## NA-813FL

## Fanless Desktop Network Appliance <br> Platform with Intel ${ }^{\circledR}$ Atom ${ }^{\text {TM }}$ Processor N270 and 4 LANs



Introduction
The NA-813FL is a compact fanless network hardware platform for VPN, firewall and other network security applications. It's best suited for space limited environments. The NA-813FL supports low power Intel ${ }^{\text {a }}$ Atom™ ${ }^{\text {™ }}$ processor N270 1.6 GHz with Intel ${ }^{\text {© }}$ 945GSE chipset and features a 1 U desktop form factor. The system supports up to a maximum of 2 GB of DDR2 400/533 memory and for storing event log data. In addition, the NA-813FL features one internal 2.5 HDD. To prevent sudden shutdown, the NA-813FL supports LAN bypass function through WDT and GPIO pin definitions. Plus, there is a MiniPCI Express slot for Wifi wireless card installation.

## Specifications

| System |  |
| :---: | :---: |
| CPU | Intel ${ }^{\text {® }}$ Atom ${ }^{\text {TM }}$ processor N 2701.6 GHz with 512K L2 cache |
| Chipset | Intel ${ }^{\text {® }}$ 945GSE + ICH7-M |
| Memory | $1 \times$ SO-DIMM DDR2 400/533 max. up to 2 GB (wide temperature support is available upon request) |
| BIOS | AMI 8Mbit PnP Flash BIOS with function of BIOS redirected to COM port |
| HDD Interface | $1 \times 2.5^{\prime \prime}$ SATA HDD (wide temperature support is available upon request) |
| Network Interface | $4 \times 10 / 100 / 1000 \mathrm{Mbps}$ Ethernet (Intel ${ }^{\oplus} 82583 \mathrm{~V}$ (default), Intel ${ }^{\bullet}$ 82574L (optional)) |
| SSD | $1 \times$ optional DiskOnModule ${ }^{\oplus}$ (USB type) <br> $1 \times$ CompactFlash ${ }^{\text {TM }}$ type-II (wide temperature is available upon request) |
| 1/0 Interface | $1 \times$ RS-232 DB9 connector, $2 \times$ USB connector, $4 \times$ RJ-45 connector, $1 \times$ DC-in power jack |
| Watchdog Timer | 255 stepping for porting |
| USB | $2 \times$ USB 2.0 port on rear side, rest are internal pin headers |
| Expansion Slot | PCle Mini Card (USB transaction bus) |
| Other Features (optional) | LAN bypass function through WDT and GPIO pin control (one group) |
| Power Supply | $1 \times 12 \mathrm{~V}, 5 \mathrm{~A}$ power adapter |
| OS Compatibility | Linux Redhat Kernel 2.6 |

## Mechanical/ Environmental

| Form Factor | 1U desktop |
| :--- | :--- |
| LED | Power, HDD, Link/Act with transfer rate, LAN bypass <br> (optional), GPIO programmable (optional) |
| Operating Temp. | $0^{\circ} \sim+40^{\circ} \mathrm{C}\left(32^{\circ} \mathrm{F} \sim 104^{\circ} \mathrm{F}\right)$ |
| Storage Temp. | $-20^{\circ} \sim+70^{\circ} \mathrm{C}\left(-4^{\circ} \mathrm{F} \sim+158^{\circ} \mathrm{F}\right)$ |
| Humidity | $10 \% \sim 90 \% \mathrm{RH}$, non-condensing |
| Chassis Material | Steel |
| Dimensions | $\left.44 \mathrm{~mm}\left(1.73^{\prime \prime}\right)(\mathrm{H}) \times 230 \mathrm{~mm}\left(9.05^{\prime \prime}\right)(\mathrm{W}) \times 152.1 \mathrm{~mm} \mathrm{(5.98}^{\prime \prime}\right)(\mathrm{D})$ |
| Weight (net/gross) | $2.5 \mathrm{~kg}(5.51 \mathrm{lb}) / 2.9 \mathrm{~kg}(6.39 \mathrm{lb})$ |
| Certification | FCC class B/CE class B |

## Features

- Low power and high performance Intel ${ }^{\circledR}$ Atom ${ }^{\mathrm{TM}}$ processor N270 1.6 GHz with 512K L2 cache and Intel ${ }^{\circledR}$ 945GSE chipset
- Supports 4 10/100/1000Mbps Ethernet ports (Intel ${ }^{\oplus}$ 82583V)
- Supports BIOS redirected to COM port
- Supports one 2.5" SATA HDD
- Supports fanless and noiseless operation
- Suitable for VPN, network bandwidth controller, firewall applications


## Ordering Information

Standard

| NA-813FL-D4GI-1.6G | Compact fanless network appliance with Intel $^{\oplus}$ Atom <br> processor N270 1.6 GHz and 4 10/100/1000Mbps (Intel ${ }^{\text {º }}$ <br> 82583V) |
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Optional
CK9A100
Cable kit (P/N: 88080000640E)

* Specifications and certifications are based on options and may vary.
** Recommend ordering optional cable kit with first order.


## Packing List

$1 \times$ DC power adapter 12V/5A
$1 \times$ SATA Cable
1 x utility CD (user's manual and driver)

## Dimensions



