

### Features

1. Industrial Embedded Motherboard with Planned Lifecycle Through Q1'2020
2. Fanless Intel Celeron N3150 SoC Processor, Quad-Core, 1.6GHz, 2.08GHz Burst, Braswell-M, 6W TDP
3. Supports 1.35V DDR3L-1600 SODIMM up to 8GB Total
4. DVI-D, 24-bit LVDS, VGA Header, SIM Socket
5. 2 \* Gigabit LAN Ports, HD Audio
6. 2 \* SATA3 6Gb/s Ports, 1 \* M.2 SATA M-key Slot
7. 1 \* PCI Express 2.0 x1 Slot, 1 \* Full-size mini-PCIE Slot
8. 4 \* USB 3.0 Ports, 3 \* USB 2.0 Ports
9. 6\*Serial Ports (1\*RS232/422/485, 5\*RS232)
10. GPIO, Watchdog Timer, AT/ATX Power Switch Mode
11. 12V DC-in or Alternate 2-pin Internal Power Connector
12. Compatible with Windows 7, 8.1, 10, Linux
13. Thin Mini-ITX Form Factor (170mm x 170mm)

<b>Model / Series</b>	■ NF591
<b>Part No</b>	■ JNF591-3150
<b>Processor</b>	■ Fanless Intel Celeron N3150 SoC Processor, Quad-Core, 1.6GHz, 2.08GHz Burst, Braswell-M, 14nm, 6W TDP, 2MB Cache
<b>Chipset</b>	■ None
<b>Video</b>	■ Intel HD Graphics in processor, 320 – 640MHz
<b>Memory</b>	<ul style="list-style-type: none"> <li>■ 2 * 204-pin SO-DIMM slot supporting DDR3L-1600* up to 8GB total, 1.35V required</li> <li>■ *1600MHz memory will run at 1600MHz, 1333MHz memory will run at 1066MHz</li> <li>■ *1066MHz memory not supported</li> </ul>
<b>Expansion Slots</b>	<ul style="list-style-type: none"> <li>■ 1 * PCI Express 2.0 x1 slot</li> <li>■ 1 * Full-size Mini-PCI Express slot, SIM Card Socket</li> </ul>
<b>Storage</b>	<ul style="list-style-type: none"> <li>■ 2 * SATA3 6Gb/s ports</li> <li>■ 1 * M.2 slot (M-key, SATA interface, 2242, 2260, 2280, shared with SATA2 port)</li> </ul>
<b>Audio</b>	■ Realtek ALC662 HD Audio, 3W Amplifier
<b>Network</b>	■ 2 * Realtek RTL8111G Gigabit LAN
<b>Other Features</b>	■ Support AHCI, ACPI S3, CPU Smart FAN, Watchdog Timer 10-255 min/sec
<b>Rear Panel I/O</b>	<ul style="list-style-type: none"> <li>■ 4 * USB 3.0 ports, DVI-D port, 2 * RJ-45 LAN port</li> <li>■ 1 * Serial port (RS232/422/485)</li> <li>■ +12V DC-in locking jack (1-pin 2.5mm ID/5.5mm OD, locking)</li> </ul>
<b>Internal I/O</b>	<ul style="list-style-type: none"> <li>■ 2 * USB headers for 3 * USB 2.0 ports, VGA header</li> <li>■ 24bit LVDS &amp; Inverter, AT/ATX power switch mode, SIM card socket</li> <li>■ 5 * Serial port headers (RS232), SMBUS header</li> <li>■ 8-bit GPIO header, Chassis Intrusion header, PS/2 KB/MS header</li> <li>■ Alternate 2-pin internal power connector</li> </ul>
<b>BIOS</b>	■ AMI 64MB Flash ROM
<b>Box Contents</b>	■ NF591 Motherboard, SATA Cable, Power Cable, 5*COM cable, VGA Cable, Manual, DVD Driver Disk, Thin & Standard I/O Shields
<b>Certification</b>	■ CE, FCC, RoHS, ErP/EuP, REACH
<b>Temperature</b>	■ Operating Temperature 0~60 ° C, Storage Temperature -20-85 ° C
<b>Form Factor</b>	■ Thin Mini-ITX Form Factor (170mm x 170mm)
<b>Warranty</b>	■ 2 Years Limited Warranty

\*Specifications subject to change without notice, not responsible for typographical errors.



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