Celeron CPU Card with LCD. Ethernet, High Drive, & SSD

Notice:

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



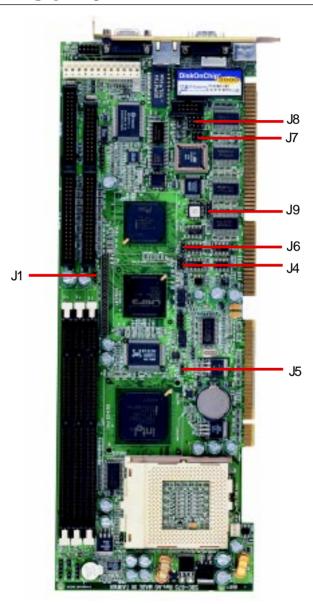
Warning! Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Caution!

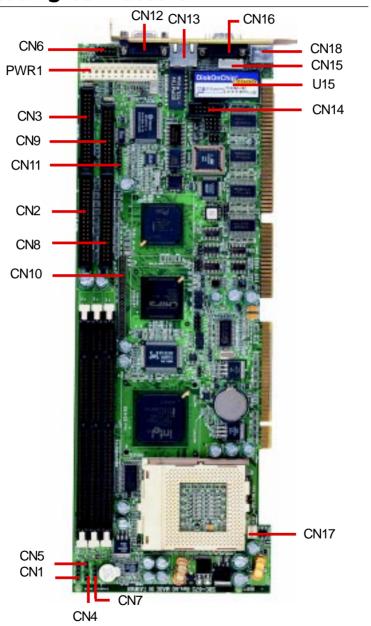


Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded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

Locating jumpers



Locating connectors



Jumpers and connectors

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.

Function
LCD driving voltage select
CPU frequency ratio select
Clear CMOS
LCD clock signal select
COM2 RS-232/422/485 select
COM2 RS-232/422/485 select
DOC address select

Connectors		
Label Function		
CN1	Power LED and keylock	
CN2	IDE hard drive connector (Primary)	
CN3	Floppy drive connector	
CN4	IDE drive LED	
CN5	Reset switch	
CN6	USB connector	
CN7	External speaker	
CN8	IDE hard drive connector (Secondary)	
CN9	Parallel port connector	
CN10	LCD display connector	
CN11	IrDA connector	
CN12	VGA display connector	
CN13	100Base-Tx Ethernet connector	
CN14	COM2 RS-232/422/485 serial port connector	
CN15	Internal keyboard connector	
CN16	COM1 RS-232 serial port connector	
CN17	CPU fan power connector	
CN18	Keyboard and PS/2 mouse connector	
U15	DiskOnChip socket	
PWR1	Power connector	

LCD driving voltage select (J1)

You can select the LCD connector CN10 (pin 5 and pin 6) driving voltage by setting J1. The configurations are as follows:

LCD drivi	ng voltage select (J1)	
	5V	3.3V *
J1	1 2 3	O 1 2 3

^{*}default

Clear CMOS (J5)

You can use J5 to clear the CMOS data if necessary. To reset the CMOS data, set J5 to 2-3 closed for just a few seconds, and then move the jumper back to 1-2 closed.

Clear CMOS (J5)		
	Protect*	Clear CMOS
J5	1 2 3 ••• ○	1 2 3 ○ •••

^{*}default

CPU frequency ratio select (J4)

CPU core frequency = CPU frequency ratio $(2\sim5.5)$ * External bus clock (66 or 100 MHz)

CPU frequency ratio select (J4)	
2x	2.5x	3x
1 3 5 0 0 0 0 2 4 6	$ \begin{array}{c c} 1 & 3 & 5 \\ \hline $	1 3 5
3.5x	4x	4.5x*
$ \begin{array}{c c} 1 & 3 & 5 \\ \hline 2 & 4 & 6 \end{array} $	1 3 5 ○ ○ ○ ○ ○ ○ 2 4 6	1 3 5 ○ ○ □ ○ ○ □ 2 4 6
5x	5.5x	
1 3 5 ○	1 3 5 ○ 1 1 2 4 6	

^{*}default

Celeron CPU jumper setting examples

Celeron CPU	J4	
300MHz	1 3 5 ○ ○ 1 ○ ○ 2 2 4 6	
333MHz	1 3 5 ○	
366MHz	1 3 5 ○ 1 1 ○ 2 4 6	

Note:

Most Celeron CPUs' frequency ratio are pre-locked within the CPUs. These CPUs run at fixed speed (frequency) regardless of the configurations listed above.

If the CPU you are using requires higher ratio then 5.5X, it is most likely pre-locked.

LCD clock signal select (J6)

You can select the LCD control signal by setting J6. The following charts show the available option.

LCD cloc	k signal select (J6)		
	SFCLK-*	SHCLK	
J6	1 2 3	1 2 3	

^{*}default

DOC address select (J9)

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. J9 controls the memory address of the Flash disk.

DiskOnChip 2000 memory	address (J9)
Memory address (HEX)	
DISABLE	
	1 2 3 4
DC00	
	1 2 3 4
D400	
	1 2 3 4 ○ ○ ○ ○
D800*	
	1 2 3 4

^{*} 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 (J7, J8)

The SBC-675 COM2 serial port can be selected as RS-232, RS-422, or RS-485 by setting J7 & J8.

COM2 Se	lect (J7, J8)		
	RS-232*	RS-422	RS-485
	12 () 10	12	12
10	9 \bigcirc \bigcirc 7	9 🗪 \bigcirc 7	9
J8	6 0 ••• 4	6 • 0 4	6 • 0 4
	3 0 🕕 1	3 🕕 🔾 1	3 🕕 🔾 1
	5 0 0 6	5 0 0 6	5 6
J7	3 0 0 4	3 • 4	3 0 0 4
	1 0 2	1 0 0 2	1002

^{*}default

