

# PA591-44(Z) Data Sheet

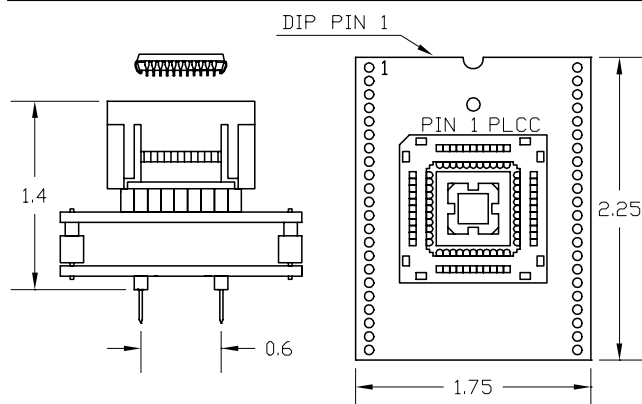
44 pin PLCC socket/40 pin DIP 0.6" plug

## Supported Device/Footprints

This adapter allows programming of Philips 87C591 44 pin PLCC, CLCC, and LCC devices in the 40 pin DIP footprint of an 87C51-FC.

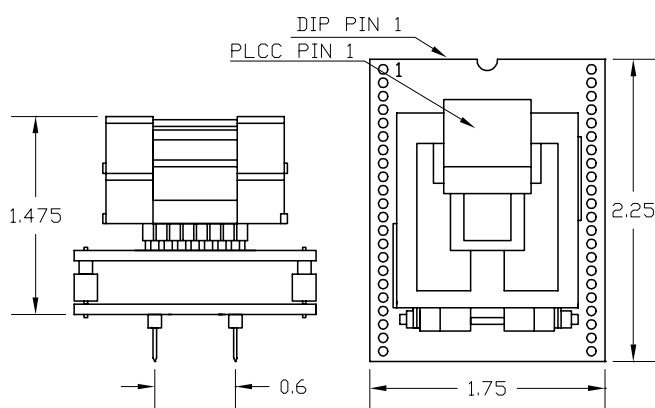
Mfgr	Device	Package	Device	Footprint Plug
Philips	87C591	PLCC	87C51-FC	40 Pin DIP

## Adapter Dimensions



Press rim to open socket, Press device to close

PA591-44



PA591-44Z

## Adapter Parts & Part Numbers

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

Adapter	Socket	Top Board	Bottom Board
PA591-44	44-106 or 44-306	44PL2-1 or 44PL2-3	591-44
PA591-44Z	44-400	44PL2-Z	591-44

## Adapter Construction

The adapter is made up of 3 sub-assemblies. They assemble via connectors making the adapter modular. This way the sub-assemblies can be replaced when they wear out.

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.

### Test Socket

PLCC Auto-Eject test socket:

Yamaichi Part #: IC120-0444-106

LSC Part #: 44-106

Yamaichi Part #: IC120-0444-306

LSC Part #: 44-306

PLCC Lidded ZIF socket:

Yamaichi Part #: IC51-0444-400

LSC Part #: 44-400

44PL2-1, -3, -Z

Accepts the test socket and connects to the bottom board.

591-44

Performs the wiring shown in the Adapter Wiring section.

## Adapter Wiring

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

DEVICE	SIGNAL	PLUG	DEVICE	SIGNAL	PLUG
1	AVss	20	23	Vdd	40
2	P1.0	1	24	P2.0	21
3	P1.1	2	25	P2.1	22
4	P1.2	3	26	P2.2	23
5	P1.3	4	27	P2.3	24
6	P1.4	5	28	P2.4	25
7	P1.5	6	29	P2.5	26
8	P1.6	7	30	P2.6	27
9	P1.7	8	31	P2.7	28
10	RST-*	9	32	PSEN-	29
11	P3.0	10	33	ALE/PROG-	30
12	PMW0	-	34	PMW1	-
13	P3.1	11	35	EA-/Vpp	31
14	P3.2	12	36	P0.7	32
15	P3.3	13	37	P0.6	33
16	P3.4	14	38	P0.5	34
17	P3.5	15	39	P0.4	35
18	P3.6	16	40	P0.3	36
19	P3.7	17	41	P0.2	37
20	XTAL2	18	42	P0.1	38
21	XTAL1	19	43	P0.0	39
22	Vss	20	44	Vdd	40

\*RESET is active low for the 87C591, and active high for the 87C51-FC. The signal is inverted on the adapter.

## Memory Map

The 87C591 is a 16K device (0000 - 3FFF), while the 87C51-FC is a 32K device (0000 - 7FFF). The programmer's address range should be reduced when using this adapter.



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