# PA1048C-128 Data Sheet
128 pin QFP socket/28 pin DIP 0.6" plug

Supported Device/Footprints

Using this adapter several 128 pin Lattice devices in QFP packages can be programmed on 28 pin DIP programmers.

Device			Footprint	
Mfgr	Device	Package	Device	Plug
Lattice	pLSI1048C	QFP	pLSI1048C	28 pin DIP
"	ispLSI1048C		ispLSI1048C	
"	pLSI2096		pLSI2096	
	ispLSI2096		ispLSI2096	

Adapter Dimensions
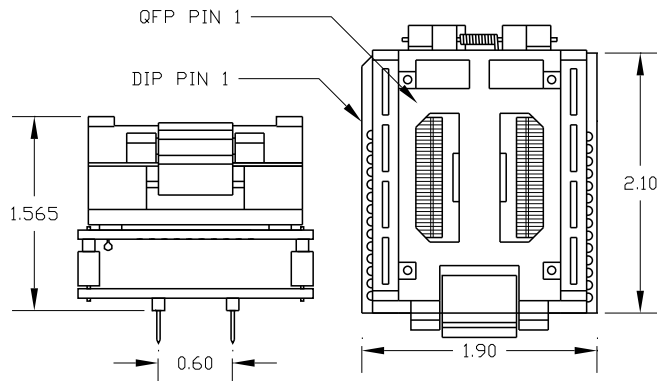
Adapter Construction

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 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.

4802-128
Performs the wiring shown in the adapter wiring section, and carries the following test socket:

Lidded QFP socket:
  Enplas Part #: FPQ-128-0.8-05A   LSC #: 128-05A
  Yamaichi Part #: IC51-1284-976-2   LSC #: 128SG-976

28-170
Connects to the top board and provides the 28 pin DIP plug.

Adapter Wiring

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

DEVICE	SIGNAL	PLUG
78	SCLK	1
20	SD1	2
46	MODE	3
18	/ispEN	4
116**	IN 10	5
14**	IN 11	6
118	IO 73	7
7	IO 89	8
8	IO 90	9
9	IO 91	10
10	IO 92	11
11	IO 93	12
12	IO 94	13
1, 17, 33, 49, 65, 81, 97, 112	GND	14
50	SD0	15
22	IO 1	16
45	IO 23	17
109	IO 71	18
19	RESET	19
15	Y0	20
83	Y1	21
80	Y2	22
79	Y3	23
67	IO 37	24
68	IO 38	25
69	IO 39	26
70	IO 40	27
16, 48, 82, 113	VCC	28

** indicates signals with 2K ohm series resistors on.
VCC to GND has a 0.1uf capacitor.