# PA-H8/325-68x Data Sheet 68 pin PLCC socket/28 pin DIP 0.6" plug

## S upported Device/Footprints

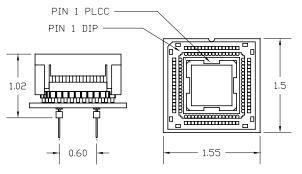
These adapters allow EPROM programming of several Hitachi 68 pin H8/32x devices in their PLCC, CLCC or LCC packages on 28 pin DIP programmers.

Hitachi device part numbers H8/322, H8/323 and H8/325 program in the 27C 256 28 pin DIP footprint.

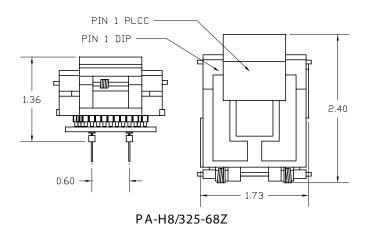
These adapters are direct replacements for Hitachi programming adapters. See the following cross reference.

| LSC adapter   | Testskt    | Device package           | Hitachi adapter |
|---------------|------------|--------------------------|-----------------|
| PA-H8/325-68  | Auto-Eject | PLCC and CLCC            |                 |
| PA-H8/325-68Z | Lidded-ZIF | PLCC and CLCC. LCC with  | HS 328E S C 01H |
|               |            | shim installed in socket |                 |

## Adapter Dimensions



PA-H8/325-68



## EPROM Address Mapping

The H8's EPROM is at the same address for MCU mode (normal execution) and EPROM programming. The valid EPROM addresses for each device are as follows.

| Device | EPROM size | EPROM     | MCU       |  |  |
|--------|------------|-----------|-----------|--|--|
|        |            | addresses | addresses |  |  |
| H8/322 | 8K bytes   | 0000-1FFF | 0000-1FFF |  |  |
| H8/323 | 16K bytes  | 0000-3FFF | 0000-3FFF |  |  |
| H8/325 | 32K bytes  | 0000-7FFF | 0000-7FFF |  |  |
|        |            |           |           |  |  |

#### Adapters-Plus Inc. P.O. BOX 900 Tracy, Ca 95378 ph.209-839-0200 fax.209-839-0235 email: sales@adapt-plus.com

### Adapter Construction

The adapter is made up of 2 sub-assemblies. They assemble via connectors making the adapter modular. This way the sub-assemblies can be replaced easily.

When disassembling the adapter take care not to bend the pins. When reassembling the adapter note the pin 1 indicators to align the parts correctly.

The following chart shows the various socket and board part numbers that make up these adapters.

| Adapter       | Socket | Board   |
|---------------|--------|---------|
| PA-H8/325-68  | 68-304 | 325-68  |
| PA-H8/325-68Z | 68-390 | 325-68Z |

#### T<u>est Socket</u>

| LSC #  | S tyle     | Mfgr/P n                |
|--------|------------|-------------------------|
| 68-304 | Auto-Eject | Yamaichi IC120-0684-304 |
| 68-390 | Lidded ZIF | Yamaichi IC 51-0684-390 |

## Shims for the ZIF Socket

The ZIF socket will accept the LCC package as well as the PLCC and CLCC packages. Since the LCC package is thinner than the PLCC a shim must be installed in the ZIF socket to provide proper contact pressure.

LCC thickness varies. For any particular LCC package design, the shim thickness will need to be determined. The ZIF socket was designed to accommodate the PLCC package which is 0.170" + 0.005" thick.

If you need assistance with shims, please call us. We will be happy to help you out.

## Adapter Wiring

The following chart shows the connections from the PLCC device to the adapter's DIP plug.

| H8/32x device/socket pin |               |        |        |    |                   |
|--------------------------|---------------|--------|--------|----|-------------------|
|                          | DIP plug pins |        |        |    |                   |
|                          |               | 27c256 | Signal |    |                   |
| 9                        | 1             | VPP    | vcc    | 28 | 33, 34, 15,<br>42 |
| 46                       | 2             | A12    | A14    | 27 | 44                |
| 53                       | 3             | A7     | A13    | 26 | 45                |
| 54                       | 4             | A6     | A8     | 25 | 50                |
| 55                       | 5             | A5     | A9     | 24 | 14                |
| 56                       | 6             | A4     | A11    | 23 | 47                |
| 57                       | 7             | A3     | OE*    | 22 | 49                |
| 58                       | 8             | A2     | A10    | 21 | 48                |
| 59                       | 9             | A1     | CE*    | 20 | 43                |
| 60                       | 10            | A0     | D7     | 19 | 26                |
| 19                       | 11            | D0     | D6     | 18 | 25                |
| 20                       | 12            | D1     | D5     | 17 | 24                |
| 21                       | 13            | D2     | D4     | 16 | 23                |
| 13, 12, 16,<br>17, 52    | 14            | GND    | D3     | 15 | 22                |

All other PLCC pins are not connected.