EPC-S201

Intel Celeron N3350 Barebone Embedded SBC Fanless Slim System

Features

- Intel® Celeron® N3350 Dual Core SoC
- Semi-Industry Fanless slim systen, 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: GPIO, Watch Dog Timer, Backlight On/Off, Brightness

Utilities: Hardware Monitor, System Info, System Throttling, Thermal Protection, Data Security

Windows 10 | DeviceOn | iManager

Specifications

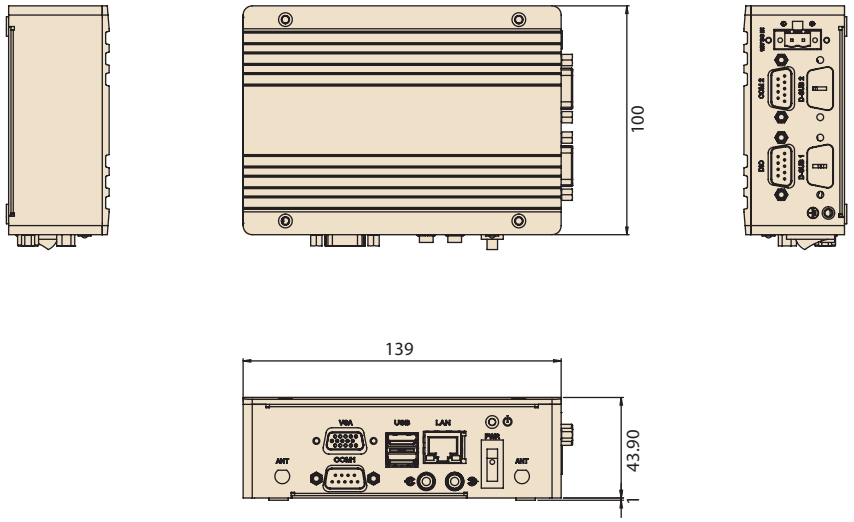
		EPC-S201M00-S1A1E
Processor System	CPU	Intel Celeron N3350 Dual Core SoC
	Frequency	1.6 GHz
	Max Turbo Frequency	2.4 GHz
	L2 Cache	2MB
	BIOS	AMI UEFI BIOS at 64Mbit
Memory	Technology	DDR3L 1866MHz
	Max. Capacity	Up to 8 GB*
	Socket	1 x 204-pin SODIMM
Display	Controller	Intel Gen9 LP
	Graphic Engine	4K 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 PICe	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.

Last updated: 1-Nov-2021

Dimensions

Unit: mm



Ordering Information

Part Number	CPU	RAM	VGA	GbE	USB 3.0	RS-232/422/485	Audio	MiniPCIe	mSATA	Power Input	Operating Temperature
EPC-S201M00-S1A1E	Intel Celeron N3350	up to 8GB DDR3L*	1	1	2	2	Line in Line out	1 Full size	1 (Half size miniPCIe connector)	$12V_{DC}$	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
Liunx	-	Yocto BSP ready
Ubuntu 20.04 LTS	TBD	

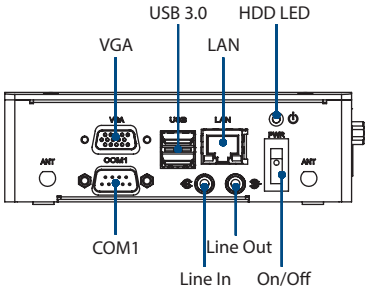
Optional

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
ESBC-0BRK-WM02	Wall mount kit
ESBC-0BRK-DR01	DIN Rail kit

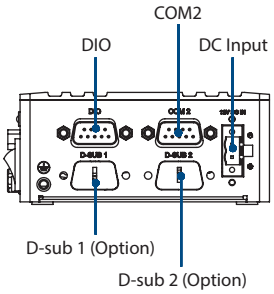
Packing List

Part Number	Description
	1 x EPC-S201 Unit
	1 x Startup Manual (Simplified Chinese)

Front View



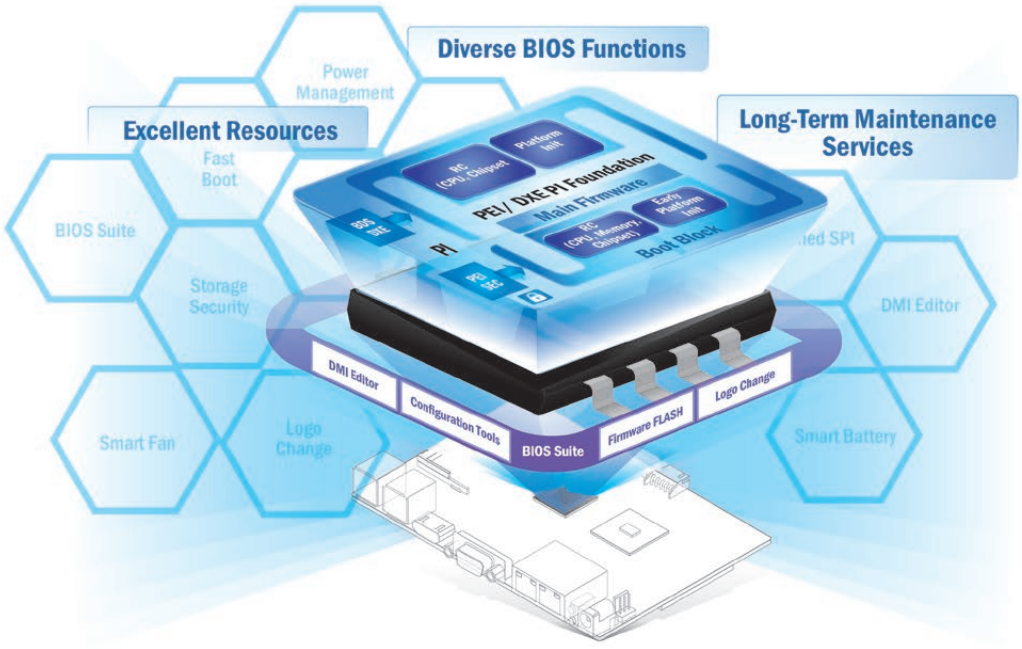
Side View



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

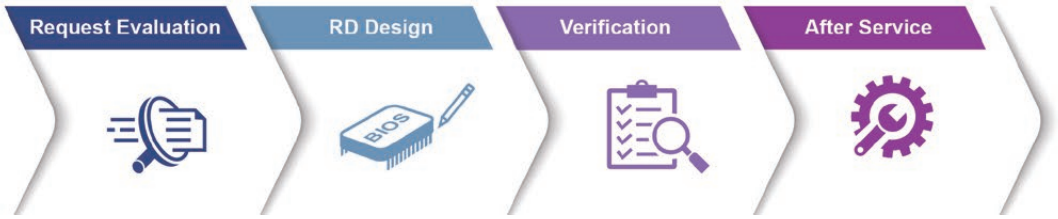
Diverse BIOS Functions

- 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



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

- Platform compatibility tests
- Preloaded functional driver and software stacks

Licensed Services

- License authorized Canonical delivers 10-years of bug fixes and security updates
- In-house bundled service

Numerous AI and Edge Resources

- Containerized technology for service provision and deployment
- AI resources from Caffe, TensorFlow, and mxnet

Local Partner Alliance

- Embedded Linux and Android Alliance (ELAA)

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
• Integrated Intel® OpenVINO™ technology • Boost AI using Advantech hardware	• Build AI environment in under 5 minutes • Ready-to-use configuration	• User friendly configuration guidance • One-click Benchmark acquisition	• Easy access to 100+ AI inference extensions • Software development package available	• Diverse CPU/RAM options • Find hardware solutions for AI development

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
• Devices status • Peripherals/firmware • Open for extension	• Real-time monitoring • Remote controls • Troubleshooting	• Zero-touch on-boarding • OTA updates • Batch control

Product Highlights

SOM-6883
High-performance 11th Gen Intel® COMe Type 6 Module

MIO-5375
Compact 11th Gen Intel® Outdoor Focused 3.5" SBC

EPC-B5587
10th Gen Intel® Xeon® based Edge server

EPC-R3220
Arm based IoT Edge Gateway