

# EPC-S201

## Intel Celeron N3350 Barebone Embedded SBC Fanless Slim System



### Features

- Intel® Celeron® N3350 Dual Core SoC
- Semi-Industry Fanless slim system, Din Rail or Wall mount design
- VGA display, COM port, 2 USB3.0, 1 LAN at Front
- 1 DIO port, 1 COM port at Side
- Advantech WISE-PaaS/DeviceOn support

#### Software APIs:



#### Utilities:



Windows Ubuntu DeviceOn iManager

### Specifications

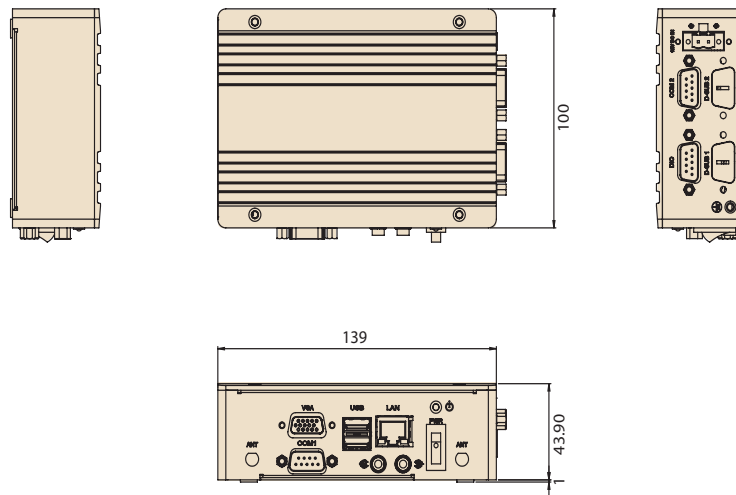
|                          |                            |                                                                                                 |
|--------------------------|----------------------------|-------------------------------------------------------------------------------------------------|
|                          |                            | EPC-S201M00-S1A1E                                                                               |
| Processor System         | CPU                        | Intel Celeron N3350 Dual Core SoC                                                               |
|                          | Frequency                  | 1.6 GHz                                                                                         |
|                          | Max Turbo Frequency        | 2.4 GHz                                                                                         |
|                          | L2 Cache                   | 2MB                                                                                             |
|                          | BIOS                       | AMI UEFI BIOS at 64Mbit                                                                         |
| Memory                   | Technology                 | DDR3L 1866MHz                                                                                   |
|                          | Max. Capacity              | Up to 8 GB (Barebone: No memory included as default)                                            |
|                          | Socket                     | 1 x 204-pin SODIMM                                                                              |
| Display                  | Controller                 | Intel® HD Graphics 500                                                                          |
|                          | Graphic Engine             | 4K Codec Decode& Encode for H.264, MPEG2, MVC, VC-1, WMV9, H.265 / HEVC, VP8, JPEG / MJPEG      |
|                          | VGA                        | 1920 x 1200                                                                                     |
| Ethernet                 | LAN                        | 10/100/1000 Mbps, Intel i210                                                                    |
| Audio                    | Main system                | Realtek ALC888S, High Definition Audio. Line-out,Line-in                                        |
| Expansion                | Mini PCIe                  | 1 x Full-size Mini PCIe                                                                         |
| Storage                  | mSATA                      | Half size MiniPCIe slot                                                                         |
| Other                    | Watchdog Timer             | 255-level timer interval, setup by software                                                     |
| Front I/O Openings       | USB                        | 2 USB3.0                                                                                        |
|                          | RJ45                       | 1                                                                                               |
|                          | VGA                        | 1                                                                                               |
|                          | COM                        | 1 (RS232/422/485)                                                                               |
|                          | Audio                      | Line-in, Line-out                                                                               |
|                          | Antenna                    | 1                                                                                               |
| Side I/O Openings        | COM                        | 1 (RS232/422/485)                                                                               |
|                          | Digital I/O                | 1 (8-bit general purpose input/ output)                                                         |
| Miscellaneous            | LED Indicators             | Power                                                                                           |
|                          | Control                    | Power switch                                                                                    |
| Power Requirement        | Power Type                 | AT                                                                                              |
|                          | Power input Voltage        | 12V                                                                                             |
|                          | Connector type             | 2-Pole Phoenix DC plug in                                                                       |
| Environment              | Operating Temperature      | 0 ~ 50 °C w/ 0.7m/s airflow                                                                     |
|                          | Storage Temperature        | -40 ~ 85 °C (-40~185 °F)                                                                        |
|                          | Relative Humidity          | 40 °C @ 95%, Non-Condensing                                                                     |
|                          | Vibration During Operation | With Desk/Wall Mount/ DIN Rail: 3 Grms, IEC 60068-2-64, random vibration, 5 ~ 500 Hz, 1 hr/axis |
|                          | Shock During Operation     | 30G, IEC60068-2-27, half sine, 11m duration                                                     |
| Physical Characteristics | Mounting                   | Desk/Wall-mounting, Din rail mounting                                                           |
|                          | Dimensions (W x H x D)     | System dimension: 139 x 100 x 44 mm                                                             |
|                          | Weight                     | 0.6 kg                                                                                          |
| Regulation               | EMC                        | CE/FCC Class B (*No RED certification), BSMI, VCCI, CCC (TBD)                                   |
|                          | Safety                     | CB, UL, BSMI, CCC (TBD)                                                                         |

\* Other RAM size is supported by request.

## EPC-S201

### Dimensions

Unit: mm



### Ordering Information

| Part Number       | CPU                 | RAM              | VGA | GbE | USB 3.0 | RS-232/422/485 | Audio               | MiniPCle    | mSATA                            | Power Input       | Operating Temperature |
|-------------------|---------------------|------------------|-----|-----|---------|----------------|---------------------|-------------|----------------------------------|-------------------|-----------------------|
| EPC-S201M00-S1A1E | Intel Celeron N3350 | up to 8GB DDR3L* | 1   | 1   | 2       | 2              | Line in<br>Line out | 1 Full size | 1 (Half size miniPCle connector) | 12V <sub>DC</sub> | 0 ~ 50 °C             |

\* RAM size is supported by request.

### Embedded OS/API

| OS/API           | Part No.       | Description                        |
|------------------|----------------|------------------------------------|
| Win10            | 20706WX6ES0036 | img W10 16EL EPC-S201 64b 1709 ENU |
| Software API     | -              | SUSI API for Windows or Linux      |
| Linux            | -              | Yocto BSP ready                    |
| Ubuntu 20.04 LTS | TBD            |                                    |

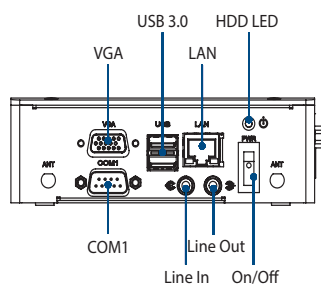
### Optional

| Part Number      | Description                                                          |
|------------------|----------------------------------------------------------------------|
| 96PSA-A60W12P2-3 | DC power 12V/5A 60W, 0 ~ 40 °C, w/ Phoneix Jack type power connector |
| 1702002600-01    | Power cable 3-pin 183 cm, USA type                                   |
| 1700018704       | Power cable 3-pin 180 cm, UK type                                    |
| 1702002605       | Power cable 3-pin 183 cm, Europe type                                |
| 1700000237-01    | Power cable 3-pin 183 cm, PSE type                                   |
| 1960083757N002   | Wall Mount Bracket (2pcs for 1 unit)                                 |
| 1960015198T011   | DIN Rail Bracket (1pcs for 1 unit)                                   |
| 1930001241       | Screw for DIN Rail Bracket (3pcs for 1 unit)                         |

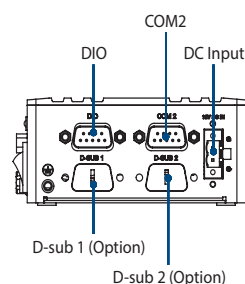
### Packing List

| Part Number | Description       |
|-------------|-------------------|
|             | 1 x EPC-S201 Unit |
|             | 1 x China RoHS    |

### Front View



### Side View

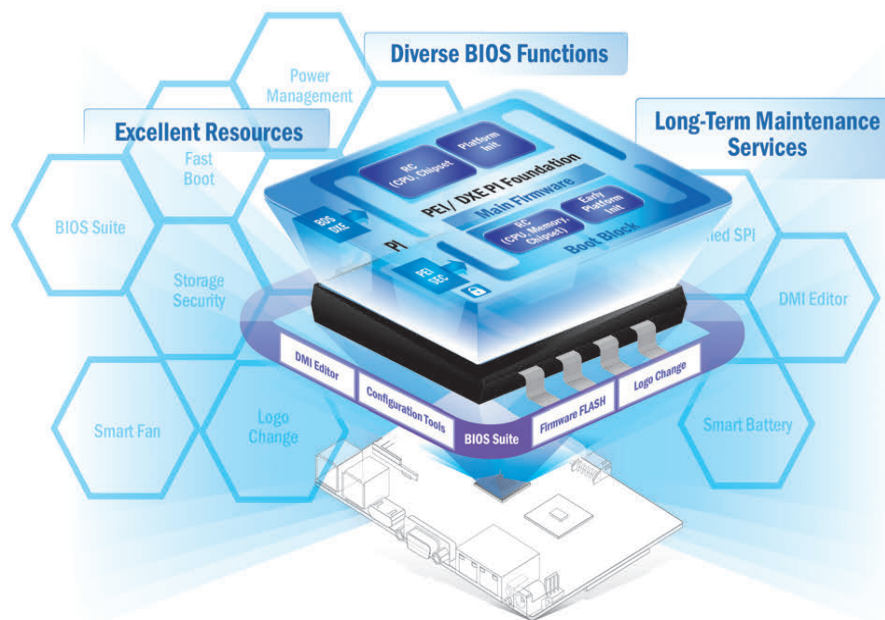


## EPC-S201

# Reliable Embedded BIOS Solutions

Custom BIOS services with long-term support

Advantech's high-quality embedded BIOS solutions deliver rapid execution and feature expert BIOS team support. These solutions feature multi-functional designs that ensure security and enable power/boot management. Advantech further provides 10+ years of BIOS version management, internal management, and longevity support for both hardware and BIOS — enhancing application efficiency, diversifying functionality, and optimizing performance.



### Embedded BIOS Solution Advantages

#### Sufficient Sources

- Strong partnership with BIOS vendors
- 50+ engineers with extensive industrial BIOS experience

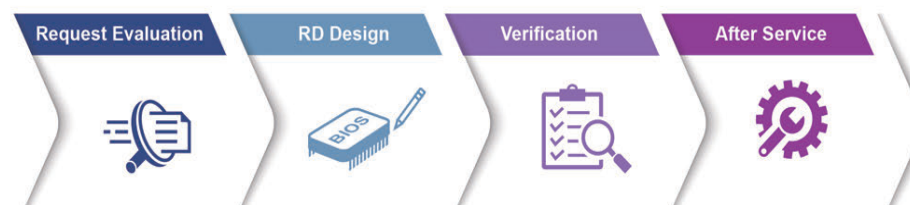
#### Diverse BIOS Functions

- Multi-layer security
- 3 second fast boot
- Power management
- BIOS suite utility

#### Long-Term Maintenance Services

- Platform longevity support
- 10-year BIOS version control
- BIOS remote backup

### Value-Added Customization Process



## EPC-S201

# Embedded Linux Support and Design-in Services

Hardware Certified Ubuntu and Yocto with Eco Partner Services

Linux is the most popular embedded OS for transportation, outdoor services, factory automation, and mission critical applications. Its open source and kernel reliability features ease security updates, and make it particularly adaptable to new AI and Edge computing technology. Advantech has cooperated with Canonical and other software partners to provide hardware certified Ubuntu image and Yocto BSP as Linux offerings. The Advantech, Embedded Linux, and Android Alliance (ELAA) delivers local software services and consultation.



## Features

| Certified OS and BSP                                                                                                                    | Licensed Services                                                                                                                                                    | Numerous AI and Edge Resources                                                                                                                                          | Local Partner Alliance                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Platform compatibility tests</li> <li>Preloaded functional driver and software stacks</li> </ul> | <ul style="list-style-type: none"> <li>License authorized Canonical delivers 10-years of bug fixes and security updates</li> <li>In-house bundled service</li> </ul> | <ul style="list-style-type: none"> <li>Containerized technology for service provision and deployment</li> <li>AI resources from Caffe, TensorFlow, and mxnet</li> </ul> | <ul style="list-style-type: none"> <li>Embedded Linux and Android Alliance (ELAA)</li> </ul> |

## EPC-S201

### Edge AI Suite

AI development for diverse application at the Edge

Increasing demand for AI inference/analytic capabilities at the Edge make AI training models, software development environments, and hardware configuration key factors in successful solution deployment. Advantech's Edge AI Suite helps users build AI demo devices quickly and choose optimal hardware solutions easily.



| 5x Performance Boost                                                                                                                | All-in-one Installation                                                                                                       | One Click AI Experience                                                                                                         | Plug-and-play Environment                                                                                                                     | Discover Cost-effective Hardware                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Integrated Intel® OpenVINO™ technology</li> <li>Boost AI using Advantech hardware</li> </ul> | <ul style="list-style-type: none"> <li>Build AI environment in under 5 minutes</li> <li>Ready-to-use configuration</li> </ul> | <ul style="list-style-type: none"> <li>User friendly configuration guidance</li> <li>One-click Benchmark acquisition</li> </ul> | <ul style="list-style-type: none"> <li>Easy access to 100+ AI inference extensions</li> <li>Software development package available</li> </ul> | <ul style="list-style-type: none"> <li>Diverse CPU/RAM options</li> <li>Find hardware solutions for AI development</li> </ul> |

## EPC-S201

### WISE-DeviceOn

#### Massive IoT Device Management Utility

IoT deployment and management typically involves numerous disparate devices installed on multiple sites. These devices require effective monitoring, managing, and tracking. Advantech's easy-to-use WISE-DeviceOn interface enables users to remotely monitor device health, troubleshoot problems, and send software/firmware updates over-the-air (OTA). In sum, DeviceOn empowers quick real-time responsiveness to emerging problems.



#### Features

| Comprehensive Management                                                                                                         | Remote Access                                                                                                                  | Efficient Operations                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Devices status</li> <li>• Peripherals/firmware</li> <li>• Open for extension</li> </ul> | <ul style="list-style-type: none"> <li>• Real-time monitoring</li> <li>• Remote controls</li> <li>• Troubleshooting</li> </ul> | <ul style="list-style-type: none"> <li>• Zero-touch on-boarding</li> <li>• OTA updates</li> <li>• Batch control</li> </ul> |

#### Product Highlights

|                                                                                                                                                                               |                                                                                                                                                                            |                                                                                                                                                                    |                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
|  <p><b>SOM-6883</b><br/>High-performance 11<sup>th</sup> Gen Intel® COMe Type 6 Module</p> |  <p><b>MIO-5375</b><br/>Compact 11<sup>th</sup> Gen Intel® Outdoor Focused 3.5" SBC</p> |  <p><b>EPC-B5587</b><br/>10<sup>th</sup> Gen Intel® Xeon® based Edge server</p> |  <p><b>EPC-R3220</b><br/>Arm based IoT Edge Gateway</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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