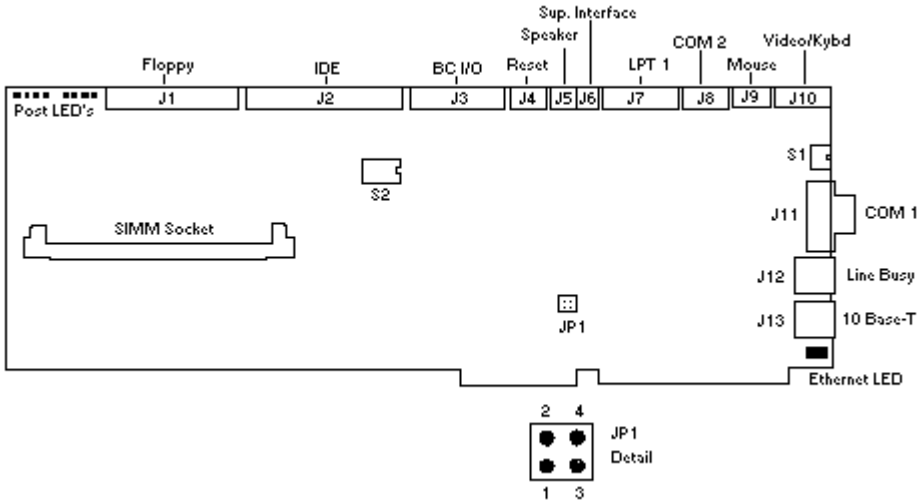
BC 3035
Quick Reference Guide

Board layout



Connectors

J1 - Floppy diskette

1	ground	2	speed	3	ground
4	n/c	5	ground	6	n/c
7	ground	8	index	9	ground
10	motor on 1	11	ground	12	drive sel 2
13	ground	14	motor sel 1	15	ground
16	motor on 2	17	ground	18	direction
19	ground	20	stop step	21	ground
22	write data	23	ground	24	write gate
25	ground	26	track 0	27	ground
28	write protect	29	ground	30	read data
31	ground	32	side select	33	ground
34	disk change				

J2 - IDE Hard Disk

1	reset	2	ground	3	data 7
4	data 8	5	data 6	6	data 9
7	data 5	8	data 10	9	data 4
10	data 11	11	data 3	12	data 12
13	data 2	14	data 13	15	data 1
16	data 14	17	data 0	18	data 15
19	ground	20	n/c	21	n/c
22	ground	23	iow	24	ground
25	ior	26	ground	27	n/c

28	bale	29	n/c	30	ground
31	idint	32	n/c	33	sa1
34	n/c	35	sa0	36	sa2
37	cs5	38	hcs1	39	n/c
40	n/c				

J3 - BC I/O

1	gnd	2	n/c	3	ledsel-
4	lanled	5	ideled	6	txdiled
7	rxdiled	8	n/c	9	dtriled
10	dcdiled	11	spkr	12	resetsw-
13	ack	14	poll	15	mseclk
16	mse data	17	kclk	18	kdata
19	+ 5vf	20	vsync	21	hsync
22	gnd	23	blu	24	grn
25	red	26	gnd		

J4 - Control Panel Connector

1	Resistor pull-up for Power on LED
2	not used
3	Reset switch (ground to reset computer)
4	IDE Drive LED
5	Ground

J5 - Speaker Connector

1	Speaker data
2	n/c
3	Ground
4	+5V (speaker power)

J6 - Supervisory Port

1	ack (to supervisor)
2	not used
3	poll (from supervisor)
4	not used

J7 - LPT1

This header requires a optional I/O adapter from Cubix. Attempting to connect a device directly to this connector will damage the board.

J8 - COM 2

1	DCD	(data carrier detect)
2	RD	(receive data)
3	TD	(transmit data)
4	DTR	(data terminal ready)
5	GND	(ground)
6	DSR	(data set ready)
7	RTS	(request to send)
8	CTS	(clear to send)
9	RI	(ring indicator)

Note: The COM2 header requires a optional I/O adapter from Cubix. Attempting to connect a serial device directly to this connector will damage the board.

J9 - PS/2 Mouse Connector

This header requires a optional I/O adapter from Cubix. Attempting to connect a PS/2 mouse directly to this connector will damage the board.

J10 - Video/Kybd Mux Connector

```
This header is for connection to the Optional Cubix Video Mux.

   1  Red              2  Ground
   3  Green            4  Ground
   5  Blue             6  Ground
   7  Hsync            8  Ground
   9  Vsync            10 mse data
   11 Kclk             12 mse clk
   13 Kdata            14 +5 (fused)
```

J11 - COM 1

```
   1  DCD  (data carrier detect)
   2  RD   (receive data)
   3  TD   (transmit data)
   4  DTR  (data terminal ready)
   5  GND  (ground)
   6  DSR  (data set ready)
   7  RTS  (request to send)
   8  CTS  (clear to send)
   9  RI   (ring indicator)
```

J12 - Line Busy

```
   1  n/c
   2  n/c
   3  tip
   4  ring
   5  n/c
   6  n/c
```

J13 - 10 Base-t Ethernet

```
   1  transmit data (+)
   2  transmit data (-)
   3  Receive data (+)
   4  n/c
   5  n/c
   6  receive data (-)
   7  n/c
   8  n/c
```

Switch & Jumper Settings

Jumper JP1 - CPU Speed

Factory configured - should not be changed.

Jumper	1-2	3-4	
	on	on	25MHZ
	off	on	33MHZ
	on	off	40MHZ

Switch 1 - Reset on Loss of DCD or DSR

	SW1	SW2
Reset when DSR drops on COM1	on	off
Reset when DCD drops on COM1	off	on
Reset when DCD or DSR drops on COM1	on	on
Reset disabled	off	off

Switch 2 - Board Options and Interrupts

	SW1	SW2	SW3	SW4	SW5	SW6	SW7
Enable Ethernet Controller	on	-	-	-	-	-	-
Enable VGA Controller	-	on	-	-	-	-	-
Supervisory IRQ to 10	-	-	on	-	-	-	-
Supervisory IRQ to 15	-	-	-	on	-	-	-
Disable Supervisory IRQ	-	-	off	off	-	-	-
PS/2 Mouse on IRQ 12	-	-	-	-	on	-	-
PS/2 Mouse on IRQ 12 disabled	-	-	-	-	off	-	-
Ethernet on IRQ 3	-	-	-	-	-	on	off
Ethernet on IRQ 5	-	-	-	-	-	off	on
Disable Ethernet Controller	-	-	-	-	-	off	off

IRQ, I/O, SIMM's & Memory Map

Simm Module configuration

All BC 4030 system memory is provided in 72-pin by 36 bit standard 70ns SIMM modules in 4MB or 16MB versions. For the proper placing of SIMM modules, see table below.

SIMM Socket 1	Total MB
4	4
8	8
16	16

IRQ Information

0	Timer Click
1	Keyboard
2	Second PIC controller
3	COM2/Ethernet (SW2)
4	COM1
5	Available/Ethernet (SW2)
6	Floppy Disk Controller
7	LPT1
8	Real-Time Clock
9	Redirected IRQ2
10	Available/Supervisory (SW2)
11	Available
12	Available/PS2 Mouse (SW2)
13	Math Coprocessor
14	Fixed Disk Controller
15	Available/Supervisory (SW2)

I/O Map

```
0000-00FF  Various "AT" functions
01F0-01FF  IDE hard drive interface
02F8-02FF  COM 2
0300-0317  Ethernet controller
03A0       Cubix Supervisory system interface
03B4-03B5  VGA
03BC-03BF  LPT1
03C0-03CF  VGA
03D4-03D5  VGA
03F0-03F7  Floppy/IDE
03F8-03FF  COM 1
```

Memory Configuration