

各種産業用 Box PC > コンパクト > uIBXシリーズ

ITG-100-AL

Fanless Ultra Compact Size Embedded System

Specifications

» CPU:
Intel® Atom™ x5-E3930 1.3GHz (up to 1.8 GHz, dual core, TDP=6.5W)
» Chipset:
SoC
» System Memory:
1x 204-pin DDR3L SO-DIMM slot (system max. 8 GB)
» Power:
Input : 2-pin terminal block: 12 V DC
Consumption: 12V @ 1A (Intel® Atom™ x5-E3930 CPU with 2GB 1600 MHz DDR3L memory)
» Reliability:
Operating Shock: Half-sine wave shock 5G, 11ms, 100 shocks per axis, IEC68-2-27
Operating Vibration: MIL-STD-810G 514.6C-1 (SSD)
Safety/EMC: CE/FCC
20.03, 2
» USB: 2 x USB 3.0
» Ethernet:2 x RJ-45
PCIe GbE by Intel® I211 controller
» COM Port:2 x RS-232/422/485
» Display:1 x VGA
" DISPIRY. I X VOA
M 2:
M.2:
1 x M.2 2230 (A key, PCIe by 1, USB2.0)
PCIe Mini:
1 x Full-size PCIe Mini slot (supports mSATA, colay with SATA)
Fanless
1 x 2.5" SATA 6Gb/s HDD/SSD bay
(ITG-100-AL-E1 & ITG-100-AL-E1/2GB support)
1 x Power Button
1 x Reset Button
1 x AT/ATX Switch
1 x LED for HDD (Yellow)
1 x LED for Power (Green)
Extruded aluminum alloy
Blue & Silver
ITG-100-AL-E1/S: 137 x 102.8 x 36.2 (WxDxH) (mm)
ITG-100-AL-E1: 137 x 102.8 x 56.2 (WxDxH) (mm)
ITG-100-AL-E1/S: 0.67 kg/1.03 kg
ITG-100-AL-E1: 0.86 kg/1.22 kg



Environment		
Operating Temperature	-20°C ~ 60°C with air flow (SSD)	
Humidity	10% ~ 95%, non-condensing	
OS Support		
OS Support	Microsoft Windows 10 / Windows 11, Linux	

Ordering Information

ITG-100-AL-E1/S-R10	Fanless embedded system, Intel®Apollo Lake x5-E3930 1.3GHz (up to 1.8GHz, dual core), VGA, M.2, COM, 12V DC and RoHS
ITG-100-AL-E1/2GB/S-R10	Fanless embedded system, Intel®Apollo Lake x5-E3930 1.3GHz (up to 1.8GHz, dual core), 2GB DDR3L pre-installed memory, VGA, M.2, COM, 12V DC and RoHS
ITG-100-AL-E1/2GB-R10	Fanless embedded system, Intel®Apollo Lake x5-E3930 1.3GHz (up to 1.8GHz, dual core), 2GB DDR3L pre-installed memory, VGA, M.2, COM, 12V DC, Flexible I/O Expansion and RoHS
ITG-100-AL-E1-R10	Fanless embedded system, Intel®Apollo Lake x5-E3930 1.3GHz (up to 1.8GHz, dual core), VGA, M.2, COM, 12V DC, Flexible I/O Expansion and RoHS

Packing List

1x Mounting bracket	1 x Screw kit
1 x SATA cable & SATA power cable(for ITG-100-AL-E1 only)	1 x RJ-45 to DB-9 COM port cable

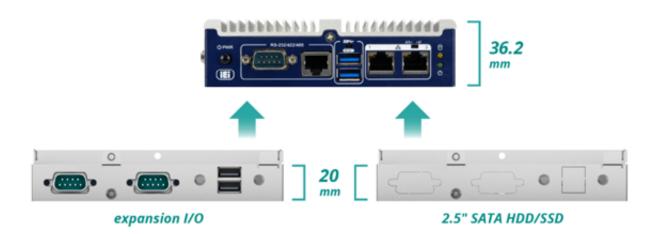
Ultra-compact Edge Computing System

The ITG-100-AL uses Intel® Atom™ X5-E3930 1.3GHz as its processor with max. 8GB memory. Space limitation is one of the constraints commonly seen in today's industrial environment. Under tight restrictions, the ITG-100-AL not only provides palm-sized design to meet the space requirement, but also comes with adequate basic I/O ports and supports a wide range of operating temperature (-20~60°C), making it suitable for acting the role as a data collection gateway for various applications. In order to respond the demand of adding more functions to the system, the ITG-100-AL is equipped with a full-size PCIe Mini slot reserved for 3G/4G and a M.2 A-key slot reserved for Wi-Fi to provide function expansion with easy access. Additional 2.5″ SATA HDD/SDD bay, knockout-hole layer with selectable I/O interface, or both of above-mentioned modularized options could be implemented into the ITG-100-AL to best fit users' preferences and still remaining its small size.

High Expansion Capability with Modular Design

Additional block layers can be assembled to achieve I/O interface expansion and data storage requirement. With choices of adding a 2.5" SATA HDD/SSD bay, a knockout-hole layer with selectable I/O interface, or both of above-mentioned options, the ITG-100-AL could be modularized to what best fit users' preferences and still remaining its compact size.





Ultra-compact Size

Space limitation is one of the constraints commonly seen in today's industrial environment. Under tight restrictions, the ITG-100-AL not only provides palm-sized design to meet the space requirement, but also comes with adequate basic I/O interfaces for various applications.



Functionality Expansions

In order to respond the demand of adding more functions to the system, the ITG-100-AL is designed with a full-size PCIe Mini slot reserved for 3G/4G and a M.2 A-key slot reserved for Wi-Fi to provide function expansions with easy access.





Full-size PCle Mini



M.2 A key



Intelligent Data Collection Gateway

The followings are some of challenges we may face when deploying new IIoT technology on factory equipment.

- *Collecting large amounts of data from sensors
- *Computing and analyzing big data
- *Delivering the computed result to other machines & devices
- *Enhancing data security

IEI ITG-100-AL features Intel® Atom CPU have the capability to provide intelligent machinery and big data analysis. Its rich I/O interfaces and multiple expansions, allowing users to connect different devices for increasing productivity by realizing smart manufacturing. IEI also offer ITG-100AI which is combined with an AI accelerator card to implement as an AI inference system for object detection.





EV Charging Station Gateway

IEI ITG-100-AL, supports -20°C to 50°C operating temperatures to enable the connection of charge units and monitoring sensors in critical environments. Under tight restrictions, it not only provides palm-sized design to meet the space requirement, but also comes with adequate basic I/O interfaces. As an IoT gateway, the ITG-100 can collect, analyze data and transfer the data to the control center through wireless connection.

