BC 5055
Quick Reference Guide

Board Layout
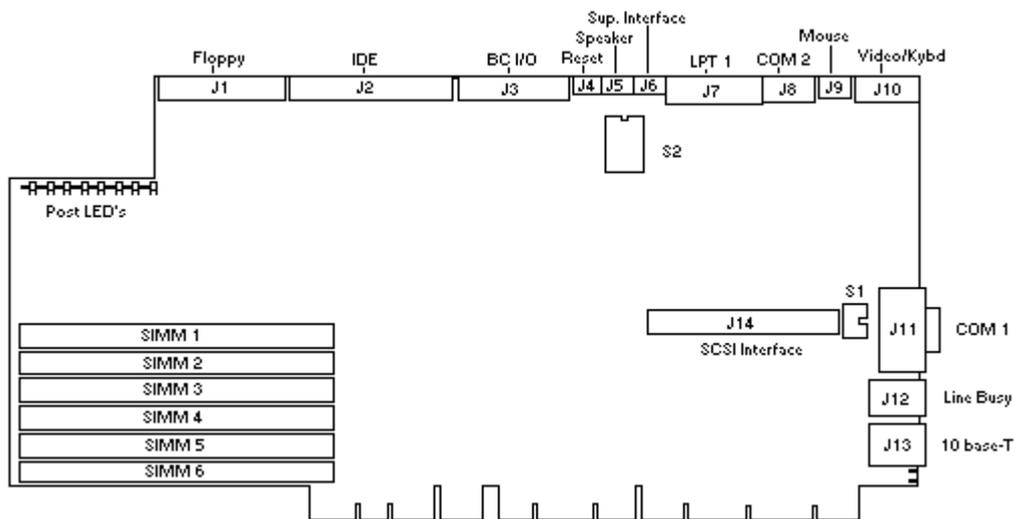
Connectors

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	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 connector

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 - Reset 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 - COMM 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.

J11 - COMM 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 (RJ11)

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

J13 - 10 Base-t Ethernet (RJ45)

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

J14 - SCSI Interface

Information not available

Switch Settings

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
Supervisory IRQ to 10	on	off		
Supervisory IRQ to 15	off	on		
Disable Supervisory IRQ	off	off		
PS/2 Mouse on IRQ 12			on	

Disable PS/2 Mouse			off	
Enable SCSI Termination				off
Disable SCSI Termination				on
Factory settings	off	on	on	off

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

Simm Module Configuration

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

1	2	3	4	5	6	Total
4	4					8
4	4	4	4			16
8	8					16
4	4	4	4	4	4	24
8	8	4	4			24
8	8	4	4	4	4	32
8	8	8	8			32
16	16					32
8	8	8	8	4	4	40
16	16	4	4			40
8	8	8	8	8	8	48
16	16	4	4	4	4	48
16	16	8	8			48
16	16	8	8	8	8	64
16	16	16	16			64
32	32					64
16	16	16	16	4	4	72
32	32	4	4			72
16	16	16	16	4	4	72
32	32	4	4	4	4	80
32	32	8	8			80
32	32	8	8	8	8	88
16	16	16	16	16	16	96
32	32	8	8	8	8	96

32	32	16	16			96
32	32	16	16	4	4	104
32	32	16	16	8	8	112
32	32	16	16	16	16	128
32	32	32	32			128
64	64					128
32	32	32	32	4	4	136
64	64	4	4			136
32	32	32	32	8	8	144
64	64	4	4	4	4	144
64	64	8	8			144
64	64	8	8	4	4	152
32	32	32	32	16	16	160
64	64	8	8	8	8	160
64	64	16	16			160
64	64	16	16	4	4	168
64	64	16	16	8	8	176
32	32	32	32	32	32	192

SIMM modules must be installed in pairs (SIMM 1 & SIMM 2, SIMM 3 & SIMM 4, SIMM 5 & SIMM 6).

IRQ Information

IRQ	Description
0	Timer Click
1	Keyboard
2	Second PIC controller
3	COM2
4	COM1
5	Available/Ethernet
6	Floppy Disk Controller
7	LPT1
8	Real-Time Clock
9	Redirected IRQ2
10	Available/IES (s2)
11	Available/SCSI
12	Available/PS2 Mouse (s2)
13	Math Coprocessor
14	Fixed Disk Controller
15	Available/IES (s2)

Memory Configuration

E000-FFFF	Reserved for system and PCI ROM BIOS
CAC0-DFFF	Available as Expanded(EMS) or Upper Memory (UMB)
C800-CABF	SCSI BIOS
C000-C7FF	Reserved for VGA BIOS
B800-BFFF	VGA/CGA Video Memory
B000-B7FF	VGA/Mono Video Memory
A000-AFFF	VGA Video Memory
0000-9FFF	Conventional DOS