



# GeForce GTX 780 LIGHTNING

msi graphics card



## Triple Force Architecture

- **Triple Level Signals** - Show the real-time load with different colors.
- **TriFrozr Thermal Design** –Three PWM fans with Independent Control on the most Advanced Thermal Design.
- **Pure Digital PWM Control** -Digital GPU / memory / AUX voltages



## Twin BIOS & Enhanced Power

- **Twin BIOS** – Two separate BIOS chips, one for Gaming and one specifically for extreme overclockers.
- **Enhanced Power** - 16 GPU phases and 3 Memory phases on a custom designed 10 layers PCB for amazing overclocking potential.



## GPU Reactor

- An add-on device on the back of GTX 780 Lightning (Behind GPU) for the highest overclocking stability
- Provides 300% higher power capacity and reduces power noise (ripple)



## Military Class Components

- MIL-STD-810G standard certified to ensure the best stability and quality.
- Uses DrMOS 4, CopperMOS, Hi-c CAP, new SFC and Dark Solid CAP.



### Product Specification

Product Name	N780 LIGHTNING
Model	V296
GPU	NVIDIA GeForce GTX 780
Codename	GK110
CUDA Core	2304 Units
Core Base Clock	980 MHz
Core Boost Clock	1033 MHz
Memory Clock	6008 MHz
Memory Size	3072MB GDDR5
Memory Bus	384 bits
Output	DP / HDMI / DL-DVI-I / DL-DVI-D
Power Consumption	250 W
Card Dimension	295x128.6x51.35 mm
Weight	1488 g
Form Factor	ATX

### Technology Support

DirectX	11.1 API (feature level 11_0)
OpenGL	4.3
PCI Express	3.0
CUDA	Y
SLI	Y, 3-way
PhysX	Y
PureVideo HD	Y
3D Vision Surround	Y

### Accessory

Driver CD	Y
Installation Guide	Y
MC 4 Certification	Y
SLI Bridge	Y, 1
DVI to VGA Dongle	Y, 1
8-Pin Power Cable	Y, 2
V-check Point	Y, 3
MOS Sink	Y, 1