FreeSpeed

Fitting Instructions

Release 2.2kb – 8Jan00

1. Remove your Athlon's rear plastic casing. This job requires a little patience and is achieved with some careful levering. Please refer to our web site for detailed pictures of how to do this.

2. Set the FreeSpeed DIP switches to the Athlons standard core voltage setting of 1.6V. This adjustment is made using Switches 9 to 12. See Fig. 1 for the voltage settings. Fig. 2 shows the switch numbering.

3. Set your FreeSpeed DIP switches to your Athlons default clock speed, i.e. – if you have an Athlon 500, set it to 500Mhz. There are a total of 12 switches that must be set for this operation. This will test that the card is functioning properly. See Fig. 3

4. Insert a spare Hard Disk style power connector into the rear of your FreeSpeed card. If you have no spare connectors, you can buy splitter cables from all computer stores for a minimal charge.

5. Now slot the FreeSpeed card onto your Athlon. It is IMPORTANT to ensure you have it the right way round. The switches on the card will face the HEATSINK/FAN side of your Athlon.

6. Now test your PC, if it's ok, power it down and start to increase the speed, step by step, in increments of 50Mhz. After each increase, retest your PC for stability (or even give it a quick benchmark test).

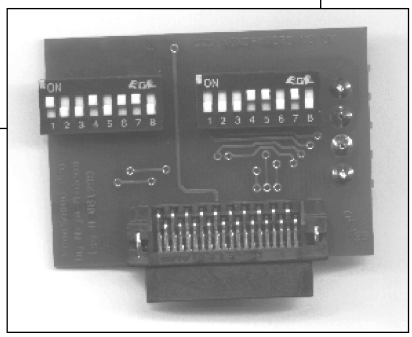

Fig. 2
FreeSpeed viewed from the front
(Side with the switches)
Switches 1 to 16 left to right

Here are some simple steps to get your FreeSpeed Card installed quickly to get you overclocking as soon as possible. All tasks in these instructions must be carried out while your PC is turned off. It is also best to discharge an static you may have picked up on an earthed metal object, such as a radiator, or heating pipe. This helps prevent damage that can be caused to electronic components.

Fig. 1

Voltage	Sw 9	Sw 10	Sw 11	Sw 12
1.45V	on	on	off	off
1.50V	off	off	on	off
1.55V	on	off	on	off
1.60v	off	on	on	off
1.65V	on	on	on	off
1.70V	off	off	off	on
1.75V	on	off	off	on
1.80V	off	on	off	on
1.85V	on	on	off	on
1.90V	off	off	on	on

If your PC fails to start, you have gone too high and will need to slow down a bit. If your PC boots ok, then crashes or errors after a while of running (don't all windows systems do this as standard ☺), try to increase the core voltage a little. Never increase the core voltage more than you need to achieve stability as it increases the operating temperatures of your CPU.

You should not really need much more than 1.75V to achieve a good overclocked speed.

As a guideline, our Athlon 500 reaches 800Mhz with only an increase to 1.75V.

Final note: We cannot guarantee any achievable clock speed from your Athlon and the disclaimers on our Ordering page at www.ninjamicro.co.uk are applicable to any work that involves any operation listed on this page.

Please contact us if you have any problems at techsupp@ninjamicro.co.uk - happy clocking.

FLUKE.

Fig. 3

Frequency	Sw 1	Sw 2	Sw 3	Sw 4	Sw 5	Sw 6	Sw 7	Sw 8	Sw 13	Sw 14	Sw 15	Sw 16
500Mhz	on	on	on	off	off	off	off	on	on	on	off	on
550Mhz	off	on	on	off	on	off	off	on	off	on	off	on
600Mhz	on	off	on	off	off	on	off	on	on	off	off	on
650Mhz	off	off	on	off	on	on	off	on	off	off	off	on
700Mhz	on	on	off	on	off	off	on	off	on	on	on	off
750Mhz	off	on	off	on	on	off	on	off	off	on	on	off
800Mhz	on	off	off	on	off	on	on	off	on	off	on	off
850Mhz	off	off	off	on	on	on	on	off	off	off	on	off
900Mhz	on	on	off	off	off	off	on	on	on	on	off	off
950Mhz	off	on	off	off	on	off	on	on	off	on	off	off
1000Mhz	on	off	off	off	off	on	on	on	on	off	off	off
1050Mhz	off	off	off	off	on	on	on	on	off	off	off	off