# QFP DELTA PROBE ADAPTERS

### www.adapt-plus.com



## **Product Overview**

#### Introduction

The Delta Probe gives you an accurate, mechanically non-invasive way to make contact with IC pins for chips having spacing of 0.5, 0.65, .635, or .8mm. The Delta Probe supports IC package configurations for the following ICs:

80 Pin	.5 mm TQFP	8800-0057
80 Pin	.65 mm PQFP	8800-0101
100 Pin	.5 mm TQFP	8800-0001
100 Pin	.65mm PQFP	8800-0011
112 Pin	.65 mm PQFP	8800-0159
120 Pin	.5 mm TQFP	8800-0055
128 Pin	.5 mm w/ heatsink	SDT8800-0033
128 Pin	.5 mm SDT, TQFP	8800-0033-TC
128 Pin	.8 mm CQFP	8800-0071
128 Pin	.8 mm PQUAD	8800-0074
132 Pin	.635 Motorola	8800-0029
132 Pin	.635 intel PQFP	8800-0070
144 Pin	.5 mm TQFP	8800-0003
144 Pin	.65 mm PQFP	8800-0087
160 Pin	.5 mm TQFP	8800-0125
160 Pin	.65 mm PQFP	8800-0034
176 Pin	.5 mm TQFP	8800-0121
184 Pin	.65 mm PQFP	8800-0066
208 Pin	.5 mm PQFP	8800-0032
208 Pin	.5 mm MQUAD	8800-0083
240 Pin	.5 mm PQFP	8800-0067
240 Pin	.5 mm CQFP	8800-0096

The Delta Probe has compressible wedge-shaped conductors that insert tightly into the spaces between the IC pins con-forming to the size and shape of each pin. The conductors themselves are manufactured with beryllium copper and kapton insulation and offer you the ease of a snap-on fit with exceptional durability. Reliability Each wedge of a Delta Probe contains two conductors thus providing a redundant electrical contact to each pin of the IC being probed. Now you can spend more time performing measurements and less time debugging your test harness.





SPECIFICATIONS Voltages: Both 3.3v and 5v Electrical loading on target system: capacitance: <1.5 pf, resistance: <1.0 ohm Insertions: supports multiple insertions

#### Minimal Keep-Out Area

Conventional methods typically require you to mask off significant areas of your PC board in order to accommodate clumsy, awkward and often unreliable devices that typically include bulky mounting hardware, adhesives, etc. The Delta Probe offers you the ease of a snap-on fit, which greatly reduces the need to use mechanical probe accessories, and reduces the amount of time you'll spend connecting your target to your test instrumentation. The Delta Probe may be used with a variety of test equip-ment such as logic analyzers, microprocessor emulators, and oscilloscopes. Signals are conveyed from the legs of the device under test to a standard PGA pattern on top of the Delta Probe. This enables the attachment of your test equipment to a standard PGA pattern. This connection can be made directly to your test equipment or through a tran-sition board when necessary. When mechanical decoupling is required, the use of a generic flexible cable transfers the PGA pattern to the end of the flexible cable.

#### **Test Equipment Connections**

Similar flexible cables, described as cross flex cables, match the PGA pattern on top of the Delta Probe and by the use of a Double Header transfer the signals a short distance from the top of the Delta Probe to rows of pins allowing selected signals to be measured using a logic analyzer.

#### Durability

The Delta Probes have been refined and tested to ensure you will have consistent and repeatable connections. Our lab tests have shown that an excess of 1,000 insertions and removals can be performed with no degradation in the reliability of the connection.

#### Low Electrical Intrusion

Low resistance and capacitance inherent to the design of the Delta Probe ensures the fidelity of the signals conveyed to your test equipment.

