



P1201 Series

Intel Elkhart Lake Platform Slim Embedded Computer



41.5mm Low-profile Design

Less Than the Standard 1U Height



One Computer, Two Purposes

Perfect as A Standalone or Panel PC



Standalone Embedded Computer



Slime Type Panel PC

Versatile Mounting Methods

Flexible from Wall, CDS, to VESA Mounting Options

Wall Mount



P1200 comes with standard wall mount brackets, allowing it to be easily mounted in any desired location

CDS Mount



P1201's CDS technology provides both panel mount and open frame mount options, depending on the chosen display module.

VESA Mount



The top cover of P1201 is designed with standard VESA mounting holes that support both 75x75mm and 100x100mm hole patterns

■ Product Introduction

■ Selection Guide



Key Features

01 | Outstanding Performance

02 | Integral Functionality

03 | Industrial-grade Reliability

Intel Elkhart Lake Platform



Powered by

Intel 10nm Process Technology

Single-thread Performance Up to **1.7X** Improvement

Elkhart Lake

Apollo Lake

Multi-thread Performance Up to **1.5X** Improvement

Elkhart Lake

Apollo Lake

Remark:

- The results come from the Intel website – Elkhart Lake Overview.
- Compared to the previous generation platform – Apollo Lake.

Intel Atom x6000E Series



Highest Clock Speed

With the Most Processing Cores in the Elkhart Lake Platform

Intel Atom x6425E

- Support 4 Cores and 4 Threads
- Base Frequency: 2.0 GHz
- Max Turbo Frequency: 3.0 GHz
- TDP: 12W

Intel Atom x6211E

- Support 2 Cores and 2 Threads
- Base Frequency: 1.2 GHz
- Max Turbo Frequency: 3.0 GHz
- TDP: 6W

DDR4 Memory

3200MHz Data-transfer Speed

DDR4 memory on Elkhart Lake can provide faster data-transfer speeds and better performance compared to DDR3L 1866MHz on Apollo Lake.

32GB Memory Capacity

P1201 supports up to 32GB of DDR4 memory, which is significantly higher than the maximum memory capacity of 8GB for Apollo Lake.



Intel UHD Graphics



CDS



DP & VGA

2X Graphics Performance

Features Intel's 10th-generation Graphics Engine

Intel UHD graphics has a higher number of execution units and higher clock speeds, providing up to 2 times the graphics performance over the previous generation (Intel HD Graphics 505) used in the Apollo Lake platform.

It can also support triple displays at high resolutions, delivering a more immersive and productive work environment.



Key Features

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I/O & Connectivity



3-Sided I/O Design

Maximize Your Connectivity Options on P1200!

High-speed Connectivity

- 2x 10 / 100 / 1000Mbps LAN Ports, RJ45
- 3x 10Gbps USB3.2 Gen2 Ports, Type A Connector
- 1x 480Mbps USB2.0 Port, Type A Connector

New

Other Function

- 1x Remote Power LED Function
- 1x Remote Power On/Off Function
- 3x RS232/422/485 Serial Ports
- 8x Isolated DIO (4x DI/4x DO), 10-Pin Terminal Block

New

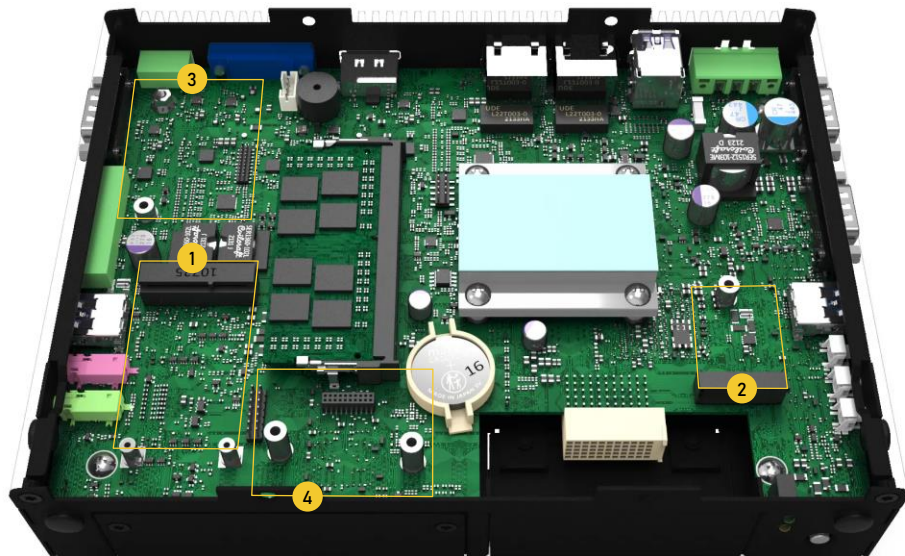
Maintenance Area

- Front Accessible 2.5" SATA Tray
- Clear CMOS Switch
- SIM Card Slot
- AT / ATX Mode Switch
- IGN 12/24V and Delay Timer Switch
- Reset Switch **New**



Streamline Your On-site Maintenance Process!

Internal Expansion Socket



1

Mini PCIe

- Support PCIe and USB 3.0 Signal
- WIFI / GPS / 4G Expansion
- Interconnect with SIM Socket
- BIOS Selectable mSATA Function

2

M.2 Key E Type 2230

New

- Support PCIe x2 Signal
- WiFi / Bluetooth Expansion
- Intel CNVi Module Expansion
- BIOS Selectable for Intel® CNVi Function

3

CFM-POE

- Enable PoE Function for Onboard LAN Ports
- Support 2x PoE+, Individual Port 25.5W
- Compliance with IEEE 802.3at Standard

4

CFM-IGN

- Power Ignition Sensing Function
- Low Voltage Detection
- Vehicle Battery Voltage: 12V / 24V

CDS Technology

CDS

Convertible Display System

Patent No.: M482908

P1201 supports CINCOZE patent technology – CDS which is compatible with existing industrial display modules (CV-100 series), sunlight-readable display modules (CS-100 series), and open frame display modules (CO-100 series).



Audio Integration Design



Built-in Speaker

P1201 features two built-in 2W speakers for all your audio needs. Whether customers need to play alerts or notifications, the P1201's speaker delivers clear and powerful sound in a compact and reliable package.

Onboard Mic-in / Line-out

P1201 is equipped with mic-in / line-out function, which allows customers to easily connect external audio devices to meet their specific needs.



OSD Function



Easy Accessible Design

Located on the Side of P1200

P1201 features an On-Screen Display (OSD) function designed for user convenience. Located on the side of the P1201, the OSD allows for easy access to monitor on/off and brightness adjustment controls.



Backlight Power Toggle



Backlight Brightness Up



Backlight Brightness Down



Key Features

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02 | Integral Functionality

03 | Industrial-grade Reliability

Wide Operating Temperature

<h1>SGS</h1>	<h2>TEST REPORT</h2>	
Reliability Laboratory		Report No.: HC90077A/2022
		Page: 1 of 4
		Date: October 13, 2022
CINCOZE CO., LTD.		
7F, NO.122, LN 235, BAOQIAO RD., XINDIAN DIST., NEW TAIPEI CITY, TAIWAN, R.O.C.		
The following merchandise was submitted and identified by the vendor as:		
<u>Product Description:</u>	Convertible Embedded System	
<u>Style/ Item No.:</u>	P1201-No.1	
<u>Quantity:</u>	Total 1 set	
<u>Testing Period:</u>	Sep. 28, 2022 to Oct. 5, 2022	
We have tested the submitted sample(s) as requested and the following results were obtained:		
<u>Test Required:</u>	(According to client's test specification, please see following sheets in detail)	
	1. Temperature Cycling Test	
<u>Test Results:</u>	-- PLEASE SEE ATTACHED SHEETS --	
<div>Signed for and on behalf of SGS TAIWAN Ltd. </div> <div>Alex Chen Asst. Supervisor</div>		
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<div>SGS Taiwan Ltd. 台資檢驗科技有限公司</div> <div>Member of SGS Group</div>		

-40°C - 70°C

Build to Withstand Extreme Conditions!

- Compliant with IEC60068-2-1 / IEC60068-2-2 / IEC60068-2-14
- With Burn-in test at CPU 100% loading and no throttling
- With extended temperature peripherals; Ambient with airflow

SGS

Reliability Laboratory

TEST REPORT

Report No.: HC90077/2022
Page: 1 of 11
Date: October 7, 2022

CINCOZE CO., LTD.
7F, NO.122, LN.235, BAQIAO RD., XINDIAN DIST.,
NEW TAIPEI CITY, TAIWAN, R.O.C.

The following merchandise was submitted and identified by the vendor as:

<u>Product Description:</u>	Convertible Embedded System
<u>Style/ Item No.:</u>	P1201 / No.1
<u>Quantity:</u>	Total 1 piece
<u>Testing Period:</u>	Sep. 13, 2022 to Sep. 23, 2022

We have tested the submitted sample(s) as requested and the following results were obtained:

Test Required : (According to client's test specification, please see following sheets in detail.)

1. Simultaneous Vibration Test
2. Vibration Test
3. Mechanical Shock Test

Test Results : -PLEASE SEE ATTACHED SHEETS-

Signed for and on behalf of
SGS Taiwan Ltd.

Hank Chiu

Hank Chiu
Asst. Manager

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P1201 is designed to withstand specified severities of non-repetitive or repetitive shocks during operation according to IEC 60068-2-27.


P1201 maintains its functional and structural integrity when exposed to the prescribed random vibration test requirements – IEC 60068-2-64.

New

P1201 has passed IEC 60068-2-6, ensuring that the device maintains its specified performance and does not exhibit any mechanical weaknesses or degradation.

EMC Standard for Industrial Environments





 **VERIFICATION OF COMPLIANCE**

This is to certify that the product listed below was (were) tested in the BTL EMC Laboratory to comply with the required criteria levels of the follow-mentioned Generic Standards or Product Family Standard(s) and/or Basic Standard(s) based on the essential conformity requirements of EMC Directive 2014/30/EU.

Equipment	Convertible Embedded System
Model Name	P1201
Brand Name	CINCOZE
Applicant	Cincoze Co., Ltd.
Address	7F, No.122, Ln.235, Baoqiao Rd., Xindian Dist., New Taipei City 231407, Taiwan
Standard(s)	EN IEC 61000-6-4:2019 BS EN IEC 61000-6-4:2019 EN IEC 61000-3-2:2019+A1:2021 Class A / Class D BS EN IEC 61000-3-2:2019+A1:2021 Class A / Class D EN 61000-3-3:2013+A2:2021 BS EN 61000-3-3:2013+A2:2021 EN IEC 61000-6-2:2019 BS EN IEC 61000-6-2:2019
Report(s)	BTL-EMC-2-2209T036

The test data, data evaluation, and equipment configuration contained in our test report(s) above was (were) obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO/IEC 17025 quality assessment standard and technical standard(s). The test data contained in the referenced test report relate only to the EUT sample and item(s) tested.


Josh Lin
Authorized Signatory



BTL INC.
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Neihu Dist., Taipei City 114, Taiwan
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EN 61000-6-2 + EN 61000-6-4

Emission Standard & Immunity Standard New

Designed to meet the strict EMC standards of EN 61000-6-4 and EN 61000-6-2, P1201 is equipped with a New Burst Protection Board that ensures uninterrupted operation in challenging EMC environments, and excels in the following EMS standards:

- EN 61000-4-3 RS (Radio-frequency electromagnetic field)
- EN 61000-4-4 EFT (Fast transients)
- EN 61000-4-6 CS (Radio-frequency common mode)
- EN 61000-4-8 PFMF (Power-frequency magnetic field)
- EN 61000-4-11 DIP (Voltage dips and Voltage interruptions)

Burst Protection Board


Achievable Under 24VDC

Experience Extreme Reliability with Direct DC Input!



Bottom Side of P1201

Safety Certification

CERTIFICATE OF COMPLIANCE	
Certificate Number Report Reference Date	Pending
Issued to:	Cincoze Co., Ltd. 7F, No. 4, Aly. 1, Ln. 235, Baociao Rd., Sindian Dist New Taipei City 23145 Taiwan
This is to certify that representative samples of	AZOT7 - Audio/Video, Information and Communication Technology Equipment Certified for Canada See Addendum Page for Product Designation(s).
	Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	CSA C22.2 NO. 62368-1-14, 2nd Ed., Issue Date: 2014-12- 01
Additional Information:	See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information
This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.	
Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.	
Look for the UL Certification Mark on the product.	
	
<small>UL LLC Any information and documentation including UL Mark evidence are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at ULCustomerService@ul.com</small>	

UL Listed

UL / c-UL / EN / CB 62368-1

P1201 has successfully achieved UL certification, which assures customers that the product has met stringent safety standards. With UL certification, customers can have confidence in the safety and reliability of P1201, making it an ideal choice for a variety of industrial applications.

■ Product Introduction

■ Selection Guide

Ordering Information



Model Name	CPU TDP	Description
P1201-X6425E-R10	12W	Intel® Atom® x6425E Quad Core Slim Embedded Computer with CDS Technology
P1201-X6211E-R10	6W	Intel® Atom® x6211E Dual Core Slim Embedded Computer with CDS Technology

Optional Modules:

Model Name	Function	Description
CFM-PoE02	PoE	CFM Module with PoE Function, Individual Port 25.5W
CFM-IGN101	IGN	CFM Module with Power Ignition Sensing Function, 12V/24V Selectable

A SLIM AND POWER EFFICIENT COMPUTER

For Embedded and Panel-PC Application

P1201

