XFX

play hard.

nFORCE 650i ULTRA
MOTHERBOARD

Quick Install Guide
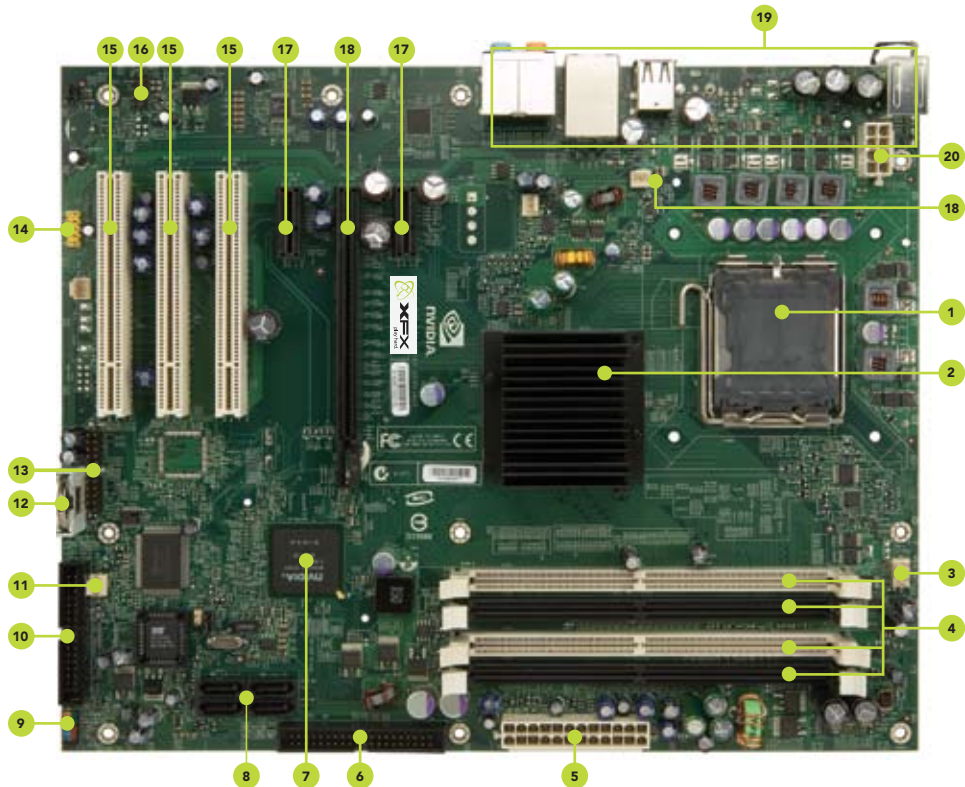
MOTHERBOARD

1. CPU Socket	8. Serial-ATA connectors	15. PCI slots
2. NVIDIA SPP with passive heat sink	9. Front panel connector	16. Front Panel Audio connector
3. CPU fan connector	10. Floppy drive connector	17. PCI Express x1 slot
4. DDR DIMM Slots 0 - 3	11. System fan connector	18. PCI Express x16 slot
5. 24-pin ATX Power Connector	12. Motherboard battery	19. Back panel connectors
6. IDE connector	13. USB headers	20. 8-pin ATX_12V power connector
7. NVIDIA MCP	14. Serial connector	

REAR PANEL
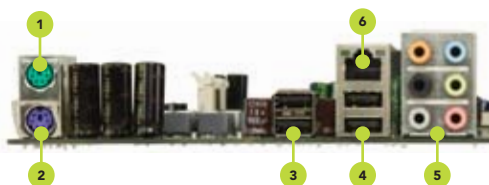
1. PS/2 Mouse Port	5. Audio Configuration		
2. PS/2 Keyboard	Port	2-Channel	4-Channel	6 or 8-Channel
3. USB 2.0 Ports (two)	Blue	Line-In	Line-In	Line-In
4. USB 2.0 ports (two)	Green	Line-Out	Front Speaker Out	Front Speaker Out
5. Audio	Pink	Mic In	Mic In	Mic In
6. LAN Port with LED status	Orange			Center/Subwoofer
indicators	Black		Rear Speaker Out	Rear Speaker Out

• Yellow/Light Up/Blink = 10 Mbps/Link/Activity
• Yellow and Green/Light Up/Blink = 100 Mbps/link/Activity
• Green/Light Up/Blink = 1000 Mbps/Link/Activity

DIMM Slot 0
DIMM Slot 2
DIMM Slot 1
DIMM Slot 3

DIMM SLOTS

Memory Configuration

	Configuration	DIMM0	DIMM1	DIMM2	DIMM3
Single Channel	1	Populated			
	2		Populated		
	3			Populated	
	4				Populated
Dual Channel	5	Populated	Populated		
	6			Populated	Populated
	7	Populated	Populated	Populated	Populated

Front Panel Header Pins

LABEL	PIN	DESCRIPTION
HD_LED	1	Hard Disk Activity LED
	2	
PWRLED	3	Front Panel Power LED
	4	
RESET	5	Reset Switch
	6	
PWRSW	7	Power Switch
	8	
No Connection	9	
Empty	10	

USB Header
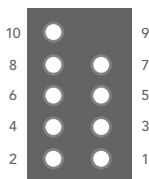
PIN	SIGNAL	PIN	SIGNAL
1	5V_Dual	2	5V_Dual
3	D-	4	D-
5	D+	6	D+
7	GND	8	GND
9	Empty	10	No Connect

INSTALLING THE CPU

Refer to page 12 of the manual in the motherboard installation CD for additional details.

1 Remove the protective socket cover on the load plate which is used to protect the socket when there is no CPU installed.

2 Unhook the socket lever by pushing *down* and *away* from the socket.

3 Lift the load plate.

4 Align the notches in the processor with the notches on the socket.

Align notches with notches on the CPU.

5 Lower the processor straight down into the socket without tilting or sliding it into the socket.

6 Close the load plate over the CPU and press down while you close and engage the socket lever.

7 There are many different fan types that can be used with this motherboard. Follow the instructions that came with your fan assembly. Be sure that the fan orientation is correct for your chassis type and your fan assembly.

INSTALLING MEMORY

Refer to page 13 of the manual in the motherboard installation CD for additional details.

DIMM Slot
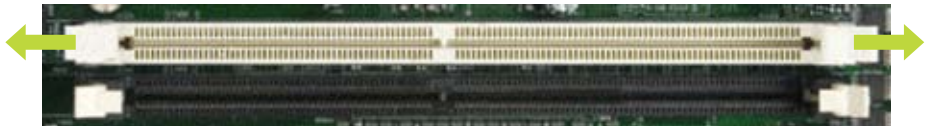
1. Unlock a DIMM slot by pressing the module clips outward.

2. Match the notch on the memory with the notch on the DIMM slot. Align the memory module to the DIMM slot, and insert the module vertically into the DIMM slot. The plastic clips at both sides of the DIMM slot automatically lock the DIMM into the connector.

CONNECTING FRONT PANEL HEADER

Refer to page 19 of the manual in the motherboard installation CD for additional details.
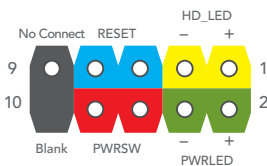
PWRLED – Front Panel Power LED
PWRSW – Power Switch
HD_LED – Hard Disk Activity LED
RESET – Reset Switch

Note: In general white and black wires are the negative leads (-) and the other colored wires are the positive (+) leads. LED will not work if the negative and positive leads are plugged in backwards.

CONNECTING DISK DRIVES

Refer to page 17 of the manual in the motherboard installation CD for additional details.

These connectors are for peripherals such as floppy drive, hard disk drives, and optical drives. (i.e. DVD-ROM, CD-ROMS, etc)
Note: Drive cables are designed to fit in these connectors in only one orientation.

Floppy Connectors

SATA Connectors

EIDE Connectors

POWER CONNECTION

Refer to page 16 of the manual in the motherboard installation CD for additional details.

This motherboard requires an ATX power supply.
Note: Power supply cables are design to fit the motherboard power connectors in only one orientation.

• For general motherboard setup, make sure the 24-pin ATX power connector, and the 8-pin 12V power connector are properly connected to the power supply.

24-pin ATX Power Connector (PWR1)

8-pin ATX 12 Power Connector (PWR2)

To set up Raid using NVIDIA MediaShield Storage, refer to the manual in the motherboard installation CD. (Page 82).

Please refer to the manufacture's installation manual when installing any devices (i.e. graphics boards, hard disk drives, optical drives, etc.) to the motherboard.

*The quick guides are used only for reference, please refer to the installation manual for detailed installation procedures.