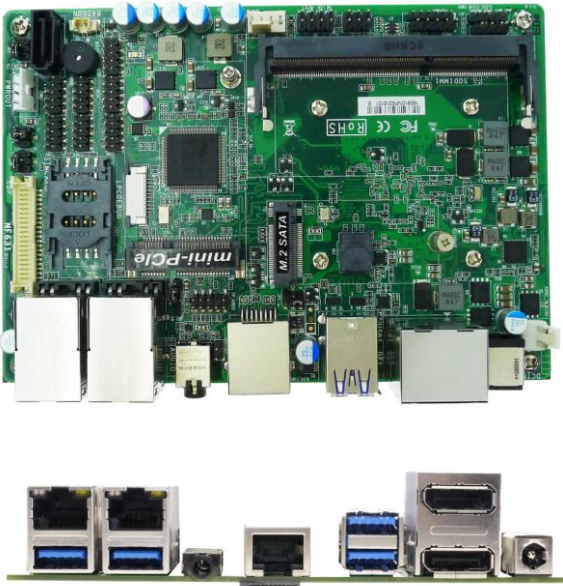


JNF631 Series

**Intel® Apollo-Lake series CPU, DDR3L up to 8GB, support
max 4K display resolution**



Overview

The JETWAY JNF631 series are 3.5" form factor board adopts the Intel® Apollo Lake N3350/N4200 SoC Processor. The board supports one 204-pins SO-DIMM DDR3L memory, up to 8GB. Featuring the integrated Intel® i211AT Gigabit Ethernet controller for Gigabit Ethernet connection, the JNF631 offers two 10/100/1000Base-TX Ethernet devices for network transmission. One SATAIII (6Gb/s) interface, micro SD socket and one M.2 (M-key, 2242) interface offer ample storage options. One Mini PCIe interface and SIM card holder are for 3G/LTE connection. Four USB3.0 ports, two USB2.0 ports and six COM ports provide versatile expansion. The JNF631 offers two DP and one eDP ports which can support triple independent output and display up to 4Kx2K@60Hz resolution. Because of these features, NF631 is suitable for digital signage or kiosk or industry use.

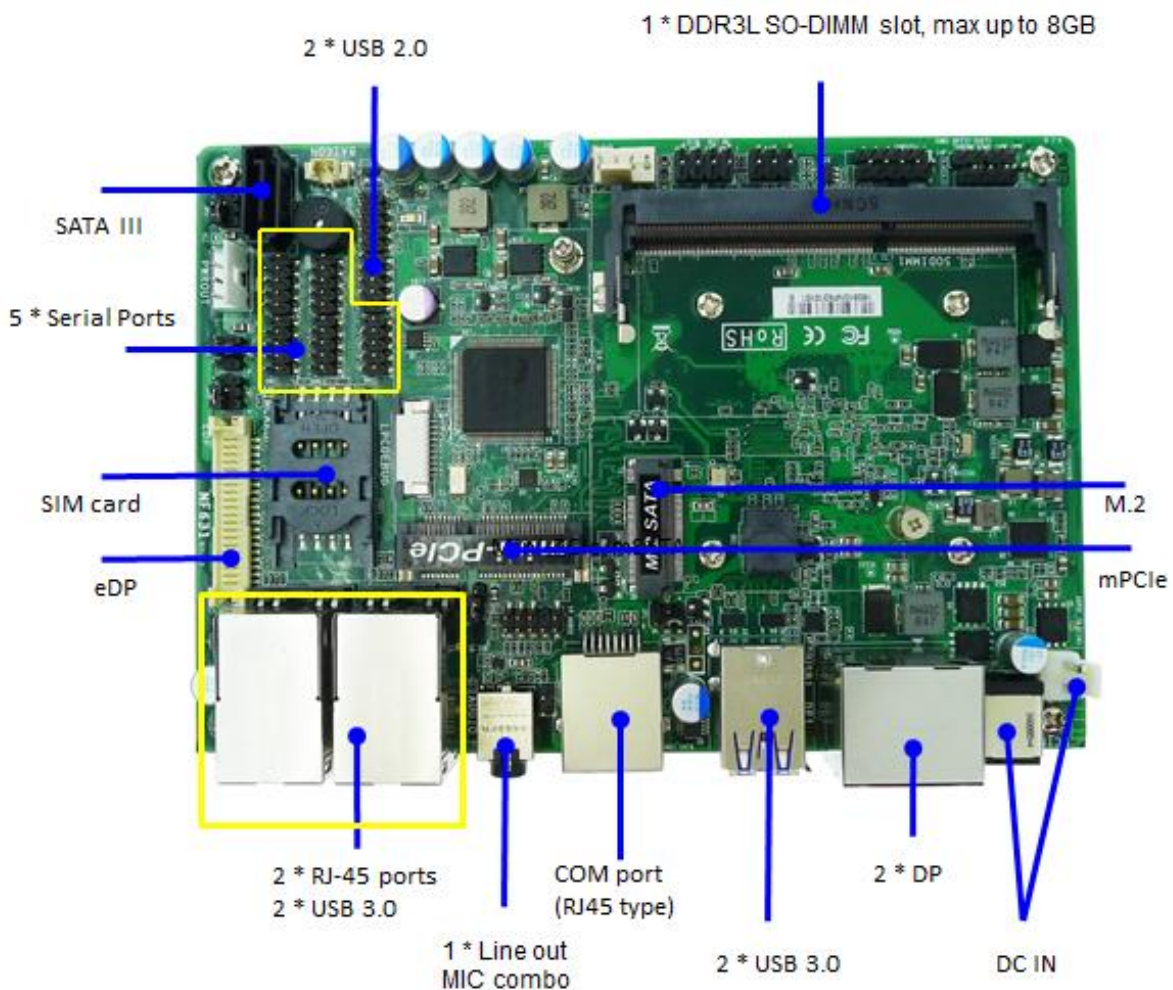
Features

1. Intel® Apollo Lake Series Processor
2. Support 1 * DDR3L SO-DIMM, up to 8GB
3. Support 2 * Display Port & 1 * eDP port
4. Support Triple Display, max 4K@60Hz resolution
5. 1 * External RS232(RJ45 Type) & 5 * Internal COM (COM 2 support RS232/422/485)
6. 4 * External USB3.0 & 2 * Internal USB2.0
7. 1 * Full size Mini PCIe , 1 * M.2 SATA interface
8. SIM card holder & micro SD socket

Application

- Digital Signage
- Kiosk
- Industry Use
- Auto Control

Internal Diagram



Specifications

Form Factor

| | |
|------------|---------------------------------------|
| Dimensions | - 3.5" (5.8-in * 4.0-in, 148 * 102mm) |
|------------|---------------------------------------|

Processor System

| | |
|-----|---------------------------------------|
| CPU | - Intel® Apollo Lake series Processor |
|-----|---------------------------------------|

| | |
|-------------|------------|
| Core Number | - (by CPU) |
|-------------|------------|

| | |
|-----------|------------|
| Max Speed | - (by CPU) |
|-----------|------------|

| | |
|----------|------------|
| L2 Cache | - (by CPU) |
|----------|------------|

| | |
|---------|-------|
| Chipset | - SoC |
|---------|-------|

| | |
|------|-----------------|
| BIOS | - AMI Flash ROM |
|------|-----------------|

Expansion Slot

| | |
|-----|-----|
| PCI | - 0 |
|-----|-----|

| | |
|-----------|-----------------|
| Mini-PCIe | - 1 (full size) |
|-----------|-----------------|

| | |
|-------|-----|
| mSATA | - 0 |
|-------|-----|

| | |
|------|-----|
| PCIe | - 0 |
|------|-----|

| | |
|-----|------------------|
| M.2 | - 1 (M key 2242) |
|-----|------------------|

| | |
|-------------------|-----|
| CFast Card Socket | - 0 |
|-------------------|-----|

| | |
|----------------|-----|
| CF Card Socket | - 0 |
|----------------|-----|

| | |
|-----------------|-----|
| SIM Card Holder | - 1 |
|-----------------|-----|

Memory

| | |
|------------|-----------------------|
| Technology | - DDR3L 1867MHz SDRAM |
|------------|-----------------------|

| | |
|------|-------|
| Max. | - 8GB |
|------|-------|

| | |
|--------|---------------|
| Socket | - 1 * SO-DIMM |
|--------|---------------|

Graphics

| | |
|------------|----------------------|
| Controller | - Intel® HD Graphics |
|------------|----------------------|

| | |
|------|-----------------|
| VRAM | - Shared Memory |
|------|-----------------|

| | |
|-----|-----|
| VGA | - 0 |
|-----|-----|

| | |
|------|-----|
| LVDS | - 0 |
|------|-----|

| | |
|---------|--|
| eDP 1.3 | - 1 (Max. Resolution : 4096 * 2160@60Hz) |
|---------|--|

| | |
|----------|-----|
| HDMI 1.4 | - 0 |
|----------|-----|

| | |
|-------|-----|
| DVI-D | - 0 |
|-------|-----|

| | |
|-------------|--|
| DisplayPort | - 2 (Max. Resolution : 4096*2160@60Hz) |
|-------------|--|

| | |
|--------------|------------------|
| MultiDisplay | - Triple Display |
|--------------|------------------|

Ethernet

| | |
|----------|--------------------|
| Ethernet | - 10/100/1000 Mbps |
|----------|--------------------|

| | |
|------------|----------------------------|
| Controller | - Intel i211AT Gigabit LAN |
|------------|----------------------------|

| | |
|-----------|-------------|
| Connector | - 2 * RJ 45 |
|-----------|-------------|

| Audio | |
|---------------------------|---|
| CODEC | - HD Audio : Realtek ALC662 |
| Channel | - 2 Channel (combo Line Out + Mic) |
| SATA | |
| Max Data Transfer Rate | - 1 * SATAIII (6.0Gb/s) |
| Rear I/O | |
| VGA | - 0 |
| DVI-D | - 0 |
| HDMI | - 0 |
| DisplayPort | - 2 |
| Ethernet | - 2 |
| USB | - 4 * USB 3.0 |
| Audio | - 1 (Line out + MIC combo) |
| Serial / Parallel | - 1 (RJ-45 type) / 0 |
| eSATA | - 0 |
| PS/2 | - 0 |
| DC-input | - 1 |
| Internal Connector | |
| USB | - 2 * USB 2.0 |
| PS/2 | - 1 |
| LVDS / inverter | - 0 |
| eDP | - 1 |
| HDMI | - 0 |
| Serial | - 5 (4 * RS232 , COM 2 support RS232/422/485) |
| SATA | - 1 * SATAIII (6.0Gb/s) |
| mPCIe | - 1 (full size) |
| Parallel | - 0 |
| mSATA | - 0 |
| M.2 | - 1 (M key-2242) |
| GPIO | - 1 (8 bit) |
| Chassis intrusion | - 1 |
| Audio Header | - 1 |
| SMBUS/ I2C | - 1 |
| AT mode | - 1 |
| TPM Header | - 0 |
| Others | - 1 * micro SD card slot |
| Watchdog Timer | |

| | |
|---------------------------|--|
| Output | - From Super I/O to drag RESETCON# |
| Interval | - 256 segments (10sec ~ 255min) |
| Power Requirements | |
| Input PWR | - 12V DC IN |
| Power On | AT/ATX Supported - AT : Directly PWR on as Power input ready - ATX: Press Button to PWR on after Power input ready |
| Certifications | |
| Certifications | - CE, FCC, RoHS, REACH |
| Environment | |
| Temperature | - Operating: 0°C ~ 60°C |
| | - Storage: -20°C ~ 85°C |
| Warranty | |
| Warranty | - 2 Years Limited Warranty |
| Packing | |
| Packing | - Net Weight: - Gross Weight: - Color Box dimension: |

*Specifications subject to change without notice, not responsible for typographical errors. Does not include HDD or OS.

Optional Accessories

| Part Number | Description |
|-------------------|-------------------------|
| | NF631 M/B |
| G03-NF631-F | IPC NF631 User's Manual |
| G02-DVD24-A1-WF | CD Driver |
| G01-SATA3-BL-1F | SATA cable |
| G01-PW4PS-2S-323F | SATA Power cable |

Mechanical Drawings (Unit = mm)

