

# SmartPico

The Fanless Tiny Embedded Box PC with congatec PICO ITX

## Features

- Tiny Size Design
- Fanless system, aluminum alloy structure
- congatec Pico ITX inside
- Intel Gigabit Ethernet LAN
- Intel HD Graphics



## System

CPU	Intel® Atom™ E3845 1.91 GHz Quad Core Intel® Atom™ E3826 1.46 GHz Dual Core Other Variants by request
Chipset	Integrated in SoC
BIOS	AMI Aptio® 2.X (UEFI) BIOS; SM-BIOS BIOS Update Logo Boot Quiet Boot HDD Password
System Memory	Single Channel up to 4GB onboard DDR3L with 1333 MHz 3845:4G,3826:2G
Board Form Factor	PICO ITX

## I/O

Ethernet	Gigabit Ethernet, for Intel® PCIe Gb LAN I210 x 1
Wireless	Optional by Half MiniCard wireless module (Factory-install)
Front I/O	USB2.0 x 2 Power Button x 1, LEDx2 for System/ (HDD/SSD) ,Antenna x 2
Others	DisplayPort DP++ x1, DC-IN x 1, DBP x 1(For RS-232)
Rear I/O	USB3.0 x 2 Intel Gigabit Ethernet RJ-45 x 1

## Expansion

Others	1x Micro SD Card slot(Factory-install)
Mini Card	Half size x 2 (Factory-install)
Indicator Front	LED x 2 for System/(HDD/SSD)

## Environment & Mechanical

Temperature Operation	With E3826 : Ambient with Airflow: -22°F ~ 158°F (-30°C ~ 70°C) With E3845 : Ambient with Airflow: -22°F ~ 140°F (-30°C ~ 60°C) With industrial grade device (According to IEC68-2-14, IEC68-2-1, IEC68-2-2) with 1 m/s air flow
Temperature Storage	-40°C ~+85°C,(40°F~185°F)With industrial grade device (According to IEC68-2-1, IEC68-2-2, IEC68-2-3)
Weight (net/gross)	0.55kg(1.2lb)/1.1kg(2.421b)

## Headquarter

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Note : All product specifications are subject to change without notice

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Dimension(W x D x H)	With bracket : 140 x 80 x 58.8 mm (5.51 x 3.15 x 2.31") Without bracket : 120 x 80 x 58.8 mm (4.72 x 3.15 x 2.31")
Mounting	Wall Mount, DIN Rail, VESA Mount by option kit
Power Requirement	DC 12V in with DC-Jack Or DC 9 ~ 36V in with 3-pin terminal block (Customize by request )
System Cooling	Passive Cooling
Anti-Vibration	5 g rms/ 5 ~ 500Hz/ operation – m-SATA 5 g rms/ 5 ~ 500Hz/ operation – SSD 50 G peak acceleration (11 msec. duration) – SSD
Anti-Shock	50 G peak acceleration (11 msec. duration)–m-SATA 50 G peak acceleration (11 msec. duration) – Micro SD card 20 G peak acceleration (11 msec. duration) – HDD

## Certification & Optional OS Installation

OS	Microsoft® Windows 8 Microsoft® Windows 7 Linux Microsoft® Windows® 7/8 embedded standard
Certification	CE / FCC class A
MTBF	According to congatec PA3

## Storage

CFast/CF/SD	1x Micro SD Card slot (Factory-install)
HDD/ SSD	( Customize by request ) 2.5" SATA HDD/SSD Bay x 1
m-SATA	mSATA x 1 (Half Size, share with Mini-Card Interface) (Factory-install)

## Display

Graphic	Next Generation Intel® HD Graphics
Controller	Built in CPU
LVDS	Customize by request 1x 24-bit Dual Channel LVDS Interface *(via eDP to LVDS converter PTN3460) resolution up 1920x1200 with 60Hz
MIPI-CSI	( Customize by request ) 1x MIPI-CSI 2.0
High Definition Video Output/DP	1x DisplayPort DP++ resolution up 1920x1200 with 60Hz

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## Ordering Information

Model	Description
<b>EBC-5231/E3826 2G</b>	<p>EBC-5231 Fanless Box PC for Pico ITX/Intel® Atom™ E3825/2G RAM</p> <p>Front Side</p> <ul style="list-style-type: none"><li>◆ 1 x Display Port</li><li>◆ 2 x USB 2.0 ( Front side)</li><li>◆ 2 x USB 3.0 ( Rear side )</li><li>◆ 1 x 10/100/1000Mbps Ethernet</li><li>◆ 1 x power on/off button</li><li>◆ 1 x COM</li><li>◆ 2 x Antenna holes ( Front side )</li><li>• 12V Power input</li></ul>
<b>EBC-5231/E3845 4G</b>	<p>EBC-5231 Fanless Box PC for Pico ITX/Intel® Atom™ E3845/4G RAM</p> <p>I/O</p> <ul style="list-style-type: none"><li>◆ 1 x Display Port</li><li>◆ 2 x USB 2.0 ( Front side)</li><li>◆ 2 x USB 3.0 ( Rear side )</li><li>◆ 1 x 10/100/1000Mbps Ethernet</li><li>◆ 1 x power on/off button</li><li>◆ 1 x COM</li><li>◆ 2 x Antenna holes ( Front side )</li><li>• 12V Power input</li></ul>
<b>EBC-5231/iE3826 2G</b>	<p>EBC-5231 Fanless Box PC for Pico ITX/Intel® Atom™ E3826/2G RAM</p> <p>I/O</p> <ul style="list-style-type: none"><li>◆ 1 x Display Port</li><li>◆ 2 x USB 2.0 ( Front side)</li><li>◆ 2 x USB 3.0 ( Rear side )</li><li>◆ 1 x 10/100/1000Mbps Ethernet</li><li>◆ 1 x power on/off button</li><li>◆ 1 x COM</li><li>◆ 2 x Antenna holes ( Front side )</li><li>• 12V Power input</li></ul> <p>Extended temperature version -40°C to 70°C without audio functionality.</p>

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## EBC-5231/iE3845 4G

EBC-5231 Barebone Fanless Box PC for Pico ITX/Intel® Atom™  
E3845/4G RAM

### I/O

- ◆ 1 x Display Port
- ◆ 2 x USB 2.0 ( Front side)
- ◆ 2 x USB 3.0 ( Rear side )
- ◆ 1 x 10/100/1000Mbps Ethernet
- ◆ 1 x power on/off button
- ◆ 1 x COM
- ◆ 2 x Antenna holes ( Front side )
- 12V Power input

Extended temperature version -40 °C to 70 °C without audio  
functionality.

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