PA51-QD(-03, -14C or -16) Data Sheet 44 pin PQFP or TQFP socket/40 pin DIP 0.6" plug

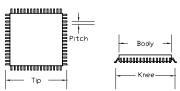
Supported Device/Footprints

These adapters allows programming of many QFP devices in their DIP footprint. The following is a <u>partial</u> list.

The following devices are supported using the indicated footprint. **Multi-Source:** 8748, 8749, 8751H, 87C51, 87C52, 87C51-FA, 87C51-FB, 87C51-FC, 87C528, 87C652, 87C654, AT89C51 **Philips 13.2mm:** 89C51-RC+, 89C51-RD+ **Atmel 13.8mm:** T87C52X2

Footprint: Same device 40DIP 0.6"

The QFP socket accepts packages with the dimensions listed below:



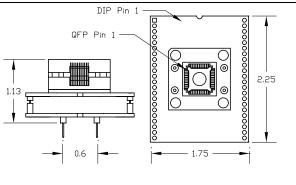
Socket	Body	Knee	Tip (lead span)	Pitch
44QF-03 TQFP	10.0 mm typ	11 mm typ 11.3 mm max	12 mm typ 12.8 mm max	0.8 mm
44QF-14C	10.0 mm typ	12.8 mm typ		0.8 mm
PQFP				
44QF-16 PQFP	10.0 mm typ	11.6 mm typ	13.2 mm typ	0.8 mm

Which adapter is correct for your package

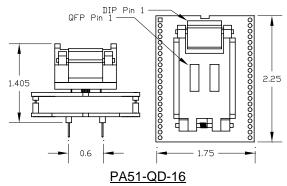
There are several 44QFP packages. Some devices are available in more that one 44QFP package. Lookup the lead span for the package you will be using. Find the matching socket in the table above. Find the adapter that includes that socket in the Adapter Construction section.

Logical Systems maintains a device to adapter cross reference in our office and on our web site. Contact us or visit our web site to look up a manufacturer and device or package code.

Adapter Dimensions



PA51-QD-03



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 easily.

The following chart shows the various socket and board part numbers of the adapters described by this datasheet.

Adapter	Socket	Top Board	Bottom Board
PA51-QD-03	44QF-03	44QF-03	51BASE
PA51-QD-14C	44QF-14C	44QF-16	51BASE
PA51-QD-16	44QF-16	44QF-16	51BASE

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 Sockets

LSC #	Style	Mfgr/Pn
44QF-03	Open Top ZIF	Enplas OTQ-44-0.8-03
44QF-14C	Lidded ZIF	Enplas FPQ-44-0.8-14C
44QF-16	Lidded ZIF	Enplas FPQ-44-0.8-16

Adapter Wiring

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

u	to the adapter's DIP plug.						
	DEVICE	SIGNAL	PLUG	PLUG	SIGNAL	DEVIC	
						E	
	1	P1.5	6	26	P2.5	23	
	2	P1.6	7	27	P2.6	24	
	3	P1.7	8	28	P2.7	25	
	4	RST	9	29	PSEN-	26	
	5	P3.0	10	30	ALE/PROG-	27	
	6	NC	N/C	N/C	NC	28	
	7	P3.1	11	31	EA-/Vpp	29	
	8	P3.2	12	32	P0.7	30	
	9	P3.3	13	33	P0.6	31	
	10	P3.4	14	34	P0.5	32	
	11	P3.5	15	35	P0.4	33	
	12	P3.6	16	36	P0.3	34	
	13	P3.7	17	37	P0.2	35	
	14	XTAL1	18	38	P0.1	36	
	15	XTAL2	19	39	P0.0	37	
	16	Vss	20	40	Vcc	38	
	17	NC	N/C	N/C	NC	39	
	18	P2.0	21	1	P1.0	40	
	19	P2.1	22	2	P1.1	41	
	20	P2.2	23	3	P1.2	42	
	21	P2.3	24	4	P1.3	43	
	22	P2.4	25	5	P1.4	44	