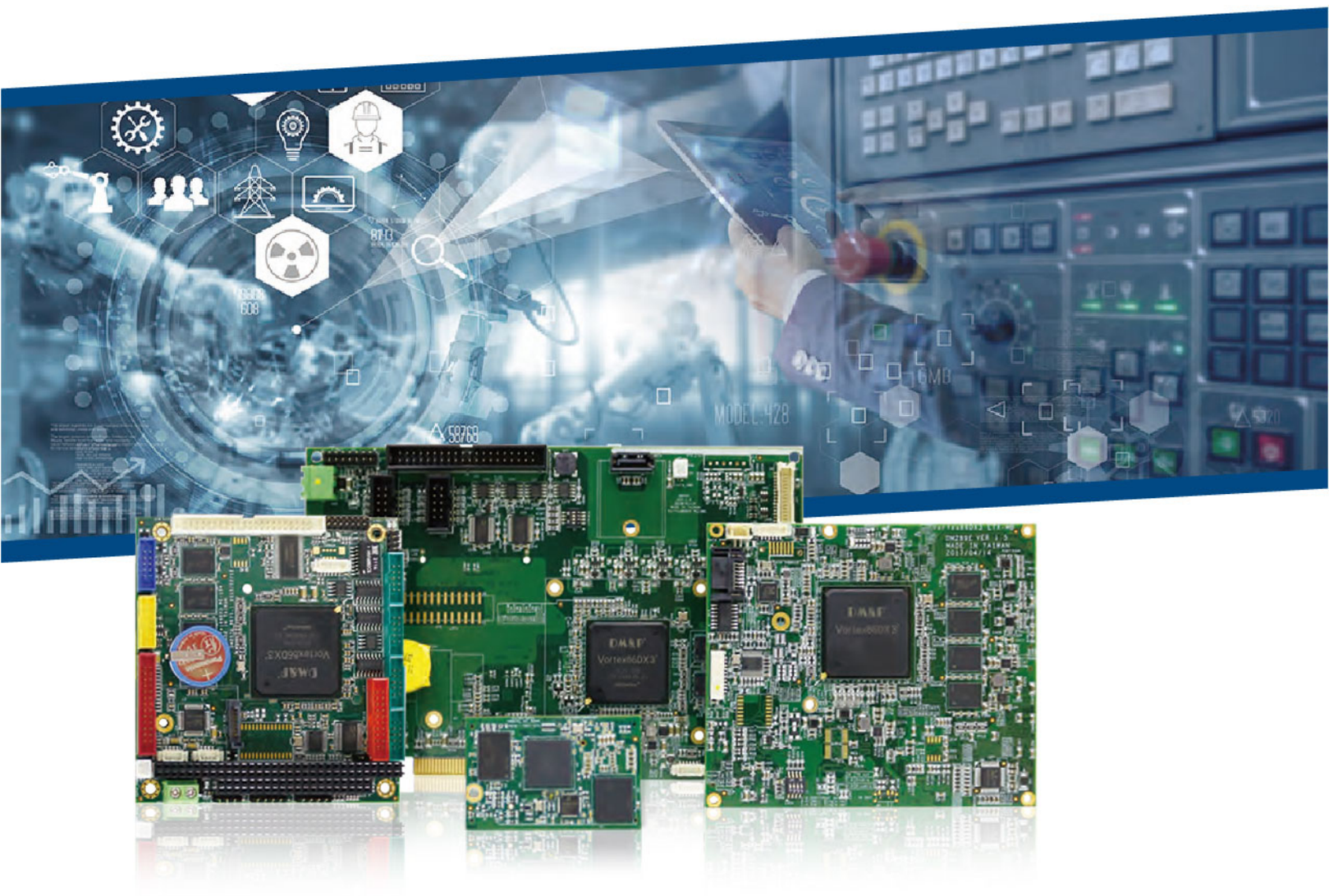
intelligent control on processor

Product Guide

TO emBEdded OR NOT TO emBEdded



*Industrial **Embedded** Solutions*

SBC

Panel PC

Box PC

Storage

About ICOP

ICOP Technology, established in 1997, is the world's leading manufacturer of industrial embedded solutions. Headquartered in Taipei, Taiwan and subsidiaries around the globe as well as worldwide distributors demonstrates ICOP's global commitment for long term and local support.

ICOP constantly strives to provide highest quality and reliability, extensive technical support, short lead times to reduced manufacturing costs and reasonable prices to meet its customers' expectations.

Strong know-how in the embedded field and extensive customer support helps ICOP to be recognized and selected by numerous well-known manufacturers and service providers from the industrial, medical, transportation, traffic management, agricultural field etc. just to mention a few.


TAIPEI

LOS ANGELES


MEXICO CITY


FRANKFURT

TOKYO


BEI JING


SHANG HAI


XI AN


SHEN ZHEN

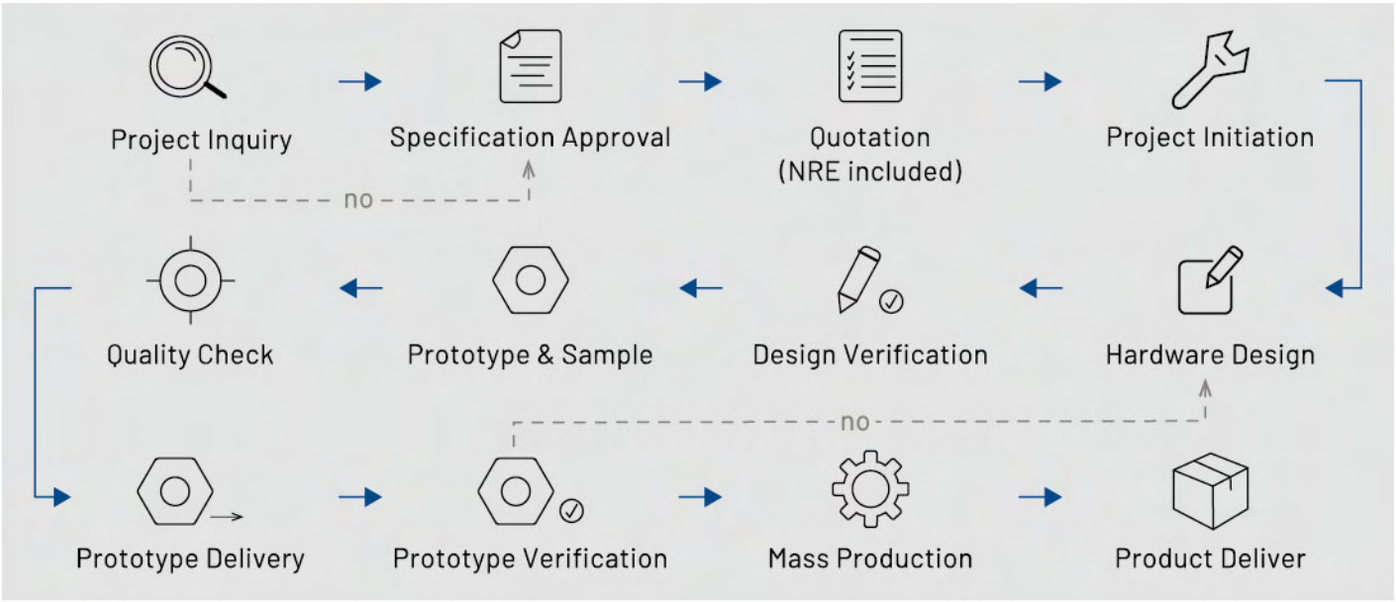
Table of Contents

ICOP Capability

ODM / OEM Service

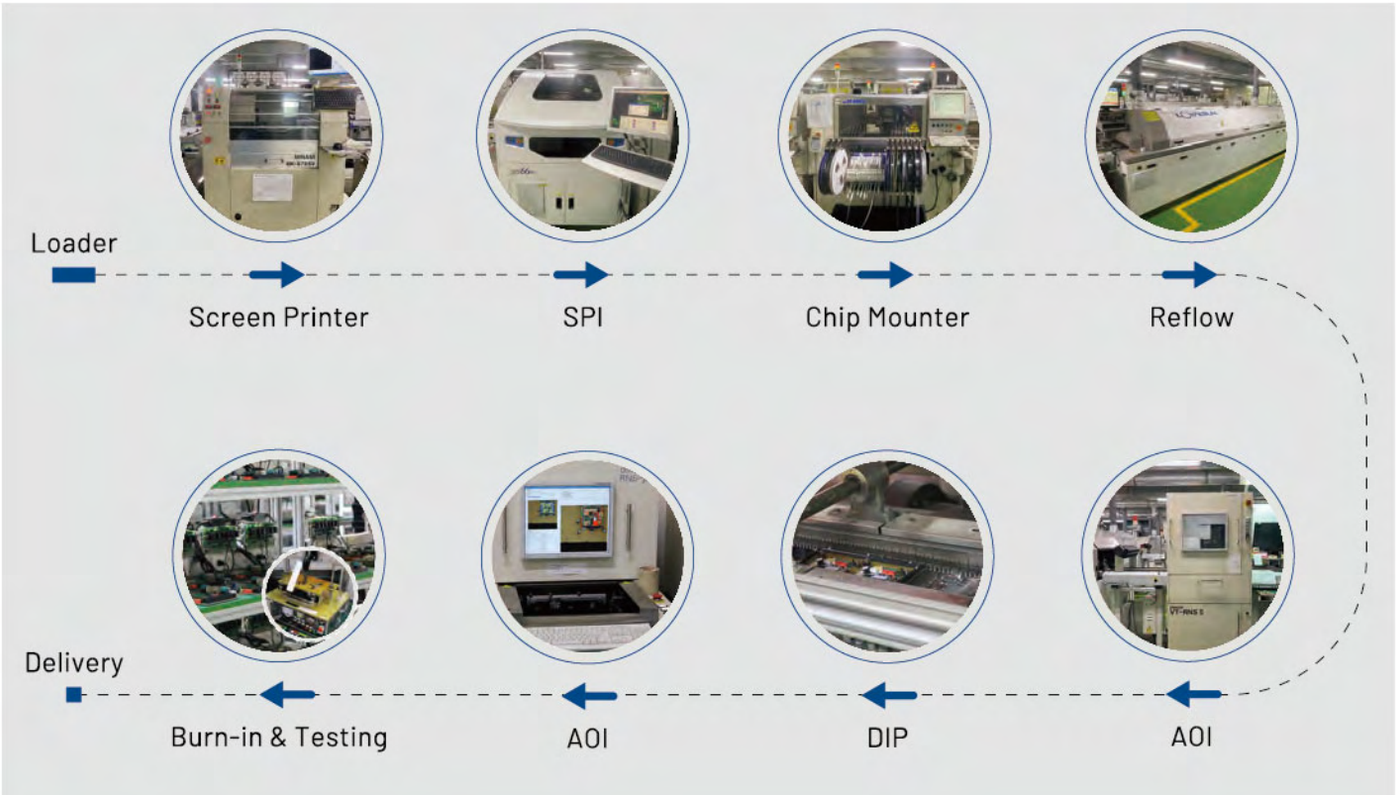
Over 20 years of experience, ICOP has established a standardized ODM/OEM flow and provides over 100 types of customized products to our customers, and it occupies 50% of ICOP's sales.

- Project Time : 12 weeks from PO to prototype.



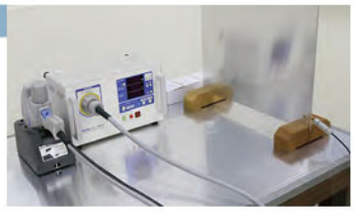
Manufacture

- Production Line : 4 lines.



Reliability Lab

In ICOP's Reliability Lab, we provide testing facilities below to test the reliability of all of our products.

1


2


3


4


5


1 **ESD Generator**
IEC61000-4-2 EMC Test

2 **EFT Generator**
Testing Capability: 1.5 kV

3 **Electrical Safety Compliance Analyzer**
ACW, DCW, IR, GB testsACW/DCW/IR/ GB/high voltage endurance tests

4 **Programmable Temp. & Humidity Chamber**
Temp.: -40 ~ +85°C
Humidity:10% ~ 98% RH

5 **EMI Compliance Testing**
Test Grade : Class A/B
Compliance with CE/FCC/VCCI Standard

Mechanics & 3D Printed Sample Service


2.5D Optical Projector


Wire Cut EDM


CNC Milling Machine


3D Printed Sample Service

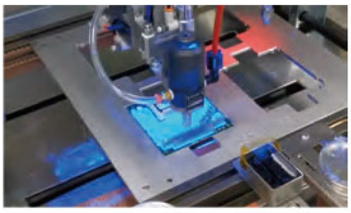

Coordinate Measuring Machine


Die Sink EDM

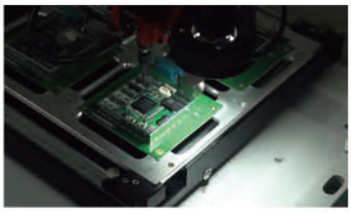

Laser Engraving Machine

Conformal Coating & Underfill

- Video -



Conformal Coating
- The coating machine : Nordson SL-940
- The coating material : HumiSeal 1 B73 (acrylic type)



Underfill
- The underfill machine : ASCENTEX ASG-Mini
- The underfill material : Zymet X2823-B

The Processors

Elkha Lake is Intel's first IoT-optimized platform with Best-in-class CPU/GPU performance to support IoT application requirement. It's has low TDP between 4.5 to 12 Watt TDP and up to 4 cores with Gen 11LP graphics and video encode/decode. For industrial and embedded applications, its has In-Band ECC, 3 x 2.5GbE TSN MACs, x12 configurable HSIO lanes and support -40 to +85°C ambient temperature.

Code Name	Elkha Lake / Embedded		
Processor Namber	x6211E	x6413	x6425E
Product Collection	Atom	Atom	Atom
Clock Speed	1.3GHz	1.5GHz	2.0GHz
Burst Speed	3.0GHz	3.0GHz	3.0GHz
# of Cores	2	4	4
OS Support	Windows 10/11, Windows 10/11 IoT, Linux		
TDP	6W	9W	12W
Passmark Score	1695	4070	4884

Braswell is the multicore system-on-a-chip based on Intel's latest microarchitecture and 14 nm process technology. It's built for designs that target entry-level 2-in-1 devices, laptops, desktops, and all-in-one PCs.

Apollo Lake is the multicore system-on-a-chip which empowers real-time computing in digital surveillance, new in-vehicle experiences, advancements in industrial and office automation, new solutions for retail and medical, and more. Utilizing Intel's industry-leading 14nm process technology.

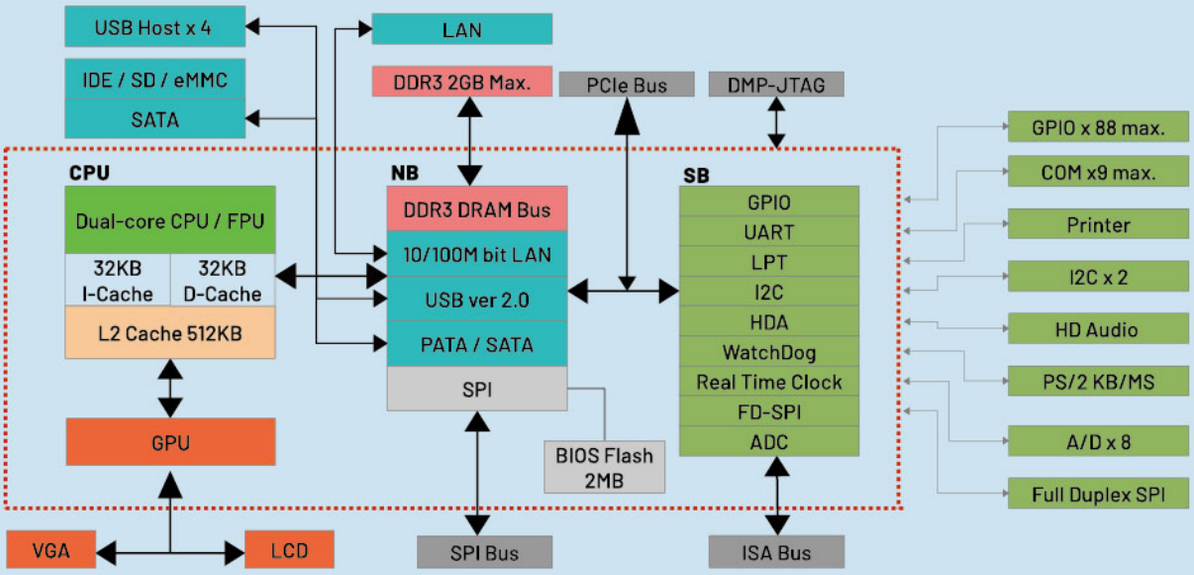
Code Name	Braswell	Braswell	Braswell	Apollo Lake	Apollo Lake	Apollo Lake
Processor Number	N3710	N3160	x5-E8000	N4200	J3455	N3350
Product Collection	Pentium	Celeron	Atom	Pentium	Celeron	Celeron
Clock Speed	1.6GHz	1.6GHz	1.04GHz	1.10GHz	1.5GHz	1.10GHz
Burst Speed	2.56GHz	2.24GHz	2.0GHz	2.50GHz	2.3GHz	2.4GHz
# of Cores	4	4	4	4	4	2
OS Support	Windows 10, Windows 10 IoT, Linux					
Passmark Score	1864	1666	1568	2035	2108	879

i.MX8M Mini is NXP's first embedded multicore application processor built using advanced 14LPC FinFET process technology, providing more speed and improved power efficiency. Backed by NXP's product longevity program, the I.MX8M Mini family can be used in any general purpose industrial and IoT application.

Code Name	NXP I.MX8M Mini			
Core	Cortex-A53 1.6GHz			
# of Cores	4	2	4	2
GPU	GCNono Ultra for 3D, GC320 for 2D			
VPU	Decode 1080p60, H.264, H.264 / Encode 1080p60, H.264			
RAM, LPDDR4	1GB / 2GB / 4GB			
eMMC	8 ~ 64GB, SLC . MLC			
OS Support	Yocto Linux, Android			
Working Temp.	-40 to 85°C	-40 to 85°C	0 to 70°C	0 to 70°C

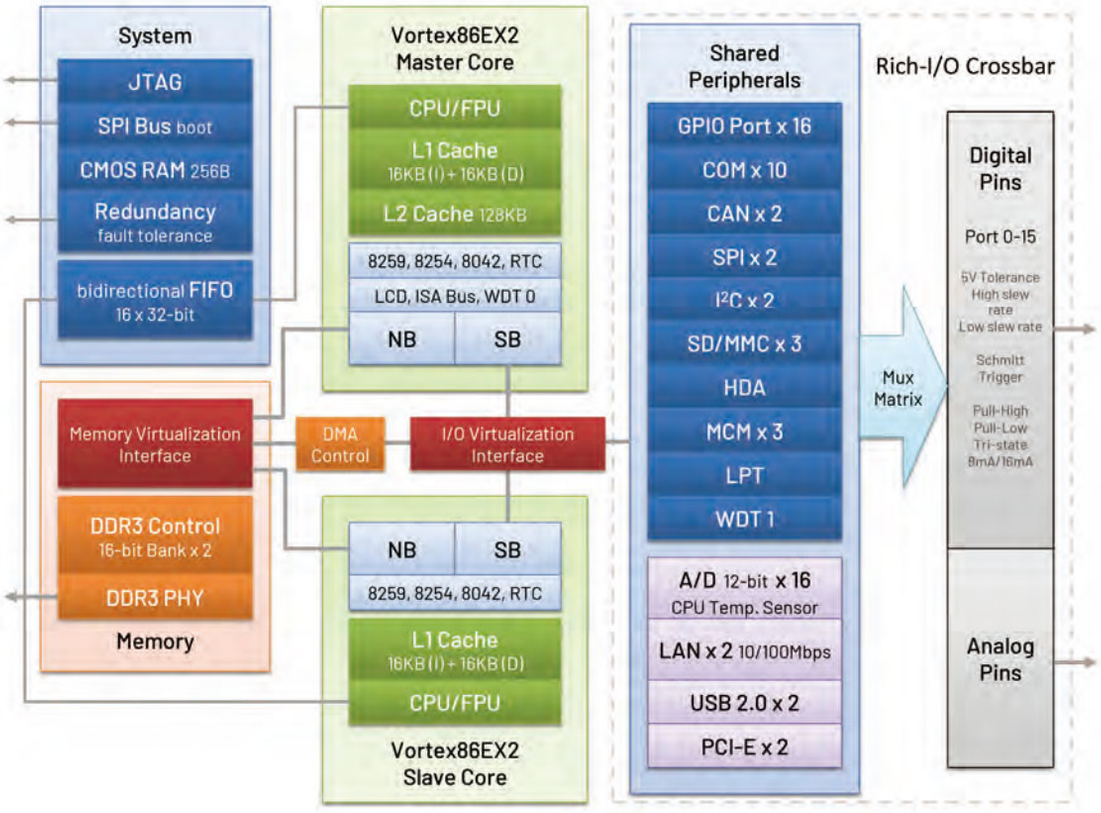
Vortex86 DX series includes the DX, DX2 and DX3. This family was originally designed for legacy x86 based applications that need traditional buses such as ISA, PCI, etc.; in the newest DX3 line, the system now utilizes an optional dual-core and also enriches the I/O interface, GPU, SATA and PCIe for legacy applications to take advantage of new technologies. The -40 to 85 °C wide temperature and 15+ year life cycle guarantee had consistently supported a variety of industrial applications for decades.

[Vortex86DX3 Block Diagram]



Vortex86 EX series includes the EX, EX2, and the upcoming EX3 in 2023. This tiny and low power consumption line of processors is equipped with a crossbar switch that allows for plenty of I/O for IoT, automation, and industrial applications. And for real-time applications, the current EX2 two-core CPU uses a Primary and Secondary core that can run different OS concurrently, making a system that can process in real-time while utilizing a dedicated CPU core.

[Vortex86EX2 Block Diagram]



Product Category

Embedded SBC

Based on the DM&P family SoC core Technology, ICOP can provide several series of Industrial SBCs and SOMs for different industrial applications and customer needs.

SoM-ICOP Proprietary | SoM-Standard | PC/104 SBC | 3.5" SBC | Tiny SBC | Half-size SBC | ITX Board

Industrial Panel PC

Different touch panel size supports from 4.3", 5.7", 6.5", 7", 8.4", 9", 10.4" to 15", ICOP industrial PPC series come with flexible I/O expansion and ruggedized design.

Panel PC Series | HMI Series | OpenFrame | LCD

Box PC

To satisfy the demands for different environments and applications, ICOP offers 3 series of Box PCs: ICE-104, iBPC and Mini PC.

Mini PC | ICE-104 | Embedded Barebone

QEC

QEC device series including the EtherCAT Master device and Slave controller, conforming to the standard EtherCAT protocol.

QEC-M | QEC-R | QEC-P

Flash Disk

ICOP's Storage products provide widely interface of industrial embedded flash with SLC, MCL and iSLC type. Different storage size supports from 512MB to 256GB.

IDE DOM | SATA DOM | SATA-Slim | mSATA | M.2 | Mini PCIe | CF cards

Peripheral

ICOP's Peripheral series is the external product for easy development to customers on our products. Including the DC-to-DC power module, PC/104 48-bit/24-bit digital I/O card, PC/104 RS232 x4 port card, etc.

Peripheral

Features

Working Temperature
With strong know-how and experience in designing embedded boards and modules, ICOP provides -40°C to +85°C CPU board choice for those industrial applications in harsh environment.

15+ Year Life Cycle
With good ERP knowledge and support from group member DMP Electronics, ICOP has ability and commits to provide long-life product supply at least 15 years from products' first day launch.

Fanless Design
Fan operation and dust collection are usually the failure points for some critical applications. All ICOP's products including single board computers, touch panel computers and small enclosure systems are fanless design as standard.

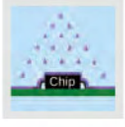
Variety of O.S Support
The demand for legacy O.S always exist for its high stability. ICOP is the only vendor has ability to offer solutions which support from the legacy DOS, Windows CE, to the popular Windows 7 and Windows 10. The mainstream of Linux and Real Time O.S are also supported.

IP65 Waterproof
The waterproof level on ICOP touch Panel PC front panel is up to IP65 which meets the demand for most applications and represents its suitability for outdoor and humid environment.

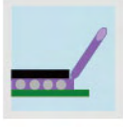
Budget
Taking advantage of Vortex86 System-on-Chip which build-in most required I/O functions without using extra I/O ICs , ICOP provide low BOM items products to avoid shortage with budgetary price.

Shock & Vibration
All ICOP products featured with its excellent robustness. With ICOP's solution, all your applications can be deployed in any kind harsh environment easily.
The Shock & Vibration certifications are available on system and Panel PC product line.

ODM Service
By leveraging ICOP's design, manufacturing and production capability, 3 prototype samples can usually be provided within 8 weeks for customer's test after product's specifications and BOM (Bill of Materials) are confirmed by ICOP and the customer.



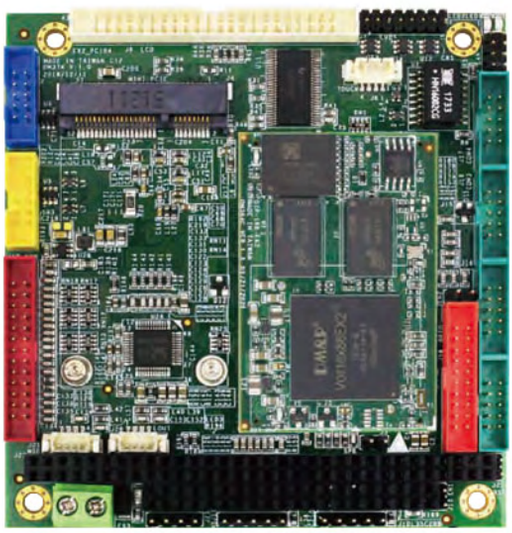
Coating Service
In-house conformal coating service provides additional protection for boards to against a variety of hazards such as moisture, dust, salt, chemicals, temperature changes, and mechanical abrasion.



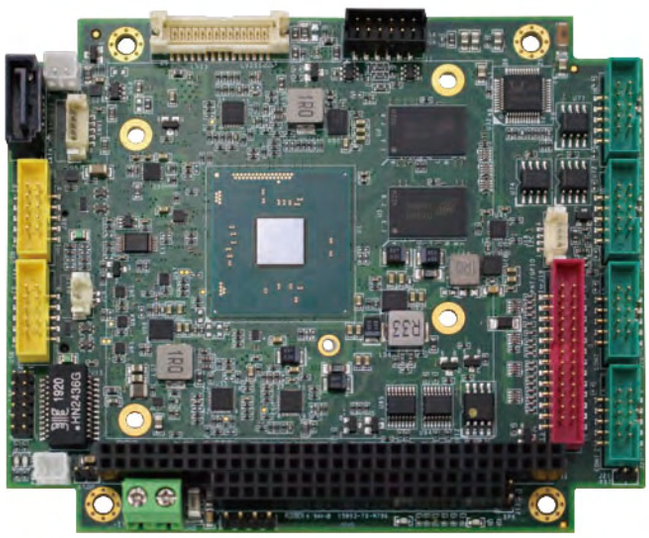
Underfill Service
In-house underfill service provides protection for boards to against dropping, scrolling, vibration and collision during the delivery and operation.

PC/104

- **CPU :** Intel Braswell Family / DMP Vortex86
- **Operating Temp. :** -40 ~ +85°C Max.
- **Features :** 16-bit full ISA support
  Fanless
  10 years life cycle



- **Size :** 90 x 96mm



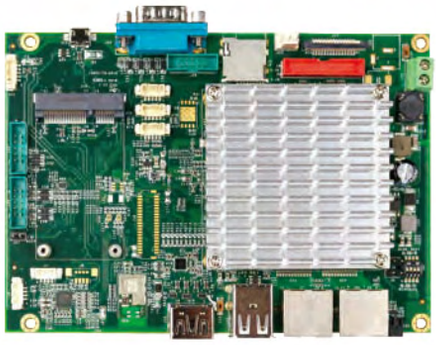
- **Size :** 116 x 96mm

Part No.	CPU	RAM	Storage	I/O
IBW-6954	Pentium® N3710 Atom® x5-E8000 Celeron® N3160	4GB Max.	SATA	4S/4U/GLAN/LPT/I²C/Audio/mPCIe/16GPIO/HDMI/VGA/LVDS
VEX2-6454-2C4INE	Vortex86EX2-600MHz	1GB Max.	Micro SD/eMMC	2S/2U/LAN/LPT/Audio/mPCIe/VGA/LCD/LVDS
VEX2-6454-4C4NE	Vortex86EX2-600MHz	1GB Max.	Micro SD/eMMC	4S/2U/LAN/LPT/Audio/mPCIe/16GPIO/VGA/LCD/LVDS
VDX3-6754-2G	Vortex86DX3 - 1GHz	2GB Max.	SATA	4S/2U/LAN/LPT/Audio/16GPIO/VGA/LCD/LVDS
VDX3-6754-2C-2G	Vortex86DX3-Dual Core -1GHz	2GB Max.	SATA	4S/2U/LAN/LPT/Audio/16GPIO/VGA/LCD/LVDS
VDX3-6755-2G	Vortex86DX3-1GHz	2GB Max.	SATA	3S(isolated)/2U/GLAN/LAN/CAN(Opt.)/VGA/LVDS
VDX3-6755-2C-2G	Vortex86DX3-Dual Core -1GHz	2GB Max.	SATA	3S(isolated)/2U/GLAN/LAN/CAN(Opt.)/VGA/LVDS
NAD11-103-SD	Vortex86DX2-800MHz	256MB Max.	SD	4S/4U/LAN/I²C/VGA/LCD/LVDS

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

3.5" SBC

- **CPU :** Intel Braswell Family / Intel Apollo Lake Family / DMP Vortex86
- **Operating Temp. :** -40 ~ +85°C Max.
- **Size :** 102 x 146mm
- **Features :** 10 COM
  Fanless
  10 years life cycle



Part No.	CPU	RAM	Storage	I/O
NX8MM-35	NXP I.MX8M MINI Quad Core 1.6GHz	2GB/4GB	eMMC/SD	3S/3U/HDMI(MIPI-DSI)/MIPI-CSI/ Audio/mPCIe/GLAN/WIFI/BT
IBW-35	Pentium® N3710 Atom® x5-E8000 Celeron® N3160	4GB Max.	mSATA/SATA	4S/6U/2GLAN/I²C/Audio/mPCIe/ 16GPIO/HDMI/VGA/LVDS
APL-35	Celeron® N3350 Pentium® N4200 Celeron® J3455	8GB Max.	M.2 SATA/SATA	6S/6U/2GLAN/I²C/Audio/mPCIe/ 8GPIO/2DP/eDP
VEX2-6427-10C4VNE	Vortex86EX2-600MHz	1GB Max.	Micro SD/SD/ eMMC	10S/4U/LAN/2CAN/2I²C/Audio/ mPCIe/VGA/LCD/LVDS
VDX3-6726-2G	Vortex86DX3-1GHz	2GB Max.	SATA	4S/4U/2GLAN/LAN/LPT/ Audio/16GPIO/VGA/LVDS
VEX-6225-43VE	Vortex86EX-400MHz	512MB Max.	Micro SD/SATA	2S/2U/LAN/CAN/I²C/ mPCIe/8ADC/VGA/LCD

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

Half-size SBC

- **CPU :** DMP Vortex86
- **Operating Temp. :** -40 ~ +85°C Max.
- **Size :** 187 x 122mm
- **Features :** 16-bit full ISA support
  PCI support
  Fanless
  10 years life cycle

Part No.	CPU	RAM	Storage	I/O
VDX3-6724-2G	Vortex86DX3-1GHz	2GB Max.	SATA	4S/4U/GLAN/LAN/LPT/Audio/ 16GPIO/VGA/LCD/LVDS
VDX3-6724-CF-2G	Vortex86DX3-1GHz	2GB Max.	CF/SATA	4S/4U/GLAN/LAN/Audio/ VGA/LCD/LVDS
VDX3-PCI-7S5E	Vortex86DX3-1GHz	2GB Max.	IDE/CF/SATA	2S/2U/GLAN/Audio/ VGA/LVDS
VDX3-PCI-7S4E	Vortex86DX3-1GHz	1GB Max.	IDE/CF/SATA	2S/2U/GLAN/Audio/ VGA/LVDS
VDX-6324RD	Vortex86DX-800MHz	512MB Max.	Micro SD/SATA	4S/4U/LAN/LPT/16GPIO/ VGA/LCD

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

Tiny SBC

- **CPU :** DMP Vortex86
- **Operating Temp. :** -40 ~ +85°C Max.
- **Size :** 100 x 66mm
- **Features :** Compact design
  Fanless
  10 years life cycle

Part No.	CPU	RAM	Storage	I/O
VEX2-6415-4C4NE	Vortex86EX2-600MHz	1GB Max.	Micro SD/eMMC	4S/2U/2LAN/LPT/Audio/ 2mPCIe/16GPIO
VEX2-6415-4C3NE	Vortex86EX2-600MHz	512MB Max.	Micro SD/eMMC	4S/2U/2LAN/LPT/Audio/ 2mPCIe/16GPIO
VDX2-6518-1G-SD	Vortex86DX2-800MHz	1GB Max.	SD	4S/2U/LAN/LPT/8GPIO/ VGA/LVDS
VDX-6318RD	Vortex86DX-800MHz	512MB Max.	IDE	4S/4U/LAN/Audio/32GPIO/ VGA/LCD
VDX-6314RD	Vortex86DX-800MHz	512MB Max.	IDE	4S/2U/LAN/16GPIO/ VGA/LCD

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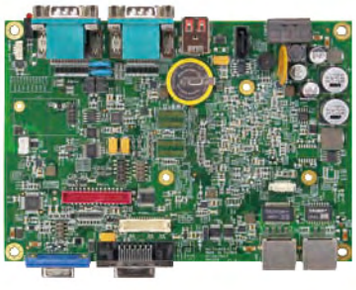
ITX Board



VDX3-EITX
- **Size :** 170 x 120mm

VDX3-PITX
- **Size :** 100 x 72mm

Part No.	CPU	RAM	Storage	I/O
APL-PITX	Celeron® N3350 Pentium® N4200	8GB Max.	M.2 SATA/SATA	2S/4U/GLAN/Audio/mPCIe/ 8GPIO/HDMI/LVDS
VDX3-PITX-7S5E1	Vortex86DX3-1GHz	2GB Max.	Micro SD/SATA	4U/LAN/Audio/16GPIO/ 8ADC/VGA
VDX3-EITX-7S5E1	Vortex86DX3-1GHz	2GB Max.	CF/SATA	3S/6U/GLAN/LAN/CAN/Audio/ VGA/LVDS

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

ETX Module | ETX®

- **CPU :** DMP Vortex86
- **Operating Temp. :** -40 ~ +85°C Max.
- **Size :** 95 x 144mm
- **Features :** 16-bit full ISA support
  PCI support
  Fanless
  10 years life cycle

Part No.	CPU	RAM	Onboard Storage	I/O
VDX3-ETX-74IE	Vortex86DX3-1GHz	1GB Max.	SATA	2S/4U/LAN/I²C/Audio/IDE/VGA/LCD
VDX3-ETX-74LE	Vortex86DX3-1GHz	1GB Max.	SATA	2S/4U/LAN/LPT/I²C/Audio/VGA/LCD
VDX3-ETX-75IE	Vortex86DX3-1GHz	2GB Max.	SATA	2S/4U/LAN/I²C/Audio/IDE/VGA/LCD
VDX3-ETX-75LE	Vortex86DX3-1GHz	2GB Max.	SATA	2S/4U/LAN/LPT/I²C/Audio/VGA/LCD

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

EBM

- **CPU :** Intel Braswell Family / Intel Apollo Lake Family
- **Operating Temp. :** 0 ~ +60°C Max.
- **Size :** 101.6 x 111.5mm
- **Features :** Fanless
  10 years life cycle

Part No.	CPU	RAM	Storage	I/O
APL-U	Celeron® N3350 Celeron® J3455	8GB Max.	M.2 SATA/SATA	1S/5U/2GLAN/Audio/2mPCIe/8GPIO/HDMI/VGA
IBW-U	Pentium® N3710 Atom® x5-E8000 Celeron® N3160	8GB Max.	Micro SD/SATA	2S/4U/2GLAN/Audio/M.2 2230 E-key/HDMI

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

SOM304 Module

- **CPU :** DMP Vortex86
- **Operating Temp. :** -40 ~ +85°C Max.
- **Size :** 70 x 70mm
- **Features :** 16-bit full ISA support
  PCI support
  Fanless
  10 years life cycle

Part No.	CPU	RAM	Onboard Storage	I/O
SOM304D375EINE1-HS	Vortex86DX3-1GHz	2GB Max.	N/A	4U/LAN/2PCIe/SATA/ISA/VGA/ 11 Configurable I/O Ports/LCD

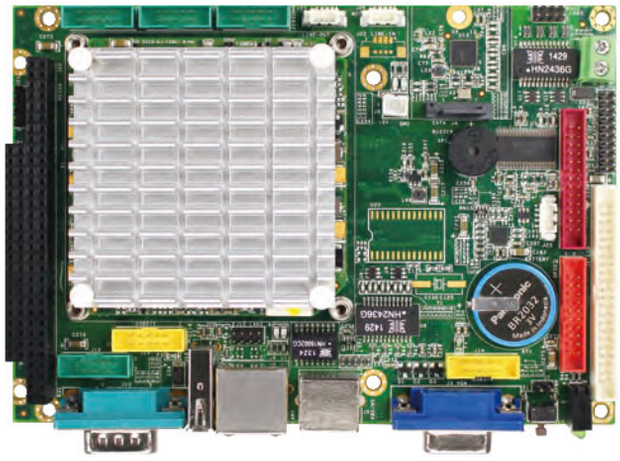
- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

SOM200 Module

- **CPU :** DMP Vortex86EX
- **Operating Temp. :** -40 ~ +85°C Max.
- **Size :** 52 x 52mm
- **Features :** Maximum 10 configurable I/O ports
  16-bit ISA support
  PCI support
  Fanless
  10 years life cycle

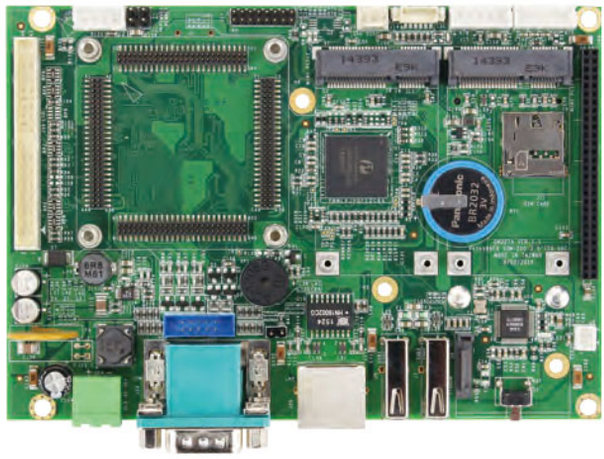
Part No.	CPU	RAM	Onboard Storage	I/O
SOM200EX43VGNE1	Vortex86EX-400MHz	512MB Max.	N/A	2S/LAN/8ADC/SATA/ 10 Configurable I/O Ports/VGA
SOM200EX43EGNE1	Vortex86EX-400MHz	512MB Max.	N/A	2U/LAN/8ADC/PCIe/SATA/ 10 Configurable I/O Ports

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe



VDX3-6726

- Development board for *SOM304D3*



VEX-6225

- Development board for *SOM200EX*

DIP-128 Module

- **CPU :** DMP Vortex86EX
- **Operating Temp. :** -40 ~ +85°C Max.
- **Size :** 45 x 28mm
- **Features :** Maximum 10 configurable I/O ports
  16-bit full ISA support
  PCI support
  Fanless
  10 years life cycle

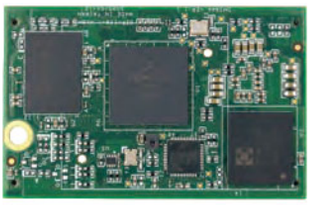
Part No.	CPU	RAM	Onboard Storage	I/O
VEX-SOM	Vortex86EX-400MHz	256MB Max.	N/A	2U/LAN/8ADC/PCIe/SATA/ 10 Configurable I/O Ports
VEX-SOM-512	Vortex86EX-400MHz	512MB Max.	N/A	2U/LAN/8ADC/PCIe/SATA/ 10 Configurable I/O Ports

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

DIP-168 Module

- **CPU :** NXP i.MX8M Mini / DMP Vortex86EX2
- **Operating Temp. :** -40 ~ +85°C Max.
- **Size :** 55 x 35mm
- **Features :** Maximum 15 configurable I/O ports
  16-bit full ISA support
  PCI support
  Fanless
  10 years life cycle

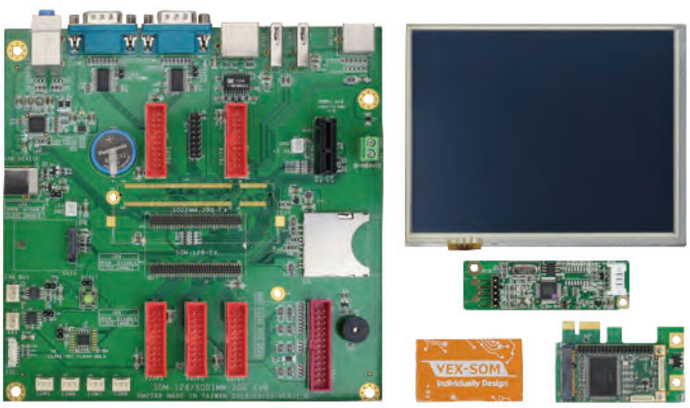
VEX2-DIP-168



N8MM-D168

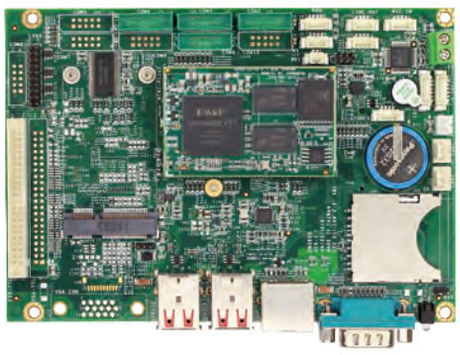
Part No.	CPU	RAM	Onboard Storage	I/O
NX8MM-D168	NXP i.MX 8M Mini Quad Core 1.6GHz	2GB Max.	Micro SD	4S/2U/GLAN/MIPI-CSI/4PWM/3I²C /3SPI/3I²S/20GPIO/PCIe/MIPI-DSI
VEX2-DIP-168-4ME1	Vortex86EX2-600MHz	1GB Max.	Micro SD	2U/LAN/8ADC/2PCIe/ 15 Configurable I/O Ports
VEX2-DIP-168-4EE1	Vortex86EX2-600MHz	1GB Max.	4GB eMMC	2U/LAN/8ADC/2PCIe/ 15 Configurable I/O Ports

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe



VEX-IOT-DEV

- Development kit for *VEX-SOM*



VEX2-6427

- Devlopment board for *VEX2-DIP-168*

Rugged PPC Series

- **Features :** Support x86 platform of DMP Vortex86 Processors.
  Different size of LCD and Touch panel support for 9", 10.4" and 15".
  Wide power requirement, +12VDC ~ +24VDC.
  Flexible I/O expansion.
  IP65 Front Panel Protection.
  Metal and Fanless Design & VESA and Panel Mount Support.




Model Name	PPC-090T	PPC-104T	PPC-150T	PPC-150P
Display Size	9" WSVGA	10.4" SVGA	15" XGA	
Max. Resolution	1024 x 600	800 x 600	1024 x 768	
Luminance (cd/m²)	300	500	250	
Touchscreen	Analog Resistive/ Capacitive Touch Panel	Analog Resistive		Capacitive Touch Panel
CPU	Vortex86DX2-933MHz Vortex86DX3-1GHz			
System Memory	1GB/2GB			
I/O	2S/3U/LAN/GLAN/Audio			
Storage	CF Card/STAT SLIM/2GB Nand Flash Onboard			
Expansion I/O	PoE/COM x5/COM x3 + 16bit GPIO			
Power Requirement	+12VDC ~ 24VDC			
Operating Temp.	0 ~ 50°C / -20 ~ +60°C			
Dimension (WxHxD mm)	242 x 156.5 x 44	273.4 x 219.8 x 49	354.9 x 280.4 x 55	354.9 x 280.9 x 54.9
Certificate	CE, FCC, VCCI, Shock, Vibration, IP65 (Front Panel)			

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe


- *Expansion I/O Ports with Custom Design*

Rugged PPC Series

- **Features :** Support x86 platform of Intel® Processor.
  Different size of LCD and Touch panel support for 9", 10.4" and 15".
  IP65 Front Panel Protection.
  Metal and Fanless Design.
  VESA and Panel Mount Support.



Model Name	PPC-090T-EHL	PPC-104T-EHL	PPC-150T-EHL	PPC-150P-EHL
Display Size	9" WSVGA	10.4" SVGA	15" XGA	
Max. Resolution	1024 x 600	800 x 600	1024 x 768	
Luminance (cd/m²)	300	500	250	
Touchscreen	Analog Resistive/ Capacitive Touch Panel	Analog Resistive		Capacitive Touch Panel
CPU	Intel® Elkhart Lake x6413E (Quad Core 1.5GHz & Burst 3.0GHz)			
System Memory	8GB			
I/O	2S/USB3.0 x3 /USB2.0 x1 /GLAN x2 /Audio			
Storage	mSATA & Micro SD Slot			
Expansion I/O	mPCIe Slot x1 / Micro HDMI (as DUAL Display)			
Power Requirement	+12VDC ~ 36VDC			
Operating Temp.	-20 ~ +60°C			
Dimension (WxHxD mm)	242 x 156.5 x 44	273.4 x 219.8 x 49	354.9 x 280.4 x 55	354.9 x 280.9 x 54.9
Sample & Certificate	*"Coming Soon"*			

Model Name	PPC-090T-APL	PPC-104T-APL	PPC-150T-APL	PPC-150P-APL
Display Size	9" WSVGA	10.4" SVGA	15" XGA	
Max. Resolution	1024 x 600	800 x 600	1024 x 768	
Luminance (cd/m²)	300	500	250	
Touchscreen	Analog Resistive / Capacitive Touch Panel	Analog Resistive		Capacitive Touch Panel
CPU	Intel® Pentium® N4200 (Quad) Intel® Celeron® N3350 (Dual)			
System Memory	4GB/8GB			
I/O	2S/3U/LAN/GLAN/Audio			
Storage	M.2 2242 SATA M-key/2.5" SATA HDD / SSD			
Expansion I/O	mPCIe Slot x1 /HDMI 1.4 (as DUAL Display)			
Power Requirement	+12VDC			
Operating Temp.	0 ~ +60°C			
Dimension (WxHxD mm)	242 x 156.5 x 50.6	273.4 x 219.8 x 52.5	354.9 x 280.9 x 58	359.6 x 283 x 57.9
Certificate	CE, FCC, VCCI, Shock, Vibration, IP65 (Front Panel)			

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

Compact PPC Series

- **Features :** Support x86 platform of Intel® and DMP Vortex86 processors, and ARM platform of Realtek RTD 1195 Cortex-A7 processor.
  Different size of LCD and Touch panel support for 5.7" and 9".
  IP65 Front Panel Protection for 9" Panel PC.
  Metal and Fanless Design.
  VESA and Panel Mount Support.




Model Name	PEX-057T / PDX2-057T / PDX3-057T	PEX-090T / PDX2-090T / PDX3-090T	PINT-090T-APL	PBSW-090T	PN8M-090T	PRTD-090T
Display Size	5.7" VGA	9" WSVGA				
Max. Resolution	640 x 480	1024 x 600				
Luminance (cd/m²)	500	300				
Touchscreen	Analog Resistive	Analog Resistive/Capacitive Touch Panel				Analog Resistive
CPU	Vortex86EXm-400MHz Vortex86DX2-933MHz Vortex86DX3-1GHz		Pentium® N4200 Celeron® N3350	Atom® x5-E8000 Pentium® N3710 Celeron® N3160	NXP I.MX8M Mini 1.6GHz Cortex-A53 (Quad)	Realtek RTD1195-1.2GHz Cortex-A7
System Memory	1GB/2GB		4GB/8GB	4GB	1GB/2GB/4GB	1GB/2GB
I/O	1S/2U/LAN/Audio		2S/3U/LAN/ GLAN/Audio	1S/2U/GLAN/Audio		1S/2U/LAN/ Audio
Storage	Miro SD Slot / CF Card/ 2GB Nand Flash Onboard		M.2 2242 SATA M-key		16GB eMMC, Micro SD Slot	8GB eMMC Onboard
Expansion I/O	N/A		mPCIe Slot x 1 HDMI 1.4 x 1	mPCIe Slot x 1		N/A
Power Requirement	+5VDC / +8 ~ +35VDC		+12VDC	+12 ~ +36VDC	+5VDC / +8 ~ +35VDC	
Operating Temp.	0 ~ +50°C / -20 ~ +60°C		0 ~ +60°C	0 ~ +50°C / -20 ~ +60°C	0 ~ +50°C / -20 ~ +70°C	
Dimension (WxHxD mm)	152 x 112 x 33	236.6 x 146 x 35	236.3 x 146 x 44.5		236.6 x 146 x 35	
Certificate	CE, VCCI, FCC, Vibration	CE, VCCI, FCC, Shock, Vibration, IP65 (Front Panel)				

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

HMI-043T Series

Model Name	HMI-043T	HMI-043T-OP
Display Size	4.3" WQVGA	4.3" WQVGA
Max. Resolution	480 x 272	480 x 272
Luminance (cd/m²)	280	280
Touchscreen	Analog Resistive	Analog Resistive
CPU	Vortex86EXm-400MHz	Vortex86EX-400MHz
System Memory	128MB/256MB	128MB/256MB
I/O	1S/1U/CAN/LAN/Audio/8GPIO	3S/2U/LCD/LAN/CAN/Audio/8GPIO
Storage	SD Slot/512MB or 8GB eMMC	512MB/8GB eMMC
Expansion I/O	HF RFIC	3 Configurable I/O Ports
Power Requirement	+7VDC ~ 24VDC	+5VDC
Operating Temp.	0 ~ +50°C / -20 ~ +60°C	-20 ~ +60°C
Dimension (WxHxD mm)	116.4 x 94.4 x 34.36	105.5 x 67.2 x 13.6
Certificate	CE, FCC, VCCI, Shock, Vibration, IP65 (Front Panel)	N/A

■ S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

Open Frame Series

Model Name	VOX-070-TS	VOX-065-TS	VOX-084-TS	VOX-090-TS	VOX-104-TS	VOX-150-TS
Display Size	7" WVGA	6.5" VGA	8.4" SVGA	9" WVGA	10.4" SVGA	15" XGA
Max. Resolution	800 x 480	640 x 480	800 x 600	1024 x 600	800 x 600	1024 x 768
Luminance (cd/m²)	400	800	250	300	300	350
Touchscreen	Analog Resistive					
CPU	Vortex86EX2 -600MHz	Vortex86DX2-933MHz Vortex86DX3-1GHz				
System Memory	1GB/2GB	512MB/1GB/2GB				
I/O	5S/4U/LCD /LAN/CAN/ Audio/8GPIO	4S/4U/VGA/LCD/LVDS/2GLAN/LAN/PWM/Audio/16GPIO				
Storage	4GB eMMC /SD Slot	SATA				
Expansion I/O	mPCIe x 4	PC/104 Bus				
Power Requirement	+12 ~ +36VDC	+5VDC & +12VDC		+5VDC	+5VDC & +12VDC	
Operating Temp.	0 ~ +50°C / -20 ~ +60°C / -30 ~ +80°C	0 ~ +50°C / -20 ~ +60°C				
Dimension (WxHxD mm)	186 x 121.1 x 28.7	190 x 145 x 41.9	230.4 x 150 x 29	245 x 152.2 x 38.5	303 x 204 x 45.5	368 x 278 x 45.5

■ S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

iBPC Series

- **CPU :** DMP Vortex86DX3
- **Operating Temp. :** -20 ~ +70°C
- **Dimensions :** 151.7 x 103 x 53.3mm
- **Features :** Panel mounting available
  Isolated GPIO
  LVDS support
  10 years life cycle

Part No.	CPU	RAM	Storage	I/O
iBPC-75GE	Vortex86DX3-1GHz	2GB Max.	SATA / Micro SD	3S / 4U / 2GLAN / LAN / Audio / 8GPIO / 8GPIO (isolated) / VGA / LVDS
iBPC-75CE	Vortex86DX3-1GHz	2GB Max.	SATA / Micro SD	3S / 4U / 2GLAN / LAN / Audio / 8GPIO (isolated) / VGA / LVDS / CAN
iBPC-75FE	Vortex86DX3-1GHz	2GB Max.	SATA / Micro SD	3S / 4U / 2GLAN / LAN / Audio / 8GPIO / 8GPIO (isolated) / VGA / LVDS

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

EBOX-3362 Series

- **CPU :** DMP Vortex86DX3
- **Operating Temp. :** -20 ~ +70°C
- **Dimensions :** 115 x 115 x 35mm
- **Features :** 100 x 100mm VESA support
  Compact design
  Fanless design and DIN Rail rack
  10 years life cycle

- VESA Mount

- Din-Rail rack

Part No.	CPU	RAM	Storage	I/O
EB-3362-L2851C3P-I	Vortex86DX3-1GHz	2GB Max.	SATA / SD	4S / 3U / GLAN / LAN / Line-out / mPCIe / VGA
EB-3362-C2G2SIM-I	Vortex86DX3-1GHz	2GB Max.	SATA / SD	2S / 3U / LAN / Line-out / 16GPIO / mPCIe / VGA
EB-3362-L2C2851G1E-I	Vortex86DX3-1GHz	2GB Max.	SATA	3S / 3U / GLAN / LAN / Mic-in / Line-out / 8GPIO / VGA

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

D-3362 Series

- **CPU :** DMP Vortex86DX3
- **Operating Temp. :** -20 ~ +70°C
- **Dimensions :** 151.7 x 103 x 53.3mm
- **Features :** Fanless design
  DIN Rail rack
  10 years life cycle

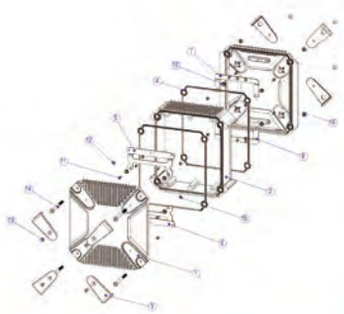
- DIN Rail rack

Part No.	CPU	RAM	Storage	I/O
D-3362-852C2-I	Vortex86DX3-1GHz	2GB Max.	SATA / SD (Internal)	4S / 2U / GLAN / LAN / mPCIe / VGA
D-3362-851C1G2-I	Vortex86DX3-1GHz	2GB Max.	SATA / SD (Internal)	2S / 2U / GLAN / LAN / mPCIe / 16GPIO / VGA

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

ICE-104 Series

- **CPU :** DMP Vortex86DX3
- **Operating Temp. :** -100 ~ +80°C Max.
- **Dimensions :** 181.6 x 184.7 x 56.6mm
- **Features :** 100 x 100mm VESA support
  IP67 dust&water design enclosure
  Support PC/104 form factor
  Customizable I/O ports configuration services

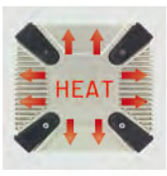


Part No.	CPU	RAM	Storage	I/O
ICE-6754-DC	Vortex86DX3-1GHz	2GB Max.	SATA	3S / 2U / 16GPIO / VGA

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

ICE-104 _ Passive Cooling Design / Active Warming System Design

- Heat flows through enclosure
- Active warming design form factor
- Works below freezing



ICE-104 _Customizable Service & Function

- Company Logo engraving services
- Customizable I/O panels services
- Stackable Chassis system form

EBOX-335xDX3 Series

- **Operating Temp. :** 0 ~ +60°C / -20 ~ +70°C
- **Dimensions :** 95 x 95 x 20mm / 95 x 95 x 35mm
- **Features :** GLAN support
  Fanless design
  PXE Diskless Boot
  Auto Power On support
  75 x 75mm VESA support

Part No.	CPU	RAM	Storage	I/O
EBOX-335xDX3	Vortex86DX3-1GHz	1GB 2GB	SD	2S / 3U / LAN / Mic-in / Line-out / VGA
EBOX-335xDX3-GL	Vortex86DX3-1GHz	1GB 2GB	SD	2S / 3U / GLAN / Mic-in / Line-out / VGA
EBOX-335xDX3-W	Vortex86DX3-1GHz	1GB 2GB	SD	2S / 3U / LAN / Mic-in / Line-out / VGA
EBOX-335xDX3-GLW	Vortex86DX3-1GHz	1GB 2GB	SD	2S / 3U / GLAN / Mic-in / Line-out / VGA
EBOX-335xDX3-RCA	Vortex86DX3-1GHz	1GB 2GB	SATA / Mirco SD	3U / LAN / Mic-in / Line-out/ VGA / mPCIe / HDMI / RCA jack

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

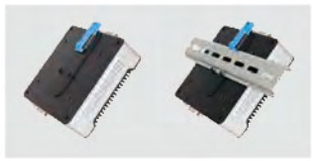
EBOX-335xDX3-C2 Series

- **Operating Temp. :** 0 ~ +60°C / -20 ~ +70°C
- **Dimensions :** 95 x 95 x 35mm
- **Features :** GLAN support
  Dual RS-232 support
  Fanless design
  PXE Diskless Boot
  Auto Power On support
  75 x 75mm VESA support

Part No.	CPU	RAM	Storage	I/O
EBOX-335xDX3	Vortex86DX3-1GHz	1GB 2GB	SD	2S / 3U / LAN / Mic-in / Line-out / VGA
EBOX-335xDX3 1G LAN	Vortex86DX3-1GHz	1GB 2GB	SD	2S / 3U / GLAN / Mic-in / Line-out / VGA
EBOX-335xDX3 Wide Temp.	Vortex86DX3-1GHz	1GB 2GB	SD	2S / 3U / LAN / Mic-in / Line-out / VGA
EBOX-335xDX3 1G LAN Wide Temp.	Vortex86DX3-1GHz	1GB 2GB	SD	2S / 3U / GLAN / Mic-in / Line-out / VGA

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

EBOX-336x Standard Series



- **Operating Temp. :** 0 ~ +60°C / -20 ~ +70°C
- **Dimensions :** 115 x 115 x 35mm
- **Features :** Dual-core CPU All-in-One Module
  Multiple RS-232 / 485 / 422 / GPIO / CANbus
  100 x 100mm VESA support
  Fanless design and DIN Rail rack
  Auto Power On / PXE Diskless Boot

Part No.	CPU	RAM	Storage	I/O
EB-336x HDMI	Vortex86DX3-1GHz	1GB 2GB	SATA / Micro SD	4S / 3U / GLAN / LAN / CAN / Mic-in / Line-out / mPCIe / HDMI / VGA
EB-336x RS-232	Vortex86DX3-1GHz	1GB 2GB	SATA / SD	4S / 3U / GLAN / LAN / CAN / Line-out / mPCIe / 16GPIO / VGA
EB-336x RS-485	Vortex86DX3-1GHz	1GB 2GB	SATA / SD	4S / 3U / GLAN / LAN / CAN / Mic-in / Line-out / mPCIe / 16GPIO / VGA
EB-336x RS-422	Vortex86DX3-1GHz	1GB 2GB	SATA / SD	4S / 3U / GLAN / LAN / CAN / Line-out / mPCIe / 16GPIO / VGA

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

EBOX-336x Special Series

- **Operating Temp. :** 0 ~ +60°C / -20 ~ +70°C
- **Dimensions :** 115 x 115 x 35mm
- **Features :** Dual-core CPU All-in-One Module
  Multiple LANs & COM ports
  SATA, CF, SD card, mPCIe, 4G LTE
  Auto Power On / PXE Diskless Boot
  100 x 100mm VESA support
  Fanless design and DIN Rail rack

Part No.	CPU	RAM	Storage	I/O
EBOX-336x 4G LTE	Vortex86DX3-1GHz	1GB 2GB	SATA / SD	4S / 3U / LAN / CAN / Line-out / mPCIe / 16GPIO / VGA
EBOX-336x GPIO	Vortex86DX3-1GHz	1GB 2GB	SATA / SD	4S / 3U / GLAN / LAN / CAN / Line-out / mPCIe / 16GPIO / VGA
EBOX-336x Multi LAN	Vortex86DX3-1GHz	1GB 2GB	SATA / SD	4S / 4U / 2GLAN / LAN / CAN / Mic-in / Line-out / mPCIe / 16GPIO / VGA
EBOX-336x Special IO	Vortex86DX3-1GHz	1GB 2GB	SATA / CF / SD	3S / 3U / GLAN / LAN / LPT / Line-out / VGA

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

EBOX-IMX8MM Series

- **Operating Temp. :** 0 ~ +60°C / -40 ~ +80°C
- **Dimensions :** 115 x 115 x 35mm
- **Features :** 2GB / 4GB LPDDR4, 16GB eMMC onboard
  Fanless design / DIN Rail rack
  100 x 100mm VESA support
  GLAN, RS-232 / 485
  Auto Power On support

Part No.	CPU	RAM	Storage	I/O
EBOX-IMX8MM w/RS-232	NXP i.MX8M Mini Quad Core 1.6GHz	2GB 4GB	eMMC / Micro SD	2S / 3U / GLAN / Line-out / mPCIe / HDMI
EBOX-IMX8MM w/RS-485	NXP i.MX8M Mini Quad Core 1.6GHz	2GB 4GB	eMMC / Micro SD	2S / 3U / GLAN / Line-out / mPCIe / HDMI
EBOX-IMX8MM w/WiFi & BT	NXP i.MX8M Mini Quad Core 1.6GHz	2GB 4GB	eMMC / Micro SD	2S / 3U / GLAN / Line-out / mPCIe / HDMI
EBOX-IMX8MM w/RS-232, Dual LAN	NXP i.MX8M Mini Quad Core 1.6GHz	2GB 4GB	eMMC / Micro SD	2S / 3U / 2GLAN / Line-out / mPCIe / HDMI
EBOX-IMX8MM w/RS-485, Dual LAN	NXP i.MX8M Mini Quad Core 1.6GHz	2GB 4GB	eMMC / Micro SD	2S / 3U / 2GLAN / Line-out / mPCIe / HDMI
EBOX-IMX8MM w/WiFi & BT, Dual LAN	NXP i.MX8M Mini Quad Core 1.6GHz	2GB 4GB	eMMC / Micro SD	2S / 3U / 2GLAN / Line-out / mPCIe / HDMI

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

DIN PC-336x Series

- **Operating Temp. :** 0 ~ +60°C / -20 ~ +70°C
- **Dimensions :** 151.7 x 103 x 53.3mm
- **Features :** Dual-core CPU All-in-One Module
  Fanless, DIN Rail support
  GLAN, RS-232 / 485 / 422 / GPIO
  PXE Diskless Boot
  Auto Power On support

Part No.	CPU	RAM	Storage	I/O
D-336x-C2	Vortex86DX3-1GHz	1GB 2GB	SATA / SD (Internal)	2S / 2U / GLAN / LAN / VGA
D-336x-C4	Vortex86DX3-1GHz	1GB 2GB	SATA / SD (Internal)	4S / 2U / GLAN / LAN / VGA
D-336x-852C2	Vortex86DX3-1GHz	1GB 2GB	SATA / SD (Internal)	4S / 2U / GLAN / LAN / VGA
D-336x-852G2	Vortex86DX3-1GHz	1GB 2GB	SATA / SD (Internal)	2S / 2U / GLAN / LAN / 16GPIO / VGA
D-336x-C2G2A	Vortex86DX3-1GHz	1GB 2GB	SATA / SD (Internal)	2S / 2U / GLAN / LAN / Mic-in / Line-out / 16GPIO / VGA

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

EBOX Apollo Lake Series

- **Operating Temp. :** 0 ~ +60°C / -20 ~ +60°C
- **Dimensions :** 115 x 115 x 48.5mm
- **Features :** Multi-Display outputs
  Multi-COM functions
  Dual GLAN, Fanless
  100 x 100mm VESA suppport
  Full size and Half size mPCIe

Part No.	CPU	RAM	Storage	I/O
EBOX-ALN3350	Celeron® N3350 Dual Core 1.10GHz	4GB 8GB	mSATA / SATA	1S / 4U / 2GLAN / Audio / mPCIe / 2HDMI / VGA
EBOX-ALJ3455	Celeron® J3455 Quad Core 1.10GHz	4GB 8GB	mSATA / SATA	1S / 4U / 2GLAN / Audio / mPCIe / 2HDMI / VGA

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

EBOX Braswell Series

- **Operating Temp. :** 0 ~ +60°C
- **Dimensions :** 115 x 115 x 35mm
- **Features :** AMI UEFI BIOS (Legacy mode switchable)
  M.2 2230 E Key support
  GLAN, RS-232 / 485
  100 x 100mm VESA support
  Auto Power On support

Part No.	CPU	RAM	Storage	I/O
EB-58E w/RS-232	Atom® x5-E8000 Quad Core 1.04GHz	4GB 8GB	SATA / Micro SD	2S / 4U / GLAN / Mic-in / Line-out / M.2 / HDMI
EB-58E w/RS-485	Atom® x5-E8000 Quad Core 1.04GHz	4GB 8GB	SATA / Micro SD	2S / 4U / GLAN / Mic-in / Line-out / M.2 / HDMI
EB-58E w/RS-232, Dual LAN	Atom® x5-E8000 Quad Core 1.04GHz	4GB 8GB	SATA / Micro SD	2S / 4U / 2GLAN / Mic-in / Line-out / M.2 / HDMI
EB-58E w/RS-485, Dual LAN	Atom® x5-E8000 Quad Core 1.04GHz	4GB 8GB	SATA / Micro SD	2S / 4U / 2GLAN / Mic-in / Line-out / M.2 / HDMI
EB-58N w/RS-232	Celeron® N3160 Quad Core 1.6GHz	4GB 8GB	SATA / Micro SD	2S / 4U / GLAN / Mic-in / Line-out / M.2 / HDMI
EB-58N w/RS-485	Celeron® N3160 Quad Core 1.6GHz	4GB 8GB	SATA / Micro SD	2S / 4U / GLAN / Mic-in / Line-out / M.2 / HDMI
EB-58N w/RS-232, Dual LAN	Celeron® N3160 Quad Core 1.6GHz	4GB 8GB	SATA / Micro SD	2S / 4U / 2GLAN / Mic-in / Line-out / M.2 / HDMI
EB-58N w/RS-485, Dual LAN	Celeron® N3160 Quad Core 1.6GHz	4GB 8GB	SATA / Micro SD	2S / 4U / 2GLAN / Mic-in / Line-out / M.2 / HDMI

- S=RS232/422/485; U=USB; GLAN=GigaLan; LPT=Printer; mPCIe=miniPCIe

QEC-EtherCAT Solutions

The QEC is a new EtherCAT solution with software that supports a wide range of integrated industrial automation applications, providing fast, simple and ready-to-use functionality that reduces development time and creates a more economical and intelligent Industrial field system.

Easy use development on EtherCAT

QEC's EtherCAT solutions support the Arduino development environment, which can dramatically speed up project development with a rich library, built-in examples, and functions, as well as rapid hardware tuning with visual libraries and database functions. Upgrade to EtherCAT solutions easily and quickly.

QEC Series Features

- Power Redundancy on two sets of isolated power inputs
- Internal Working Status Monitoring
- RJ45 Cable Power Supply
- Cable Redundancy EtherCAT Slave Architecture
- Auto-Switch OR-ing Power Supply System
- Multi-Color Terminal Blocks for Easy Function Separation

High Performance & Synchronization

- Synchronous motion control of up to 32 axes
- Minimum communication cycle 125us

Easy Operation

- Easy Software design, reduce development time
- Provide ArduBlock and HMI resources tools
- Various Packages, Libraries, and examples

EtherCAT Slave Device

Adapter

Stepper Motor

Hand Wheel & RS232/485

Analog I/O

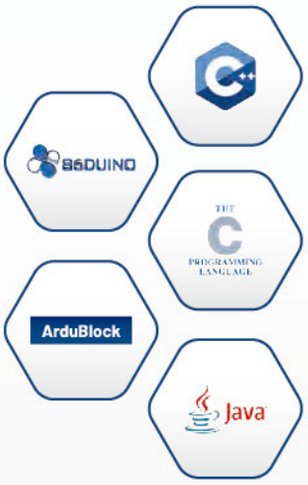
Digital I/O

QEC-M-01

Touch Panel Series
QEC-M-043T

EtherCAT Master Device

Touch Panel Series
QEC-M-070T



QEC Series List

Type	Driver	Description
Master	QEC-M-01	
	QEC-M-043T	With 4.3" Touch Panel
	QEC-M-070T	With 7" Touch Panel
Slave	QEC-RxxD	Digital I/O Slave module
	QEC-RxxA	Analog I/O Slave module
	QEC-RxxMP	Stepper Motor Slave module
	QEC-RxxMV	Servo Motor Slave module
	QEC-RxxHU	MPG, Keypad, LCM, UART slave module
	QEC-JT	Fiber Optics Junction slave module

Compatibility
- Support for third-party EtherCAT Slaves
- Offer ESI file

Service
- Professional Team Service support
- Customization Software library service

Flash Disk

IDE DOM Series

DDOM- □□ - □□ - □

Storage Capacity	Pins	Type	Working Temp.
DDOM-SST : 1G, 2G DDOM-MN : 512M, 1G IDM : 512M-8G	44 : 44pin	HL : Horizontal Left H : Horizontal V : Vertical (Max 4GB)	None : 0 ~ 70°C X : -40 ~ 85°C

IDM- □□ - □□ - □ - □

SATA DOM Series

ISATA- □□ - □ - □ - □

Storage Capacity	Type	Flash Type	Working Temp.
ISATA (S) : 1G-16G ISATA (M) : 8G-128G	H : Horizontal	S : SLC M : MLC	None : 0 ~ 70°C X : -40 ~ 85°C

SATA SLIM Series

ISATA-SLIM- □ - □□ - □

Flash Type	Storage Capacity	Working Temp.
M : MLC	8G-256G	None : 0 ~ 70°C X : -40 ~ 85°C

M.2 Series (SATA 2242 M key)

IM242S- □□ - □ - □

Storage Capacity	Flash Type	Working Temp.
SLC : 8G-64G MLC : 8G-256G	S : SLC M : MLC	None : 0 ~ 70°C X : -40 ~ 85°C

mSATA Series

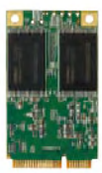
IMSATA- □□ - □ - □

Storage Capacity	Flash Type	Working Temp.
SLC : 4G-128G MLC : 8G-256G	S : SLC M : MLC	None : 0 ~ 70°C X : -40 ~ 85°C

Mini PCIe DOM

IMPeDOM- □□ - □

Storage Capacity	Flash Type
8G-128G	M : MLC IS : iSLC



Peripheral

DCM
DC to DC power module

SERIALCAN
UART to CAN module

ICOP-0072
PC/104 DC to DC + 24-bit digital I/O card

ICOP-1800
PC/104 RS232 x 4 port card

ICOP-0101
PC/104 48-bit digital I/O card

ICOP-0102
PC/104 24-bit digital I/O card

MINIPCIE-9160
Mini-PCIe VGA card

MINIPCIE-8111F
Mini-PCIe GbE LAN card

SD-1917
IDE (44pin) to Micro SD Controller

CF-1916
IDE (44pin) to
Compact Flash Type I/II

CF-1915
IDE (44pin) to
Compact Flash Type I/II

ICOP-0076
LAN Adapter Kit

Memo

Memo

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