

# CIC-56 $\mu$ BGA-48D-A6-YAM

56-Bump  $\mu$ BGA to a 48-Pin DIP

Apr-98

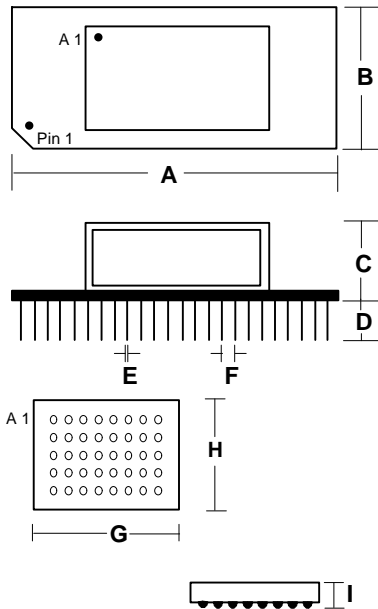
**$\mu$ BGA DEVICES:** (EXAMPLES)

G28F320J5  
G28F640J5

**SOCKET:** Yamaichi NP291-07210-AC08338

<b><u>PRICING:</u></b>	<b><u>QTY</u></b>	<b><u>PRICE EACH</u></b>
	1-4	\$310.00
	5-9	\$279.00
	10-24	\$263.50
	25-49	\$232.50

**TYPICAL DIMENSIONS:** (Drawings not to scale)



<b>DIMENSION</b>	<b>MM</b>	<b>INCH</b>
A	62.23	2.450
B	27.94	1.100
C	18.90	0.744
D Pin Length	10.16	0.400
E Pin Diameter	0.64	0.025
F Pin Spacing	2.54	0.100
ROW SPACING	15.24	0.600
G	16.37	0.644
H	7.67	0.302
I	0.94	0.037
PITCH	0.75	0.030

**PIN CONFIGURATION:**

<b>BASE 48-Pin DIP</b>	<b>PIN NAMES</b>	<b>SOCKET 56-Bump <math>\mu</math>BGA</b>
1	NC	F7
2	A <sub>20</sub>	C1
3	A <sub>19</sub>	B1
4	A <sub>18</sub>	D3
5	V <sub>PP</sub> / V <sub>PEN</sub>	A5
6	CE1# / CE0#	D2 / A4
7	DQ <sub>15</sub>	G2
8	DQ <sub>14</sub>	H2
9	DQ <sub>13</sub>	H3
10	DQ <sub>12</sub>	G4
11	DQ <sub>11</sub>	H5
12	DQ <sub>10</sub>	I6
13	DQ <sub>9</sub>	H7
14	DQ <sub>8</sub>	G7
15	GND/GND <sub>Q</sub> (Planes 2 & 5)	A7 / I2 / I5
16	DQ <sub>7</sub>	F3
17	DQ <sub>6</sub>	G3
18	DQ <sub>5</sub>	I3
19	DQ <sub>4</sub>	H4
20	DQ <sub>3</sub>	G5
21	DQ <sub>2</sub>	H6
22	DQ <sub>1</sub>	G6
23	DQ <sub>0</sub>	H8
24	OE#	G1
25	A <sub>1</sub>	D7
26	A <sub>2</sub>	D8
27	A <sub>3</sub>	D6
28	A <sub>4</sub>	B8
29	A <sub>5</sub>	C8
30	A <sub>6</sub>	C7
31	A <sub>7</sub>	B7
32	A <sub>8</sub>	C6
33	A <sub>9</sub>	B6
34	GND/GND <sub>Q</sub> (Planes 2 & 5)	A7 / I2 / I5
35	A <sub>10</sub>	A6
36	A <sub>11</sub>	B5
37	A <sub>12</sub>	B4
38	A <sub>13</sub>	C4
39	A <sub>14</sub>	A3
40	A <sub>15</sub>	B3
41	A <sub>16</sub>	C3
42	A <sub>17</sub>	B2
43	WE#	F1
44	V <sub>CC</sub> /V <sub>CCQ</sub> (Planes 3 & 4)	A2 / I7 / I4
45	A <sub>22</sub>	D1
46	NC / CE2#	F8
47	A <sub>21</sub>	C2
48 or V <sub>CC</sub> /q Planes	WP# / NC <sup>1</sup>	F2
V <sub>CC</sub> /q Planes	RP#	C5
V <sub>CC</sub> /q Planes	BYTE#	F6

**NOTES:**

- WP#/NC (F2) can be jumpered to DIP Pin 48 or V<sub>CC</sub>/V<sub>CCQ</sub> plane of PC board.
- Bypass capacitors (Type 1206) may be added between V<sub>CC</sub> planes & GND planes; as required by Programmer Vendor

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