

# SBC-770

Pentium II CPU Card with LCD, Ethernet, High Drive, & SSD

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## Notice:

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This guide is designed for experienced users to setup the system within the shortest time. For detailed information, please always refer to the electronic user's manual.

## Safety Precautions

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**Warning!** *Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.*

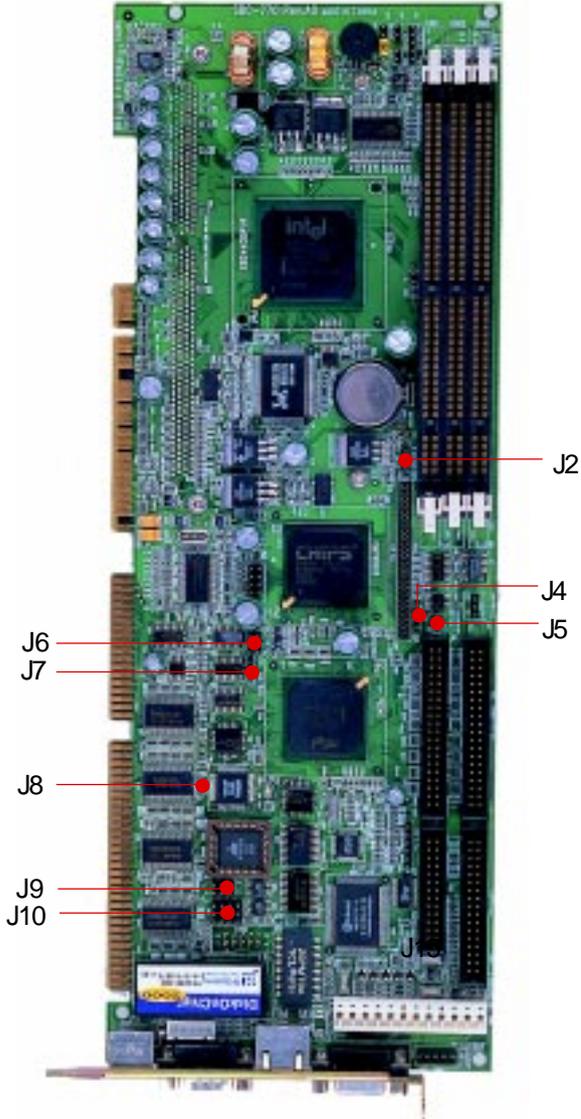


**Caution!** *Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.*



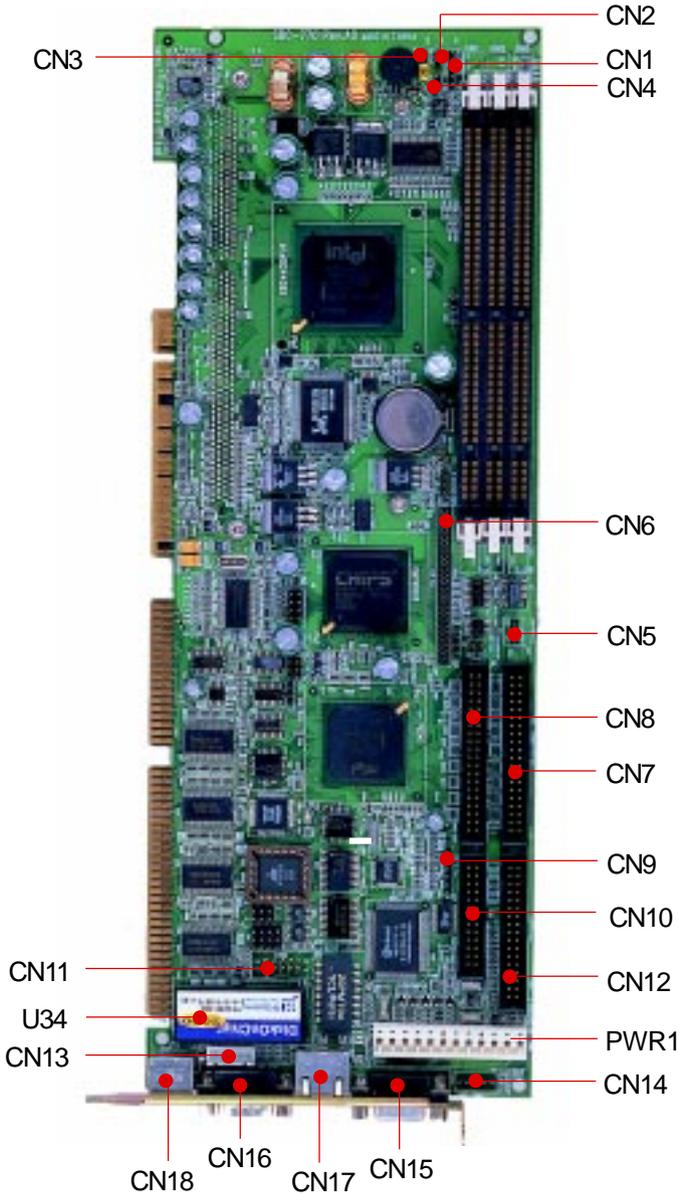
## Locating jumpers

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# Quick Installation Guide

## Locating connectors



SBC-770

## Jumpers and connectors

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Connectors on the board link it to external devices such as hard disk drives, a keyboard, or floppy drives. In addition, the board has a number of jumpers that allow you to configure your system to suit your application.

The following tables list the function of each of the board's jumpers and connectors.

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### Jumpers

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<b>Label</b>	<b>Function</b>
J2	Clear CMOS
J4	LCD driving voltage select
J5	System temperature thermal sensor
J6	CPU frequency ratio select
J7	LCD clock signal select
J8	DOC address select
J9	COM2 RS-232/422/485 select
J10	COM2 RS-232/422/485 select

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# Quick Installation Guide

## Connectors

<b>Label</b>	<b>Function</b>
CN1	Power LED and keylock
CN2	Hard drive LED
CN3	External speaker
CN4	Reset switch
CN5	CPU fan power connector
CN6	LCD display connector
CN7	IDE hard drive connector (Primary)
CN8	IDE hard drive connector (Secondary)
CN9	IrDA connector
CN10	Parallel port connector
CN11	COM2 RS-232/422/485 serial port connector
CN12	Floppy drive connector
CN13	Internal keyboard connector
CN14	USB connector
CN15	VGA display connector
CN16	COM1 RS-232 serial port connector
CN17	100Base-Tx Ethernet connector
CN18	Keyboard and PS/2 mouse connector
U34	DiskOnChip socket
PWR1	Power connector

## Clear CMOS (J2)

You can use J2 to clear the CMOS data if necessary. To reset the CMOS data, set J2 to 2-3 closed for just a few seconds, and then move the jumper back to 1-2 closed.

### Clear CMOS (J2)

	Protect*	Clear CMOS
J2		

\*default

## LCD driving voltage select (J4)

You can select the LCD connector CN6 (pin 5 and pin 6) driving voltage by setting J4. The configurations are as follows:

### LCD driving voltage select (J4)

	5V	3.3V *
J4		

\*default

# Quick Installation Guide

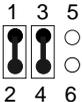
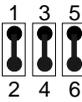
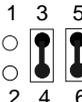
## System temperature thermal sensor (J5)

This jumper is reserved to connect a system temperature thermal sensor in order to detect the system temperature.

## CPU frequency ratio select (J6)

CPU core frequency = CPU frequency ratio (3~5.5) \* External bus clock (66 or 100 MHz)

CPU frequency ratio select (J6)

3x	3.5x*	4x
		
4.5x	5x	5.5x
		

\*default

## Pentium II CPU jumper setting examples

Pentium II CPU	J6												
233/66MHz	<table><tr><td>1</td><td>3</td><td>5</td></tr><tr><td></td><td></td><td></td></tr><tr><td>2</td><td>4</td><td>6</td></tr></table>	1	3	5				2	4	6			
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266/66MHz	<table><tr><td>1</td><td>3</td><td>5</td></tr><tr><td>○</td><td>○</td><td>○</td></tr><tr><td>○</td><td>○</td><td>○</td></tr><tr><td>2</td><td>4</td><td>6</td></tr></table>	1	3	5	○	○	○	○	○	○	2	4	6
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300/66MHz	<table><tr><td>1</td><td>3</td><td>5</td></tr><tr><td>○</td><td>○</td><td></td></tr><tr><td>○</td><td>○</td><td>○</td></tr><tr><td>2</td><td>4</td><td>6</td></tr></table>	1	3	5	○	○		○	○	○	2	4	6
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333/66MHz	<table><tr><td>1</td><td>3</td><td>5</td></tr><tr><td>○</td><td></td><td>○</td></tr><tr><td>○</td><td>○</td><td>○</td></tr><tr><td>2</td><td>4</td><td>6</td></tr></table>	1	3	5	○		○	○	○	○	2	4	6
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300/100MHz	<table><tr><td>1</td><td>3</td><td>5</td></tr><tr><td></td><td></td><td>○</td></tr><tr><td>○</td><td>○</td><td>○</td></tr><tr><td>2</td><td>4</td><td>6</td></tr></table>	1	3	5			○	○	○	○	2	4	6
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350/100MHz *	<table><tr><td>1</td><td>3</td><td>5</td></tr><tr><td></td><td></td><td></td></tr><tr><td>2</td><td>4</td><td>6</td></tr></table>	1	3	5				2	4	6			
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400/100MHz	<table><tr><td>1</td><td>3</td><td>5</td></tr><tr><td>○</td><td>○</td><td>○</td></tr><tr><td>○</td><td>○</td><td>○</td></tr><tr><td>2</td><td>4</td><td>6</td></tr></table>	1	3	5	○	○	○	○	○	○	2	4	6
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Pentium II CPU	J6												
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500/100MHz	<table><tr><td>1</td><td>3</td><td>5</td></tr><tr><td>○</td><td>●</td><td>○</td></tr><tr><td>○</td><td>●</td><td>○</td></tr><tr><td>2</td><td>4</td><td>6</td></tr></table>	1	3	5	○	●	○	○	●	○	2	4	6
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550/100MHz	<table><tr><td>1</td><td>3</td><td>5</td></tr><tr><td>○</td><td>●</td><td>●</td></tr><tr><td>○</td><td>●</td><td>●</td></tr><tr><td>2</td><td>4</td><td>6</td></tr></table>	1	3	5	○	●	●	○	●	●	2	4	6
1	3	5											
○	●	●											
○	●	●											
2	4	6											

\*default

## LCD clock signal select (J7)

You can select the LCD control signal by setting J7. The following charts show the available option.

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### LCD clock signal select (J7)

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	SFCLK-*	SHCLK
J7		

\*default

# Quick Installation Guide

## DOC address select (J8)

The DiskOnChip 2000 occupies an 8 Kbyte window in the upper memory address range of D400 to E000. You should ensure this does not conflict with any other device's memory address. J8 controls the memory address of the Flash disk.

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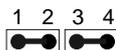
DiskOnChip 2000 memory address (J8)

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### Memory address (HEX)

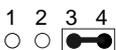
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DISABLE



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DC00



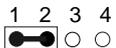
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D400



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D800\*



\* default

These addresses might conflict with the ROM BIOS of other peripheral boards. Please select the appropriate memory address to avoid memory conflicts.

## COM2 RS-232/422/485 select (J10, J9)

The SBC-770 COM2 serial port can be selected as RS-232, RS-422, or RS-485 by setting J10 & J9.

### COM2 Select (J10, J9)

	RS-232*	RS-422	RS-485
J10	12 ○  10	12  ○ 10	12  ○ 10
	9 ○  7	9  ○ 7	9  ○ 7
	6 ○  4	6  ○ 4	6  ○ 4
	3 ○  1	3  ○ 1	3  ○ 1
J9	5 ○ ○ 6	5 ○ ○ 6	5  6
	3 ○ ○ 4	3  4	3 ○ ○ 4
	1  2	1 ○ ○ 2	1 ○ ○ 2

\*default

