



# Network Security

## N1000 Series

MSI N1000 series is very compact box with Intel® Apollo-Lake series SoC which is to be an edge network device for modern application like IoT gateway in smart cities, retail, transportation, residential, hospital, etc. General security services are used as VPN, Firewall and so on. N1000 series could simplified and cut down the cost of network infrastructure.

## Product Appearance

MSI N1000 series contains N1000a, N1000b and N1000c.

**N1000a**



**N1000b**



**N1000c**






## Introduction & Features

MSI N1000 series are entry level for small business users/residential/retail edge network application. Which provides greatly cost benefits of entry network architecture.

### Compact and mobility

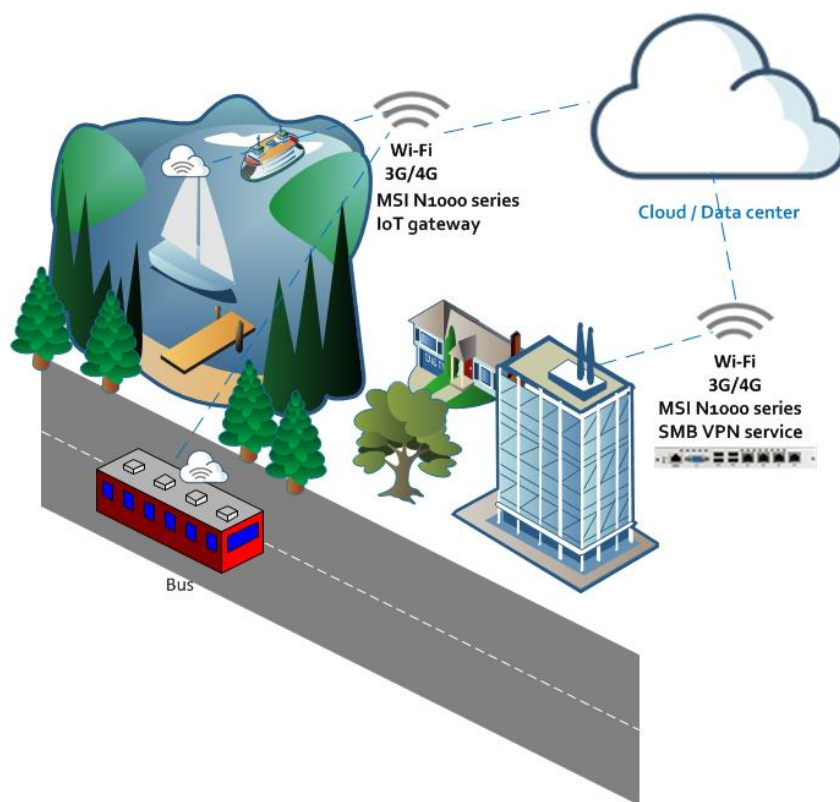
- ✓ **Optimized efficiency** - Intel® Atom Apollo-Lake series CPUs provides efficiency computing and lowest power consumption to take lightweight security network application.
- ✓ **Mobility and lower carbon emission** – MSI N1000 series are built with Atom SoC. They easily locate in branch offices, campus, residential by small box design so that reduce cost of operating space. Whose low power consumption also save power and air conditioner for reducing carbon footprint.
- ✓ **Compact and Wireless transmission** – IoT technology has implemented in many areas, a compact design is needed for saving space and easier locating in different places. N1000 series also provide wireless sensor network function to connect machines as IoT gateway to fit in this digital transformation.
- ✓ **Network virtualization** - Access virtualization through SDN/NFV technology, N1000 series with high core SoC for being a virtualized Customer Premises Equipment (vCPE) so that implement the managed CPE service (Ethernet, VPN) to enterprise branch. And play as an edge network function as IoT gateway/vRouter/vFirewall and so on.



Model	N1000a	N1000b	N1000c
			
Form factor	Small Box	Small Box	1U
Processor	Intel® Pentium® N4200, Quad cores, 2.50GHz Intel® Celeron® N3350, Dual cores, 2.40 GHz	Intel® Pentium® N4200, Quad cores, 2.50GHz Intel® Celeron® N3350, Dual cores, 2.40 GHz	Intel® Pentium® J4205, Quad cores, 2.60GHz Intel® Pentium® N4200, Quad cores, 2.50GHz Intel® Celeron® N3350, Dual cores, 2.40 GHz
Chipset	NUVOTON NCT6106D	NUVOTON NCT6106D	NUVOTON NCT6106D
Memory	1 x DIMM slot, Single channel DDR3L, up to 1866MHz Non-ECC SODIMM up to 8GB	1 x DIMM slot, Single channel DDR3L, up to 1866MHz Non-ECC SODIMM up to 8GB	1 x DIMM slot, Single channel DDR3L, up to 1866MHz Non-ECC SODIMM up to 8GB
Storage	1 x SATA DOM 1 x M.2 M-Key SSD	1 x Internal 2.5" HDD 1 x M.2 M-Key SSD	1 x Internal 2.5" HDD 1 x M.2 M-Key SSD
Expansion slot	1 x Mini-PCle 1 x Micro-SIM card holder	1 x Mini-PCle 1 x Micro-SIM card holder	1 x Mini-PCle 1 x Micro-SIM card holder
Indicator	1 x Power, 1 x HDD	1 x Power, 1 x HDD	1 x Power, 1 x HDD
Front I/O	2 x Antenna (for Wi-Fi/3G/LTE supported) 1 x LED (POWER/HDD) 1 x Serial port (RJ45) 2 x USB3.0 ports 2 x USB2.0 ports 4 x GbE RJ45 ports 1 x VGA port	2 x Antenna (for Wi-Fi/3G/LTE supported) 1 x LED (POWER/HDD) 1 x Serial port (RJ45) 2 x USB3.0 ports 2 x USB2.0 ports 4 x GbE RJ45 ports 1 x VGA port	2 x Antenna (for Wi-Fi/3G/LTE supported) 1 x LCM Module w/ 3 buttons 1 x LED (POWER/HDD) 1 x Serial port (RJ45) 2 x USB3.0 ports 2 x USB2.0 ports 4 x GbE RJ45 ports 1 x VGA port
Rear I/O	1 x DC Jack 1 x Power/Reset button	1 x DC Jack 1 x Power/Reset button	1 x Power/Reset button
Thermal	Fanless	1 x Blower Fan	1 x Fan (option for J4205)
Environment	Operating Temperature: 0°C ~ 40°C Operating Humidity: 0% ~ 85% (non-condensing)	Operating Temperature: 0°C ~ 40°C Operating Humidity: 0% ~ 85% (non-condensing)	Operating Temperature: 0°C ~ 40°C Operating Humidity: 0% ~ 85% (non-condensing)
Dimensions	8.5"W(216mm) x 1.3"H(33mm) x 10.2"D(134mm)	8.26"W(210mm) x 1.75"H(44mm) x 5.27"D(134mm)	12.28"W(312mm) x 1.73"H(44mm) x 7.87"D(200mm)
Certification	CE, FCC(Class B), CB	CE, FCC(Class B), CB	CE, FCC(Class B), CB
Power supply	DC 12V/40W Adapter (screw type)	DC 12V/40W Adapter (screw type)	100W/150W single PSU 80+
Accessory	1 x set Ears	1 x set Ears	1 x set Ears

MSI N1000 series are built with Intel® Atom SoC to satisfy local security application or to be an IoT gateway in different industries. N1000 adopt latest Atom Apollo-lake series processor which could provide the best price/performance ratio to build up an edge VPN, Firewall, security service. The smart cities, retail, logistics and transportation areas are going to work out a very high efficiency network infrastructure so that N1000 series is suitable to install on everywhere. Even in the train, restaurant, hotel, campus and booth, N1000 has the mobility and high speed WiFi/3G/LTE wireless transmission to connect with sensors level for uploading data and response the command. Figure 1 represent the one of simplified IoT application and an idea to realize such intelligent concept.

Figure 1. N1000 series typical application



For more information, please visit our website.  
<http://server.msi.com>

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