

# JNU591R-3160

NUC size with Intel® Braswell Soc Processor, DDR3L up to 8GB, support 3 Independent Display outputs (2\* HDMI, 1\* DP)

## Features

1. Intel® Braswell N3160 SoC Processor
2. 1\* DDR3L SO-DIMM up to 8GB
3. Support 2\* HDMI 1.4b & 1\* DP 1.2 total 3 Independent Displays
4. Support 2\* Realtek RTL8119I GbE
5. Integrated Realtek ALC888S Audio CODEC with 4-CH
6. Support 1 \* Serial ATAPI (6Gb/s)
7. 4\* USB3.0 and 2\* USB2.0
8. 1\* External COM Port Support RS232/422/485
9. 1\* full size mPCIe (shared with mSATA), 1\* half size
10. 1\* SIM Card Holder



intel. FC CE RoHS COMPLIANT

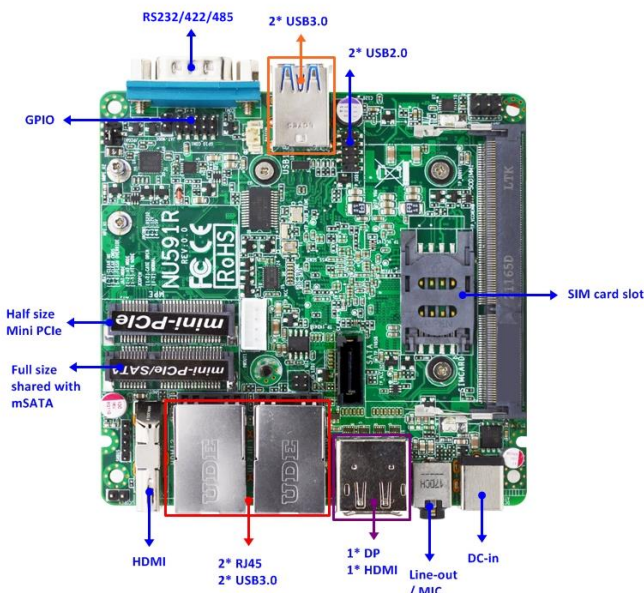
## Overview

The JETWAY NU591R Series adopts the Intel® Braswell N3160 SoC processor. The board has one DDR3 1600MHz SO-DIMM up to 8GB memory. NU591R Series equipped with 2\* HDMI and 1\* DP for IoT applications. In addition, it offers 4\* USB3.0 & 2\* USB2.0 ports which can connect different peripherals, e.g. camera and sensor. It is flexible expansion via one full size mini PCIe (shared with mSATA) and one half size mini PCIe and one RS232/422/485 port. For storage selection, NU591R Series provides one mSATA (shared with full size mini PCIe) and one SATAIII connector. In addition, NU591R Series board size is 101\*101mm and is a SubCompact, powerful and energy efficient NUC form factor board with reliable performance.

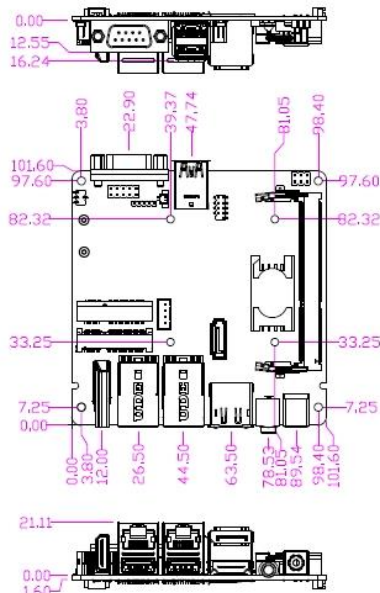
## Application

Digital Signage / Cloud Applications / Industrial Automation / IOT Solution

## I/O Diagram



## Mechanical Drawings (Unit=mm)



## Specifications

### Model

NU591R (N3160)

### Processor System

- Intel Braswell N3160 SoC Processor
- AMI 64Mb Flash ROM BIOS

### Storage

- 1\* SATAIII (6 Gb/s)
- 1\* mSATA (Shared with full size Mini PCIe)

### Ethernet

2\* Realtek RTL8119I GbE

### Audio

HD audio: Realtek ALC888S

### Internal I/O

- 2\* USB2.0
- 1\* SATAIII
- 1\* SIM card holder
- 1\* Chassis intrusion
- 1\* GPIO
- 1\* Audio Header
- 1\* SMBUS
- 1\* AT mode

### Power

12V DC-in PWR

- AT: Directly PWR on as Power input ready
- ATX: Press Button to PWR on after Power input ready

### Temperature

- Operating Temperature: 0 ~ 60° C
- Storage Temperature: -20 ~ 85° C
- Humidity: 10% ~ 90% RH @40°C (non-condensing)

### Warranty

2 Years limited warranty

### Form Factor

NUC (101 \* 101mm)

### Memory

1\* DDR3L 1600MHz SO-DIMM up to 8GB

### Expansion

- 1\* Mini-PCIe (Full size shared with mSATA)
- 1\* Mini-PCIe (Half size)

### Graphics

- Intel® HD Graphics, shared memory
- 2\* HDMI 1.4b (Max Resolution: 3840x2160@30Hz)
- 1\* DP (Max Resolution: 3840x2160@30Hz)
- Support Triple Displays

### Watchdog Timer

- From Super I/O to drag RESETCON#
- 256 segments (10sec ~ 255min)

### External I/O

#### Front:

- 2\* USB3.0
- 1\* COM (RS232/422/485)

#### Rear:

- 2\* HDMI
- 1\* DP
- 2\* RJ45
- 2\* USB3.0
- 1\* Audio jack
- 12V DC-in

### Compliance

CE, FCC, RoHS, REACH

### OS Support

Win7 SP1 64-bit, Win8.1 64-bit, Win10 64-bit, UEFI Win10 64-bit, Win 10 IoT Enterprise 64-bit LTSC 2019, UEFI Win 11 64-bit, UEFI Win 11 IoT Enterprise, Server 2012R2 64-bit, Server 2016 64-bit, Server 2019 64-bit, Server 2022 64-bit, WE Standard 7 SP1 64-bit, WE Standard 8.1 64-bit, Android x86 (Version 9.0-r2), CentOS 9 (Version 9), Debian 11 (Version 11.2.0), Fedora-LXDE (Version 35-1.2), Fedora Workstation (Version 35-1.2), Fedora Server (Version 35-1.2), FreeBSD (Version 13), OpenSUSE (Version 15.3-3), OpenBSD (Version 70), pfSense (Version 2.6.0), RedHat Enterprise (Version 8.4), TrueNAS (Version 11.3-U5), Ubuntu Standard / LTS (Version 20.04.3), Ubuntu Server (Version 20.04.3)

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

## Standard Accessories

| Part Number      | Description          |
|------------------|----------------------|
|                  | JNU591R-3160 M/B     |
| G01-SATAL-RD30-F | 1* SATA Cable L-Type |
| G01-XH4-SA15-35F | 1* SATA Cable        |
| F07-FNJNU93-F    | 1* NUC 3pin FAN      |