

PA28-32-20-Dx-QF Data Sheet

28 pin DIP 0.3" socket /32 pin QFP plug

Supported Device/Footprints

The PA28-32-20-Dx-QF adapters accept 28 pin DIP devices and have a removable 32 pin QFP solder-down plug. This allows DIP devices, or emulators with DIP plugs, to be used during development of QFP based products. Other devices that require the same wiring and footprint would also be supported.

The following DIP device footprints are converted to the indicated QFP footprint.

This adapter supports the following devices.

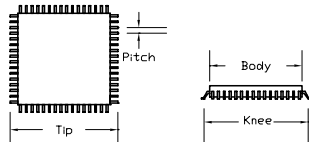
Atmel: AT90S2333, AT90LS4433, AT90S4433, AT90LS4433

Footprint: Same device 32QFP

The QFP plug will fit most 32 pin. 0.8mm pitch, QFP land patterns. Usually the pads extend from the body past the tip of the device leads. This plug will fit on pads that have a minimum span of 7.0mm or less and an outer span of 9.2mm or more.

Inner pad span	Outer pad span
7.0mm or less	9.2mm or more

The QFP Plug's leads are dimensioned as follows.



Plug	Body	Knee	Tip	Pitch
PQF-32	7.0mm typ	7.2mm typ	9.2mm typ	0.8mm

Adapter Construction

The adapter is made up of 3 or 4 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 lists the adapters described by this datasheet and their subassemblies.

Adapter	Test Socket	Top Board	Bottom Board	QFP Plug
PA28-32-20-DP-QF	none *	32-28-20-DIP	32PLUG-Q	PQF-32
PA28-32-20-DZ-QF	2806-ADZ *	32-28-20-DIP	32PLUG-Q	PQF-32

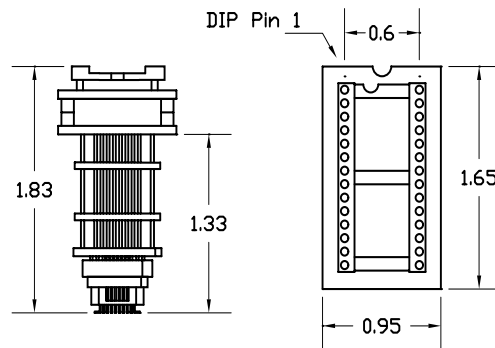
* The adapter always has a 28 pin 0.6" DIP production socket.

The optional test socket plugs into the production socket.

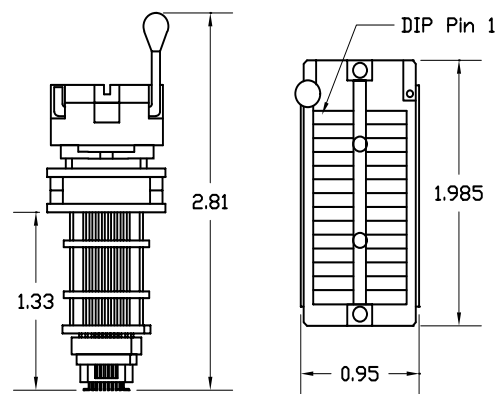
Test Socket

LSC #	Style	Mfgr/Pn
2806ADZ	DIP ZIF	Aries 28-6554-11

Adapter Dimensions



PA28-32-20-DP-QF



PA28-32-20-DZ-QF

Adapter Wiring

The following chart shows the connections between the DIP socket (device) to the adapter's QFP plug (footprint).

QFP	DIP	DIP	QFP
1	5	4	32
2	6	3	31
3	NC	2	30
4	7	1	29
5	8	28	28
6	NC	27	27
7	9	26	26
8	10	25	25
9	11	24	24
10	12	23	23
11	13	NC	22
12	14	22	21
13	15	21	20
14	16	NC	19
15	17	20	18
16	18	19	17

Skip-Short notation(7, 10, 23, 26) using header pin numbers.



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 Doc: 283220DQ.DOC
 Rev 12/07/2006
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