

# PA51CC-BD Data Sheet

## 64 pin uBGA socket/40 pin DIP 0.6" plug

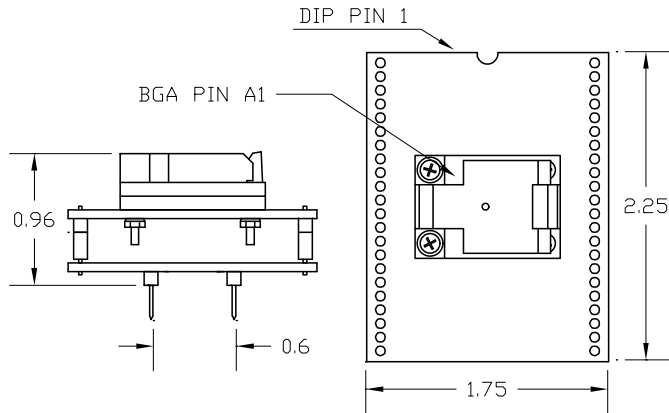
### Supported Device/Footprints

This adapter allows programming of an Atmel T89C51CC01 in the 64 pin uBGA package using the 40 pin DIP footprint specified by Atmel.

For this adapter to be useful, a programmer must offer specific support for this device and adapter combination.

**Atmel:** T89C51CC01 8x8 uBGA Package Code: CA-BGA64  
**Footprint:** Atmel specified 40 DIP 0.6"

### Adapter Dimensions



PA51CC-BD

### Adapter Construction

This 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.

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 adapter described by this datasheet and its subassemblies.

Adapter	Test Socket	Top Board	Bottom Board
PA51CC-BD	64BF-L6617	T89C51BT	51BASE

### Test Socket

LSC Socket	Style	Mfgr/Pn
64BF-L6617	Lidded ZIF	Loranger 080SQ064U6617

The Test Socket is not soldered to the adapter. It uses a pressure style contact. The Contact Tails of the socket press against PCB pads when a device is installed in the socket.

To remove the socket, remove the nuts from the screws and lift the socket off the top board.

### Adapter Wiring

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

uBGA Socket	Signal	DIP Plug	DIP Plug	Signal	uBGA Socket
A3	P1.0	1	40	VCC	B5,B6
B3	P1.1	2	39	P0.0	G8
A2	P1.2	3	38	P0.1	F7
B2	P1.3	4	37	P0.2	E7
A1	P1.4	5	36	P0.3	F8
B1	P1.5	6	35	P0.4	E8
C2	P1.6	7	34	P0.5	D8
C1	P1.7	8	33	P0.6	D7
D5	RST	9	32	P0.7	C8
E1	P3.0	10	31	EA*	D1
E2	P3.1	11	30	ALE	B8
F1	P3.2	12	29	PSEN*	C7
F2	P3.3	13	28	P2.7	H3
G1	P3.4	14	27	P2.6	H4
G2	P3.5	15	26	P2.5	H5
H1	P3.6	16	25	P2.4	G5
H2	P3.7	17	24	P2.3	H6
A8	XTAL2	18	23	P2.2	G6
A7	XTAL1	19	22	P2.1	H7
A4,A5,A6	VSS	20	21	P2.0	H8