

PA-XAS3FC-QD Data Sheet

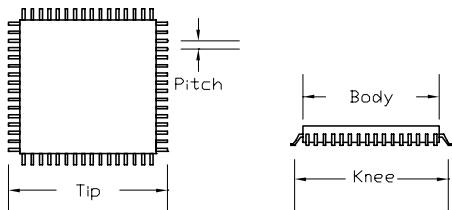
80 pin QFP socket/40 pin DIP 0.6" plug

Supported Device/Footprints

These adapters are for device programming the EPROM of a Philips 51XAS3. They accept the XAS3 in 80 pin QFP and plug into an 87C51FC 40 pin DIP footprint.

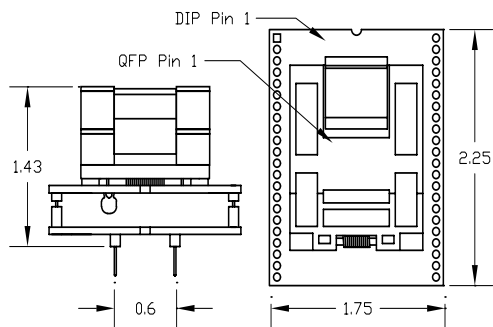
Device		Footprint	
Manufacturer	Device	Device	Package
Philips	51XA-S3QFP (SOT-315)	87C51FC	40 DIP 0.6"

The QFP socket accepts packages with the dimensions listed below:



Body	12 mm typ	Tip	14 mm typ
Pitch	0.5 mm	Knee	12.8 mm typ

Adapter Dimensions



PA-XAS3FC-QD

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 lists the adapters described by this datasheet and their subassemblies.

Adapter	Test Socket	Top Board	Bottom Board
PA-XAS3FC-QD	80QJ-808	XAS3-80	51-BASE

Test Socket

LSC #	Style	Mfgr/Pn
80QJ-808	Lidded ZIF	Yamaichi#: IC51-0804-808

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.

Memory Map

Both the 51XAS3 and the 87C51FC (FC) contain 32K bytes of EPROM. Using the FC algorithm all of the 51XAS3's EPROM (0000-7FFF) can be programmed.

Adapter Wiring

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

Adapter Socket 51XAS3-QFP		Adapter Plug 87C51-FC-DIP	
Pin	Signal	Pin	Signal
3	P3.0	21	P2.0/A8
4	P3.1	22	P2.1/A9
5	P3.2	23	P2.2/A10
6	P3.3	24	P2.3/A11
7	P3.4	25	P2.4/A12
8	P3.5	26	P2.5/A13
9	P3.6	14	P3.4/A14
12	VSS	20	VSS
13	VSS	20	VSS
14	VDD ¹	40	VDD
15	VDD ¹	40	VDD
16	EA*/VPP ²	31	EA*/VPP
28	VDD ¹	40	VDD
29	VDD ¹	40	VDD
30	VSS	20	VSS
31	VSS	20	VSS
32	P1.0	27	P2.6
33	P1.1	28	P2.7
34	P1.2	16	P3.6
35	P1.3	17	P3.7
36	P1.4	13	P3.3
42	P0.0	39	P0.0/D0
43	P0.1	38	P0.1/D1
44	ALE/PGM*	30	ALE/PGM*
45	PSEN*	29	PSEN*
47	RST*	20	VSS
48	P0.2	37	P0.2/D2
49	P0.3	36	P0.3/D3
50	P0.4	35	P0.4/D4
51	VDD ¹	40	VDD
52	VDD ¹	40	VDD
53	VSS	20	VSS
54	VSS	20	VSS
55	P0.5	34	P0.5/D5
56	P0.6	33	P0.6/D6
57	P0.7	32	P0.7/D7
58	P2.0	1	P1.0/A0
59	P2.1	2	P1.1/A1
61	P2.2	3	P1.2/A2
62	P2.3	4	P1.3/A3
63	P2.4	5	P1.4/A4
64	P2.5	6	P1.5/A5
65	P2.6	7	P1.6/A6
66	P2.7	8	P1.7/A7
67	XTAL2	18	XTAL2
68	XTAL1	19	XTAL1
69	VSS	20	VSS
70	VSS	20	VSS
71	VDD ¹	40	VDD
72	VDD ¹	40	VDD

S3 pins that are not shown are not connected.

¹ 0.1uf capacitor, VDD to Ground.

² Optional capacitor VPP to Ground is not installed.

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