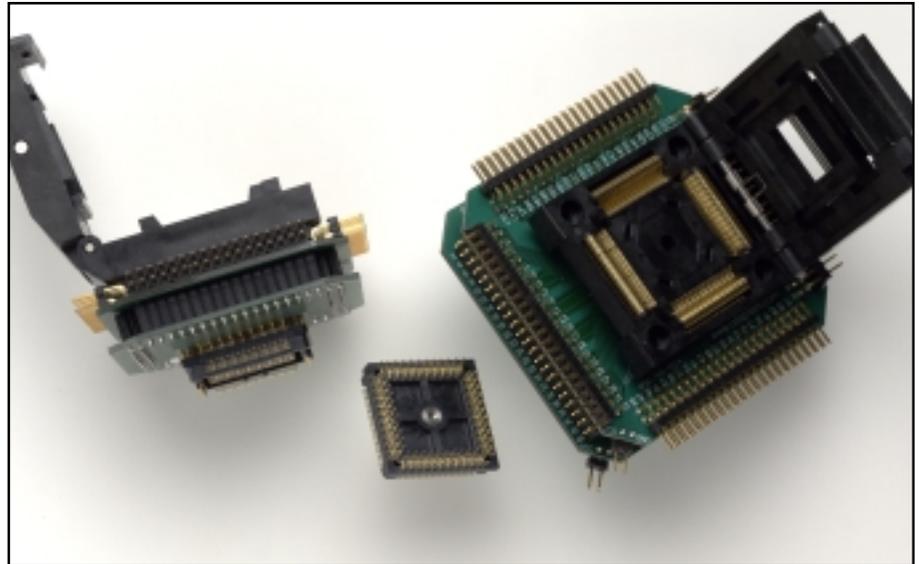
The largest selection of QFP logic analyzer adapters, all featuring the PolyPod

QFP logic analyzer adapter selector (Call if your adapter is not listed)

Footprint	Body	Part Number	Footprint	Body	Part Number	Footprint	Body	Part Number
32 pin .8mm	7.0 x 7.0	120-4262-00	80 pin .4mm	12.0 x 12.0	120-4325-00	144 pin .5mm	20.0 x 20.0	120-4414-00
40 pin .65mm	10.0 x 10.0	120-4272-00	100 pin .8mm	22.0 x 22.0	120-4360-00	144/160 pin .65m	28.0 x 28.0	120-4418-00
44 pin .8mm	10.0 x 10.0	120-4276-00	100 pin .5mm	14.0 x 14.0	120-4352-00	156 pin .4mm	14.0 x 20.0	120-4425-00
44 pin 1mm	14.0 x 14.0	120-4278-00	100 pin .4mm	12.0 x 12.0	120-4350-00	160 pin .65mm	28.0 x 28.0	120-4435-00
48 pin .5mm	10.0 x 10.0	120-4280-00	100 pin .65mm	14.0 x 20.0	120-4358-00	160 pin .5mm	24.0 x 24.0	120-4433-00
48 pin .8mm	7.0 x 7.0	120-4284-00	112 pin .65mm	20.0 x 20.0	120-4367-00	168 pin .65mm	28.0 x 28.0	120-4440-00
52 pin .65mm	10.0 x 10.0	120-4287-00	120 pin .4mm	14.0 x 14.0	120-4370-00	176 pin .5mm	24.0 x 24.0	120-4446-00
56 pin .65mm	10.0 x10.0	120-4293-00	120 pin .5mm	16.0 x 16.0	120-4372-00	176 pin .4mm	20.0 x 20.0	120-4442-00
64 pin 1mm	14.0 x 20.0	120-4308-00	120 pin .5mm	20.0 x 20.0	120-4373-00	208 pin .5mm	28.0 x 28.0	120-4450-00
64 pin .8mm	14.0 x 14.0	120-4306-00	120/144 pin .5mm	20.0 x 20.0	120-4373-00	240 pin .5mm	32.0 x 32.0	120-4464-00
64 pin .65mm	12.0 x 12.0	120-4304-00	128 pin .5mm	18.0 x 18.0	120-4382-00	256 pin .5mm	27.2 x 39.2	120-4473-00
72 pin .5mm	10.0 x 10.0	120-4315-00	128 pin .5mm	14.0 x 20.0	120-4383-00	256 pin .4mm	28.0 x 28.0	120-4471-00
80 pin .8mm	14.0 x 20.0	120-4332-00	128 pin .8mm	28.0 x 28.0	120-4386-00	304 pin .5mm	30.0 x 30.0	120-4480-00
80 pin .65mm	14.0 x 14.0	120-4329-00	132 pin .635mm	24.2 x 24.2	120-4388-00			
80 pin .5mm	12.0 x 12.0	120-4327-00	144 pin .4mm	16.0 x 16.0	120-4410-00			

SOIC Bug Catchers

Small Outline Integrated Circuits come in many sizes , shapes, and package variations and our sales and engineering staff is ready to adapt any to your design environment. These adapters allow you to perform in circuit testing, and signal probing.

TARGET INTERFACE
The developer begins by soldering a surface mount base to the target board. The base emulates the physical characteristics of the device under test. The base bases come in to styles or types.

J-Lead Foot
A PCB roughly the same size as the device with bent and formed leads that solder to the target using the same methods as the actual device.

Solder Column Foot
This style uses solder column technology for mounting to the target PCB. This style is typically run through a re-flow oven.

TEST INTERFACE
The test interface consist of a PCB with standard .025 wire wrap post for easy signal access, and an off the shelf SOIC device Zif socket for holding the D.U.T.. The individual signals are numbered for ease of use and hands free testing.

MODULAR DESIGN
Like most of our adapters these are modular in design and function. Utilizing modular design allows you the developer to test multiple boards by purchasing extra target interfaces and utilizing the same probe assembly .

CUSTOMER SERVICE
CALL US AND YOU WILL TALK WITH A LIVELY INTELLEGENT PERSON

ANY PACKAGE....
ANY PACKAGE, ANY DEVICE, ANY ANALYZER

SOIC, TSOP Bug Catchers

Lead Count	IC	Base Type	Part number
8	SOIC, 1.27mm	J-lead	120-4500-00
16	SOIC, 1.27mm	J-lead	120-4510-00
18	SOIC, 1.27mm	J-lead	120-4515-00
20	SOIC, 1.27mm	J-lead	120-4520-00
28	SOIC, 1.27mm	J-lead	120-4530-00
32	TSOP, 0.5mm	Leadless	120-4541-00
32	SSOP, 0.65mm	Leadless	120-4542-00
36	TSSOP, 0.8mm	Leadless	120-4548-00
44	SOIC, 1.27mm	J-lead	120-4560-00
44	SOIC, 1.27mm	T3	120-4560-50
48	TSOP, 0.5mm	Leadless	120-4566-00
56	SOIC, 1.27mm	Leadless	120-4580-00

QUICK ORDER GUIDE: DETERMINE
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• Generic breakout or device specific pin assignment required
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Pin Isolators

Adapters.com realizes at some point in time most developers need to isolate a signal or a group of signal to test one function of their firmware or another. We have designed our pin isolators with that thought in mind. These adapters are typically socketable to the target board, then allow for the device to be placed in circuit and via conveniently placed dip switches or jumper shunts allow for individual circuits to be isolated.

DIP ISOLATORS

DIP Isolators? Yes the tried and true are still in circulation today. Dip Isolator have a male socketable dip footprint for adapting to the target, and then have a zif socket for the D.U.T.. The adapter has two boards mounted vertically with dip switches for easy access to the signals that need to be isolated.

PLCC ISOLATORS

Adapters.com PLCC isolator adapters use a unique two board design that not only allows you to isolate the signals but doubles as a logic analysis adapter for probing and signal verification. On the test interface board rows of numbered test points connected via jumper shunts allows easy manipulation of the desired signals that need to be tested.

QFP ISOLATORS

Our customers demanded that we include adapters for QFP devices. Now we also have included them in to our line of Isolator adapters. Although these adapters are typically surface mount, socket version can be designed per your requirements. In some cases the adapters work with OEM supplied connectors with some of the industries leading development tool makers, and work well with our PolyFlex line of high speed rigid flex adapters.
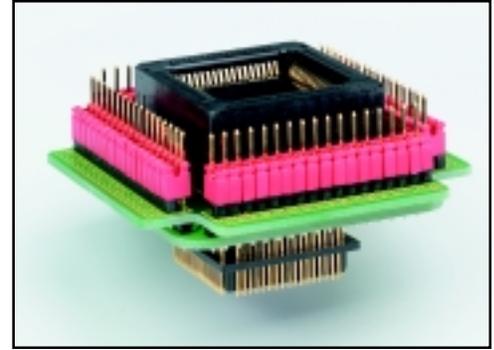
At Adapters.com our goal is to be a one stop shop for all your interconnect challenges. Start all your projects right by giving our technical sales professionals a call, you will be the one who gets it done fast, and has the least amount of down time in your development.

PLCC ISOLATORS

INNOVATIVE 2 BOARD DESIGN

EASY TO USE
MULTIPURPOSE ADAPTER

PLCC Pin Isolator

Pin Isolators, PLCC and DIP, and socket configurations

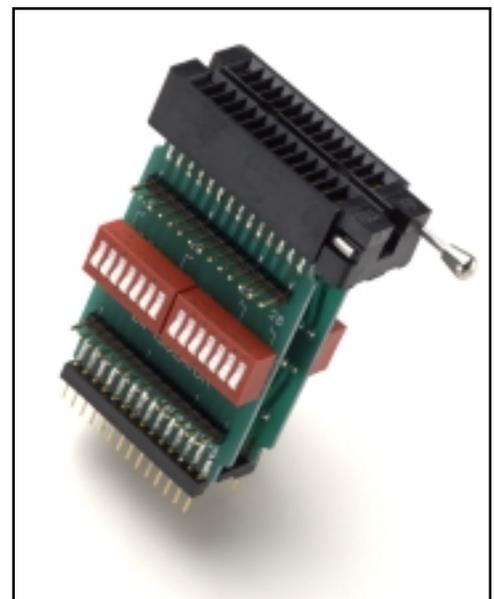| Footprint	Socket	Part Number	Footprint	Socket	Part Number
24 pin DIP .300 mil wide	Production Zif	120-4976-00 120-4976-01	20 pin PLCC	Zif	120-5260-10
28 pin DIP .300 mil wide	Production Zif	120-4980-00 120-4980-01	28 pin PLCC	Production Zif	120-5261-00 120-5261-10
28 pin DIP .600 mil wide	Production Zif	120-4981-00 120-4981-01	32 pin PLCC	Production Zif	120-5266-00 120-5266-10
32 pin DIP .600 mil wide	Production Zif	120-4983-00 120-4983-01	44 pin PLCC	Production Zif	120-5271-00 120-5271-10
48 pin DIP .600 mil wide	Production Zif	120-4992-00 120-4992-01	52 pin PLCC	Production Zif	120-5276-00 120-5276-10
			68 pin PLCC	Production Zif	120-5281-00 120-5281-10
Call for PGA footprint selection			84 pin PLCC	Production Zif	120-5286-00 120-5286-10

QFP ISOLATORS

UTILIZES POLYPOD TECHNOLOGY

SUPPORTS MANY DEVELOPMENT TOOL CONFIGURATIONS

ANY PACKAGE....

ANY PACKAGE, ANY DEVICE

DIP Pin Isolator

31