

# Beyond the Standard Driving Your Applications Forward

---



► **Embedded Boards:**

3.5" ECX, Pico-ITX, ATX, Micro-ATX, Mini-ITX, COM Express & Qseven

► **Box PCs:**

Heavy-duty Industrial PCs, Rackmount PCs, Compact Rugged PCs, General-purpose PCs, Digital Signage Players, OPS Players, Network Security Appliances, IoT Gateways & Nodes

► **Panel PCs:**

Open Frame Panel PCs, Flat Panel PCs, Edgeless Flat Panel PCs, Rugged Panel PCs, General-purpose Panel PCs

# Single Board Computers – 3.5" ECX & Pico-ITX



SBC (Single Board Computer) is a complete computer with all of its necessary components, including processor, memory, storage, I/Os and/or other features required for a functional computer, built onto a single circuit board. It is often housed inside a larger device or product to provide additional intelligence or control the functions of machine or equipment.



**ECX-KLU0/SLU0 Series**



**KEEX-5100 Series**



**KEEX-8100 Series**

Form Factor	3.5" ECX		3.5" ECX		3.5" ECX	
Processor	Intel® Core™ i7-7600U / i5-7300U / i3-7100U / i7-6600U / i5-6300U / i5-6200U / Celeron® 3965U / 3955U		Intel® Core™ i5-5350U / i3-5010U / i7-5650U / i3-4010U / i5-4300U / i7-4650U / Celeron® 3765U		Intel® Haswell M-Series CPUs (FCPGA946 Socket)	
Chipset	-		-		QM87	
Memory	2x DDR4 SO-DIMM		1x DDR3L SO-DIMM		1x DDR3/L SO-DIMM	
LVDS	1		1		1	
DP	1 (on rear)		2 (on rear)		-	
HDMI	1 (on rear, v2.0)		-		1 (on rear)	
DVI	-		-		1 (Type I on rear)	
Multiple Display	3		3		3	
GbE LAN	2 (RJ45 on rear)		3 (RJ45 on rear)		2 (RJ45 on rear)	
USB 3.0	4 (Type A on rear)		4 (Type A on rear)		4 (2x Type A on rear)	
USB 2.0	2		2		2	
RS232/422/485	2		2		2	
DIO	1 (8-bit)		1 (8-bit)		1 (8-bit)	
SATA	2 (v3.0)		2 (v2.0)		2 (v2.0)	
mSATA / mPCIe	-		1		2	
mPCIe	1		1		-	
M.2	1 (key B)		-		-	



**KEEX-1850 Series**



**ECX-BW00**



**ECX-APLO Series**

Form Factor	3.5" ECX		3.5" ECX		3.5" ECX	
Processor	Intel® Celeron® N3060   Intel® Celeron® N3160		Intel® Celeron® N3160		Intel® Atom™ x7-E3950 / x5-E3940 / x5-E3930 / Pentium® N4200/Celeron® N3350	
Memory	1x DDR3L SO-DIMM		1x DDR3L SO-DIMM		2x DDR3L SO-DIMM	
eDP	-		1		-	
LVDS	1		-		1	
DP	1 (on rear)		1 (on rear)		1 (on rear)	
HDMI	1 (on rear, v1.4)		1 (on rear, v1.4)		1 (on rear, v1.4)	
VGA	1		-		-	
Multiple Display	3 (LVDS / VGA alternative)		3		3	
GbE LAN	2 (RJ45 on rear)		2 (RJ45 on rear)		2 (RJ45 on rear)	
USB 3.0	4 (Type A on rear)		4 (Type A on rear)		4 (Type A on rear)	
USB 2.0	2		2		2	
RS232/422/485	2		2		2	
RS232	4		4		4	
DIO	1 (8-bit)		1 (8-bit)		1 (8-bit)	
SATA	2 (v2.0)   1 (v2.0)		1 (v2.0)		1 (v3.0)	
Micro-SD Cage	1   1		1		1 (on front)	
mSATA	-		1		-	
mPCIe	2   1		1		1	
M.2	-		-		1 (key B)	

## Icon Legend



Extended Temperature Model(s) Available



Fanless Architecture



IP65-rated Anti-spray & Anti-dust Design



Palm-sized Form Factor



### KEEX-1760 Series

### PITX-APLO Series

### PITX-MX60 Series

Form Factor	3.5" ECX	Pico-ITX	Pico-ITX
Processor	Intel® Celeron® J1900 / N2807 / Atom™ E3845 / E3825	Intel® Pentium® N4200 / Celeron® N3350 / Atom™ x7-E3950 / x5-E3940	NXP® i.MX6 Dual Automotive / Quad / Dual Extended Consumer
Memory	1x DDR3L SO-DIMM	1x DDR3L SO-DIMM	1GB / 2GB DDR3 Memory
eDP	-	1	-
LVDS	1	-	1
HDMI	1 (on rear, v1.4)	1 (on rear, v1.4)	1 (on rear, v1.4)
VGA	1 (on rear)	-	-
Multiple Display	2	2	2
GbE LAN	2 (RJ45 on rear)	2 (RJ45 on rear)	1 (RJ45 on rear)
10/100 LAN	-	-	1 (RJ45 on rear)
USB 3.0	1 (Type A on rear)	2 (Type A on rear)	3 (2x Type A on rear)
USB 2.0	5 (2x Type A on rear)	2	-
USB 2.0 OTG	-	-	1 (Micro-USB on right)
RS232/422/485	2	1	1
RS232	4	-	1
DIO	1 (8-bit)	-	-
SATA	1 (v2.0)	2 (v2.0)	-
eMMC	-	-	4GB / 8GB
Micro-SD Cage	-	-	1 (on right)
mSATA	1	-	-
mPCIe	1	-	1
M.2	-	1 (key A)	-

Ivy Bridge and Sandy Bridge based models are available (for 3.5" ECX). Please contact us for details.

## Computer-on-Modules – COM Express® & Qseven™



Computer-on-Module (COM) is a small form-factor, ready-to-use embedded computing platform with processor, memory, core power, BIOS, OS, drivers and associated BSPs already integrated on the board and validated to ensure its compatibility and functionality. System developers can eliminate significant development risk and focus on their core competence in developing carrier boards for application-specific systems.



### COMC-E380 Series

### COMM-E380 Series

### KEEX-200T

Form Factor	COM Express® Compact + Type 6 Pin-out		COM Express® Mini + Type 10 Pin-out		Qseven™
Processor	Intel® Atom™ E3845	Intel® Atom™ E3825	Intel® Atom™ E3845	Intel® Atom™ E3825	NXP® i.MX 6 Dual Lite/ Dual/ Quad Automotive
Memory	4GB DDR3L Memory	2GB DDR3L Memory	4GB DDR3L Memory	2GB DDR3L Memory	1GB DDR3 memory
LVDS	-	-	-	-	2 (via Gold Finger)
LVDS / eDP	-	-	1 (via Pin-out)	-	-
LVDS / DP	1 (via Pin-out)	-	-	-	-
DP	1 (via Pin-out)	-	1 (via Pin-out)	-	-
HDMI	-	-	-	-	1 (v1.4, via Gold Finger)
VGA	1 (via Pin-out)	-	-	-	-
Multiple Display	2	-	2	-	2
GbE LAN	1 (via Pin-out, replaceable by PCIe1 for option)		1 (via Pin-out, replaceable by PCIe1 for option)		1 (via Gold Finger)
USB 3.0	1 (via Pin-out)	-	1 (via Pin-out)	-	-
USB 2.0	7 (via Pin-out)	-	7 (via Pin-out)	-	1 (via Gold Finger)
USB 2.0 OTG	-	-	-	-	1 (via Gold Finger)
Tx / Rx	2 (via Pin-out)	-	2 (via Pin-out)	-	-
GPIO	1 (8-bit, via Pin-out)	-	-	-	-
GPIO / SDIO	-	-	1 (8-bit, via Pin-out)	-	-
SDIO	-	-	-	-	1 (via Gold Finger)
SATA	2 (v2.0, via Pin-out)		2 (v2.0, via Pin-out)		2 (v2.0, via Gold Finger)
eMMC	32GB	16GB	32GB	16GB	4GB
Micro-SD Cage	1		-		1
PCIe	3 (x1, via Pin-out, +1 when LAN is replaced by PCIe1)		3 (x1, via Pin-out, +1 when LAN is replaced by PCIe1)		1 (x1, via Gold Finger)

Carrier boards are available for each Computer-on-Module. Please contact us for details.

// All specifications and photos are subject to change without notice

# Industrial Motherboards – ATX, Micro-ATX & Mini-ITX



Industrial motherboard offers a greater number and variety of memory / storage sockets, expansion slots and I/O ports on a larger sized circuit board in comparison with SBC. Thus, it reserves flexibility for system upgrade in the future and enables connection to more peripheral devices, especially legacy ones.



**ATX-KLSO / KEMB-8100 Series**



**KEMB-8000 Series**



**UATX-DNV0 Series**

<b>Processor</b>	Intel® Kaby Lake-S / Skylake-S CPUs (FCLGA1151)		Intel® Haswell S-Series CPUs (FCLGA1150 Socket)		Intel® Atom™ C3000 Series
<b>Chipset</b>	H110	Q170	H81	Q87	-
<b>Memory</b>	4x DDR4 UDIMM				
<b>DP</b>	1 (on rear)				
<b>HDMI</b>	1 (on rear, v1.4)				
<b>DVI</b>	1 (Type D on rear)				
<b>VGA</b>	1				
<b>Multiple Display</b>	3				
<b>10GbE LAN</b>	-				
<b>GbE LAN</b>	2 (RJ45 on rear)				
<b>USB 3.0</b>	4 (Type A on rear)	6 (4x Type A on rear)	2 (Type A on rear)	4 (2x Type A on rear)	2 (Type A on rear)
<b>USB 2.0</b>	4	6	6 (2x Type A on rear)	8 (2x Type A on rear)	2
<b>RS232/422/485</b>	2 (1x DB9 on rear)				
<b>RS232</b>	4				
<b>DIO</b>	1 (16-bit)				
<b>SATA</b>	4 (v2.0, RAID support for Q170 model)				
<b>eMMC</b>	-				
<b>mSATA / mPCIe</b>	-	2	-	2	-
<b>mPCIe</b>	1	-	1	-	-
<b>PCI</b>	4				
<b>PCIe</b>	2 (x1) + 1 (x16)	2 (x4/x2/x1) + 1 (x16)	2 (x1) + 1 (x16)		1 (x8)



**MITX-CLS0 Series**

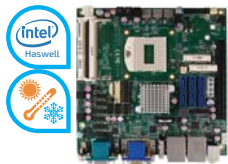


**MITX-KLS0/SLS0 Series**

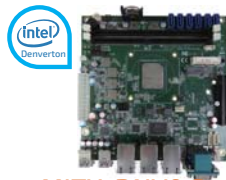


**KEMX-8200 Series**

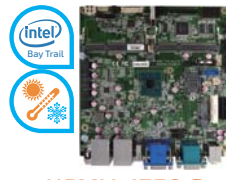
<b>Processor</b>	Intel® Coffee Lake-S CPUs (FCLGA1151, Core & Xeon E3)			Intel® Kaby Lake-S / Skylake-S CPUs (FCLGA1151)		Intel® Haswell S-Series CPUs (FCLGA1150 Socket)
<b>Chipset</b>	C246	C242	H370 Series	H110	Q170	H81
<b>Memory</b>	2x DDR4 UDIMM (ECC support)					
<b>eDP</b>	1					
<b>LVDS</b>	-					
<b>DP</b>	2 (on rear)					
<b>HDMI</b>	1 (on rear, v1.4)					
<b>DVI</b>	-					
<b>VGA</b>	-					
<b>Multiple Display</b>	3					
<b>GbE LAN</b>	3 (RJ45 on rear)	2 (RJ45 on rear)	3 (RJ45 on rear)	2 (RJ45 on rear)		2 (RJ45 on rear)
<b>USB 3.1</b>	4 (Type A on rear)	-	2 (Type A on rear)	-		-
<b>USB 3.0</b>	2 (Type A on rear)	4 (Type A on rear)	4 (Type A on rear)	4 (Type A on rear)	6 (4x Type A on rear)	2 (Type A on rear)
<b>USB 2.0</b>	4					
<b>RS232/422/485</b>	2 (DB9 on rear)					
<b>RS232</b>	-					
<b>DIO</b>	1 (8-bit)					
<b>SATA</b>	4 (v2.0)					
<b>mSATA / mPCIe</b>	-					
<b>mPCIe</b>	-					
<b>M.2</b>	3 (1x Key M, 1x Key A, 1x Key B)					
<b>PCIe</b>	1 (x16)					



**KEMX-8000 Series**



**MITX-DNVO Series**



**KEMX-1750 Series**



**KEMX-1702**

Processor	Intel® Haswell M-Series CPUs (FCPGA946 Socket)	Intel® Atom™ C3538	Intel® Atom™ C3338	Celeron® J1900 / Atom™ E3845	Intel® Atom™ E3825	Intel® Atom™ E3825
Chipset	QM87	-	-	-	-	-
Memory	2x DDR3/L SO-DIMM	2x DDR4 UDIMM	1x DDR4 UDIMM	2x DDR3L SO-DIMM	1x DDR3L SO-DIMM	1x DDR3L SO-DIMM
LVDS	1	-	-	1	-	1
HDMI	1 (on rear, v1.4)	-	-	1 (on rear, v1.4)	-	1 (on rear, v1.4)
DVI	1 (Type D on rear)	-	-	-	-	-
VGA	1 (on rear)	1 (on rear)	-	1 (on rear)	-	1 (on rear)
Multiple Display	3	1	-	2	-	2
GbE LAN	2 (RJ45 on rear)	6 (RJ45 on rear)	-	2 (RJ45 on rear)	-	2 (RJ45 on rear)
USB 3.0	6 (4x Type A on rear)	4 (Type A on rear)	-	1 (Type A on rear)	-	1 (Type A on rear)
USB 2.0	6	2	-	5 (4x Type A on rear)	-	5 (4x Type A on rear)
RS232/422/485	2 (DB9 on rear)	2 (1x DB9 on rear)	-	2 (DB9 on rear)	-	2 (DB9 on rear)
RS232	4	-	-	4	-	4
DIO	1 (8-bit)	1 (8-bit)	-	1 (8-bit)	-	-
Parallel Port	-	-	-	1	-	1
SATA	6 (v2.0, RAID support)	up to 6 (v3.0)	-	1 (v2.0)	-	1 (v2.0)
eMMC	-	optional	-	-	-	-
mSATA	-	-	-	1	-	1
mSATA / mPCIe	1	1	-	-	-	-
mPCIe	1	-	-	1	-	2
M.2	-	1 (Key B)	-	-	-	-
PCIe	1 (x16)	1 (x8, supporting PCIe1/x4/x8)	-	1 (x1)	-	-

Ivy Bridge and Sandy Bridge based models are available (for Mini-ITX). Please contact us for details.

## General-purpose Box PCs



QutePC Series is a collection of generally-used fanned box PCs. Palm size with a volume of only 0.6 liter is their greatest asset and allows them fit well almost anywhere. Enclosed in a plastic housing, the series is a perfectly reasonable platform as well for general-purpose applications.



**QutePC-5000 Series**



**QutePC-1700 Series**

Processor	Intel® Core™ i5-5200U / i3-4010U	Intel® Celeron® J1900 / N2930	Intel® Atom™ E3825
Memory	1x DDR3L SO-DIMM	1x DDR3L SO-DIMM	
HDMI	1 (on rear, v1.4)	1 (on rear, v1.4)	
DVI	1 (Type D on rear)	-	
VGA	-	1 (on rear)	
Multiple Display	2	2	
GbE	2 (RJ45 on rear)	1 (RJ45 on rear)	
USB 3.0	4 (Type A on front)	1 (Type A on front)	
USB 2.0	2 (Type A on front)	2 (Type A on front)	
RS232	-	1 (RJ45 on rear)	
2.5" HDD / SSD	1 (SATA 2.0)	1 (SATA 2.0)	
Micro-SD Cage	-	-	1 (on front)
mSATA / mPCIe	1	-	-
mPCIe	-	1	

Ivy Bridge and Sandy Bridge based models are available. Please contact us for details.

## Heavy-duty Industrial Box PCs



KUBE & QBO Series features passive cooling design, a greater variety and amount of I/O interfaces, especially for industrial legacy devices, and flexible expansion for specific applications (eg. motion control module, video inspection module, graphics card or network interface card). It is an ideal platform for heavy-duty industrial applications.



**KUBE-8130**



**QBO-1000 Series**

	Intel® Celeron® J1900	Intel® Skylake / Kaby Lake S-Series CPUs (FCLGA1151 Socket, TDP up to 35W)
Processor	Intel® Celeron® J1900	Intel® Skylake / Kaby Lake S-Series CPUs (FCLGA1151 Socket, TDP up to 35W)
Chipset	-	Q170
Memory	2x DDR3L SO-DIMM	2x DDR4 SO-DIMM
DP	-	2 (on rear)
HDMI	1 (on rear, v1.4)	-
DVI	-	1 (Type D on rear)
VGA	1 (on rear)	-
Multiple Display	2	3
GbE	2 (RJ45 on rear)	2 (RJ45 on rear)
USB 3.0	1 (Type A on front)	4 (Type A on rear)
USB 2.0	5 (1x Type A on front, 4x Type A on rear)	2 (Type A on rear)
RS232/422/485	2 (DB9 on rear)	2 (DB9 on rear)
RS-232	8 (4x DB9 on front, 4x DB9 on rear)	-
Parallel Port	1 (on front)	-
2.5" HDD / SSD	1 (SATA 2.0)	1 (SATA 2.0)
mSATA	1	-
mSATA / mPCIe	-	2
PCIe	-	2 (x8, accessible on rear)

Ivy Bridge and Sandy Bridge based models are available (for KUBE Series). Please contact us for details.

## Rackmount Industrial PCs



RAK Series is a collection of rackmount industrial PCs designed to be mounted in standard 19-inch racks. Featuring large storage capacities and flexible expansion, they are often used in data centers, communications facilities and at industrial installations.



**RAK-400**



**RAK-100 Series**



**RAK-100S Series**

	Skylake-S / Kaby Lake-S		Haswell-S		Intel® Skylake-S / Kaby Lake-S CPUs	Intel® Skylake-S / Kaby Lake-S CPUs
	Q170	H110	Q87	H81		
Processor	Skylake-S / Kaby Lake-S		Haswell-S		Intel® Skylake-S / Kaby Lake-S CPUs	Intel® Skylake-S / Kaby Lake-S CPUs
Chipset	Q170	H110	Q87	H81	Q170	Q170
Memory	4x DDR4 UDIMM		4x DDR3 DIMM	2x DDR3 DIMM	2x DDR4 SO-DIMM	2x DDR4 SO-DIMM
DP	1 (on rear)				2 (on rear)	2 (on rear)
HDMI	1 (on rear, v1.4)		-		-	-
DVI	1 (Type D on rear)				1 (Type D on rear)	1 (Type D on rear)
VGA	-		1 (on rear)		-	-
Multiple Display	3				3	3
GbE	2 (RJ45 on rear)				2 (RJ45 on rear)	2 (RJ45 on rear)
USB 3.0	4 (Type A on rear)		2 (Type A on rear)		5 (1x Type A on front, 4x Type A on rear)	4 (Type A on rear)
USB 2.0	2 (Type A on front)		4 (2x Type A on front, 2x Type A on rear)		3 (1x Type A on front, 2x Type A on rear)	4 (2x Type A on front, 2x Type A on rear)
RS232/422/485	1 (DB9 on rear)				3 (1x DB9 on front, 2x DB9 on rear)	2 (DB9 on rear)
Drive	4 (SATA 2.0, 3x 5.25" ODD on front / 4x 3.5" HDD / 1x 2.5" HDD / 1x Slim ODD)				4 (SATA 3.0, 3.5" HDD / SSD Drive Bay on front)	4 (SATA 3.0 2.5" HDD / SSD) / 1 (SATA 3.0 3.5" HDD)
mSATA / mPCIe	2	-	2	-	2	2
mPCIe	-	1	-	1	-	-
PCI	4				-	-
PCIe	1 (x16)				2 (x8, accessible on rear)	2 (x8, accessible on rear)

// All specifications and photos are subject to change without notice



# Compact Rugged Box PCs



QBOX Series is a collection of fanless compact box PCs enclosed within a rugged aluminium housing to prevent sensitive components from being exposed to dust and other environmental factors, making it suitable to applications in harsh conditions. Extended temperature models are offered for deployment under extreme high, low or radically fluctuating temperatures.



## QBOX-2090 Series

Processor	Intel® Celeron® N3350 / Pentium® N4200 / Atom™ x7-E3950 / x5-E3940
Memory	2x DDR3L SO-DIMM
DP	1 (on rear)
HDMI	1 (on rear, v1.4)
Multiple Display	2
GbE	2 (RJ45 on rear)
USB 3.0	4 (Type A on rear)
RS232/422/485	2 (DB9 on front)
RS-232	2 (DB9 on front)
DIO	1 (DB9 Female on rear)
2.5" HDD / SSD	1 (SATA 3.0)
Micro-SD Cage	-
mSATA / mPCIe	-
mPCIe	1
M.2	1 (Key B)



## QBOX-300S Series

Processor	Intel® Celeron® N3350 / Pentium® N4200 / Atom™ x5-E3930 / x5-E3940 / x7-E3950
Memory	2x DDR3L SO-DIMM
DP	-
HDMI	2 (on rear, v1.4)
Multiple Display	2
GbE	2 (RJ45 on rear)
USB 3.0	4 (Type A on front)
RS232/422/485	2 (DB9 on rear)
RS-232	-
DIO	-
2.5" HDD / SSD	-
Micro-SD Cage	1 (on front)
mSATA / mPCIe	1
mPCIe	-
M.2	2 (1x Key A, 1x Key B)



## QBOX-2080 Series

Processor	Intel® Celeron® N3160
Memory	1x DDR3L SO-DIMM
DP	1 (on rear)
HDMI	1 (on rear, v1.4)
Multiple Display	2
GbE	2 (RJ45 on rear)
USB 3.0	4 (Type A on rear)
RS232/422/485	2 (DB9 on front)
RS-232	2 (DB9 on front)
DIO	1 (DB9 Female on rear)
2.5" HDD / SSD	1 (SATA 2.0)
Micro-SD Cage	-
mSATA / mPCIe	-
mPCIe	2
M.2	-



## QBOX-1800 Series

Processor	Intel® Celeron® N3160 / N3060
Memory	2x DDR3L SO-DIMM
DP	1 (on rear)
HDMI	2 (on rear, v1.4)
Multiple Display	3
GbE	1 (RJ45 on rear)
USB 3.0	4 (Type A on front)
RS232/422/485	1 (DB9 on rear)
RS-232	-
DIO	-
2.5" HDD / SSD	1 (SATA 2.0)
Micro-SD Cage	1 (on front)
mSATA / mPCIe	-
mPCIe	1
M.2	-



## QBOX-2072 Series

Processor	Intel® Celeron® J1900 / Atom™ E3845
Memory	1x DDR3L SO-DIMM
HDMI	1 (on rear, v1.4)
VGA	1 (on rear)
Multiple Display	2
GbE	2 (RJ45 on rear)
USB 3.0	1 (Type A on rear)
USB 2.0	4 (Type A on rear)
RS232/422/485	2 (DB9 on front)
RS-232	2 (DB9 on front)
DIO	1 (DB9 Female on rear)
2.5" HDD / SSD	1 (SATA 2.0)
Micro-SD Cage	-
mSATA	-
mSATA / mPCIe	1
mPCIe	1



## QBOX-2700 Series

Processor	Intel® Celeron® J1900	Intel® Atom™ E3825
Memory	1x DDR3L SO-DIMM	
HDMI	1 (on rear, v1.4)	
VGA	1 (on rear)	
Multiple Display	2	
GbE	1 (RJ45 on rear)	
USB 3.0	1 (Type A on front)	
USB 2.0	2 (Type A on front)	
RS232/422/485	1 (DB9 on rear)	
RS-232	1 (DB9 on rear)	
DIO	-	
2.5" HDD / SSD	1 (SATA 2.0)	
Micro-SD Cage	-	1 (on front)
mSATA	-	-
mSATA / mPCIe	-	-
mPCIe	1	-



## QBOX-1700 Series

Processor	Intel® Celeron® N2930	Intel® Atom™ E3825
Memory	1x DDR3L SO-DIMM	
HDMI	1 (on rear, v1.4)	
VGA	1 (on rear)	
Multiple Display	2	
GbE	1 (RJ45 on rear)	
USB 3.0	1 (Type A on front)	
USB 2.0	2 (Type A on front)	
RS232/422/485	1 (DB9 on rear)	
RS-232	-	
DIO	-	
2.5" HDD / SSD	1 (SATA 2.0)	
Micro-SD Cage	-	1 (on front)
mSATA	-	-
mSATA / mPCIe	-	-
mPCIe	1	-



## QBOX-200S Series

Processor	Intel® Celeron® N2930 / N2807	Intel® Atom™ E3825
Memory	1x DDR3L SO-DIMM	
HDMI	1 (on rear, v1.4)	
VGA	1 (on rear)	
Multiple Display	2	
GbE	1 (RJ45 on rear)	
USB 3.0	1 (Type A on front)	
USB 2.0	2 (Type A on rear)	
RS232/422/485	1 (DB9 on rear)	
RS-232	-	
DIO	-	
2.5" HDD / SSD	-	
Micro-SD Cage	-	1 (on front)
mSATA	-	1
mSATA / mPCIe	-	-
mPCIe	1	-

Ivy Bridge and Sandy Bridge based models are available. Please contact us for details.

# Digital Signage Players



QDSP Series is a platform designed for digital signage applications and typically features high-definition graphics / audio controller, independent multiple displays and a rich combination of video / audio interfaces. In consideration of any possible application scenarios, the device is enclosed within a compact slim case allowing it even to fit space-critical areas.



**QDSP-3000 Series**



**QDSP-7000 Series**



**QDSP-400 Series**

Processor	Intel® Kaby Lake-S / Skylake-S CPUs (FCLGA1151)		Intel® Core™ i7-7600U/i5-7300U/i3-7100U / i7-6600U/i5-6300U/Celeron® 3965U/3955U	Intel® Core™ i5-7200U / i3-7100U / i5-6300U / i5-6200U / Celeron® 3965U / 3865U / 3955U
Chipset	H110	Q170	-	-
Memory	2x DDR4 SO-DIMM		2x DDR4 SO-DIMM	4x DDR4 SO-DIMM
DP	1 (on rear)		1 (on rear)	1 (on rear)
HDMI	2 (on rear, v2.0)		1 (on rear, v2.0)	1 (on rear, v1.4)
Multiple Display	3		2	2
GbE LAN	2 (RJ45 on rear)		2 (RJ45 on rear)	1 (RJ45 on rear)
USB 3.0	4 (Type A on front)	6 (Type A on front)	4 (Type A on rear)	4 (Type A on front)
USB 2.0	2 (Type A on front)	-	-	-
RS232/422/485	1 (DB9 on rear)		2 (1x DB9 on front)	1 (DB9 on rear)
DIO	-		1 (DB9 Female on front)	-
2.5" HDD / SSD	1 (SATA 2.0)		1 (SATA 3.0)	1 (SATA 2.0)
mSATA / mPCIe	-	2	-	-
mPCIe	2	-	1	1
M.2	-		1 (Key B)	-



**QDSP-6000 Series**



**QDSP-2090 Series**



**QDSP-2080 Series**



**QDSP-200 Series**

Processor	Intel® Core™ i7-5650U / i5-5350U / i7-4650U / i5-4300U / i3-4010U / Celeron® 3765U		Intel® Haswell S-Series CPUs (FCLGA1150 Socket)		Intel® Haswell M-Series CPUs (FCPGA946 Socket)		Intel® Celeron® J1900	Intel® Atom™ E3825
Chipset	-		H81	Q87	QM87		-	
Memory	2x DDR3L SO-DIMM		2x DDR3 SO-DIMM		2x DDR3/L SO-DIMM		1x DDR3L SO-DIMM	
DP	-		2 (on rear)		-	2 (on rear)	-	
HDMI	2 (on rear, v1.4)		-		2 (on rear, v1.4)	1 (on rear, v1.4)	1 (on rear, v1.4)	
DVI	-		1 (Type I on rear)		1 (Type I on rear)	-	-	
VGA	-		-		-	1 (on rear)	1 (on rear)	
Multiple Display	2		3		3		2	
GbE	2 (RJ45 on rear)		2 (RJ45 on rear)		2 (RJ45 on rear)		1 (RJ45 on rear)	
USB 3.0	4 (2x Type A on front, 2x Type A on rear)		2 (Type A on front)	-	6 (Type A on front)		1 (Type A on front)	
USB 2.0	2 (Type A on rear)		4 (Type A on front)	6 (Type A on front)	-		2 (Type A on front)	
RS232/422/485	2 (DB9 on rear)		1 (DB9 on rear)		1 (DB9 on rear)		1 (RJ45 on rear)	
2.5" HDD / SSD	1 (SATA 2.0)		1 (SATA 2.0)		1 (SATA 2.0)		1 (SATA 2.0)	
Micro-SD Cage	-		-		-		-	
eSATA	1 (on front)		-		-		-	
mSATA	1		-		-		-	
mSATA / mPCIe	-		-	2	2		-	
mPCIe	2		2	-	-		1	

Ivy Bridge and Sandy Bridge based models are available. Please contact us for details.



# OPS-compliant Digital Signage Players

OPS Series is a collection of digital signage players based on Intel® Open Pluggable Specification. They can help digital signage operators to easily, quickly and widely deploy rich media content in a cost-effective manner through the standardized interchangeable mechanical interface.



## OPS-2000 Series



## OPS-2050 Series



## OPS-1000 Series



## OPS-100 Series

Processor	Intel® Core™ i5-7200U / i5-6200U	Intel® Core™ i7-6820HQ / i5-6440HQ	Intel® Core™ i7-5850EQ / i7-5700EQ / i7-4700EQ / i5-4400E	Intel® Celeron® J1900 / N2930
Chipset	-	QM170	QM87	-
Memory	2x DDR4 SO-DIMM	2x DDR4 SO-DIMM	2x DDR3/L SO-DIMM	2x DDR3L SO-DIMM
DP	2 (1x on front, 1x by JAE)	2 (1x on front, 1x by JAE)	2 (1x on front, 1x by JAE)	1 (by JAE)
HDMI	1 (by JAE, v2.0)	2 (1x on front, 1x by JAE, v2.0)	2 (1x on front, 1x by JAE, v1.4)	2 (1x on front, 1x by JAE, v1.4)
DVI	-	-	-	1 (by JAE)
Multiple Display	2 (on-front DP and by-JAE DP are alternative)	3 (only one supported among on-front ports)	3 (by-JAE HDMI & by-JAE DP are alternative)	2 (only one output support among DVI & HDMI)
GbE	2 (RJ45 on front)	2 (RJ45 on front)	2 (RJ45 on front)	2 (RJ45 on front)
USB 3.0	6 (4x Type A on front, 2x by JAE)	6 (4x Type A on front, 2x by JAE)	6 (4x Type A on front, 2x by JAE)	2 (1x Type A on front, 1x by JAE)
USB 2.0	2 (by JAE)	2 (by JAE)	2 (by JAE)	5 (3x Type A on front, 2x by JAE)
2.5" HDD / SSD	1 (SATA 2.0, slim type slot on front)	1 (SATA 2.0, slim type slot on front)	1 (SATA 2.0, slim type slot on front)	1 (SATA 2.0, slim type slot on front)
mSATA	-	-	-	1
mSATA / mPCIe	-	-	2	-
mPCIe	1	-	-	1
M.2	1 (key A)	2 (1x key A, 1x key B)	-	-

15" / 17" / 19" square-screen and 21.5" widescreen OPS-compliant flat panel monitors are available. Please contact us for details.

# IoT Gateways & Nodes

UbiQ Series IoT gateways support a variety of IoT protocols and enable flexible seamless connections between edge devices and most cloud platforms. QBOX-200H IoT sensor node can collect data gathered from sensors and then pass them to the gateway or directly to the Cloud.



## UbiQ-100 Series



## QBOX-200H

Processor	Intel® Atom™ E3825	Intel® Atom™ E3815	Intel® Atom™ E3805
Memory	4GB DDR3L memory	2GB DDR3L memory	1x DDR3L SO-DIMM
HDMI	1 (on rear, v1.4)	-	-
GbE	2 (RJ45 on rear)	1 (RJ45 on rear)	1 (RJ45 on rear)
USB 3.0	1 (Type A on front)	1 (Type A on front)	1 (Type A on front)
USB 2.0	2 (Type A on rear)	2 (Type A on rear)	3 (2x Type A on rear, 1x Type Micro-B on rear)
RS232/422/485	2 (DB9 on rear)	2 (DB9 on rear)	1 (DB9 on rear)
eMMC	32GB	16GB	-
Micro-SD Cage	1 (on front)	1 (on front)	1 (on front)
mSATA	-	-	1
mPCIe	2	2	1

# Network Security Appliances



NWA Series supports LAN bypass function which can instantly pass the link to the next available paths in case of a single point of network failure. It is therefore suitable for the enterprises who want to build a network redundancy to ensure maximum uptime and availability for network-based applications.



**NWA-6500 Series**



**NWA-6300 Series**

Processor	Intel® Atom™ C3538	Intel® Atom™ C3338	Intel® Celeron® J1900 / Atom™ E3845	Intel® Atom™ E3825
Memory	2x DDR3L UDIMM	1x DDR3L UDIMM	2x DDR3L SO-DIMM	1x DDR3L SO-DIMM
VGA	-	-	1 (on rear)	-
GbE	6 (RJ45 on rear, LAN1 & LAN2 Bypass, LAN3 & LAN4 Bypass)		4 (RJ45 on rear, LAN1 & LAN2 Bypass)	
USB 3.0	2 (Type A on rear)		1 (Type A on rear)	
USB 2.0	-		2 (Type A on rear)	
RS232	1 (RJ45 on rear)		1 (RJ45 on rear)	
2.5" HDD / SSD	1 (SATA 2.0)		1 (SATA 2.0)	
mSATA	-		1	
mPCIe	1		-	
M.2	2 (1x Key A, 1x Key B)		-	
PCIe	1 (x16, w/ x4 support)		-	

# Rugged Panel PCs



KPC Series is a collection of 5-wire resistive touch screen panel PCs. Each model features an IP65-rated aluminum front bezel to protect the interior system unit against water spray and dust ingress. Thus, they can ensure a reliable long-term operation under harsh environmental conditions.



**KPC-1900**



**KPC-15B0/17B0**



**KPC-1030/1260 Series/  
1570 Series/1770 Series/2150**

Processor	Intel® Skylake S-Series CPUs (FCLGA1151 Socket, up to 35W)		Intel® Haswell M-Series CPUs (FCPGA946 Socket)		Intel® Celeron® J1900			
	-	Atom™ E3825	Atom™ E3845	-	-	Atom™ E3825	Atom™ E3845	-
Chipset	Q170		HM87, QM87		-			
Memory	2x DDR4 SO-DIMM		2x DDR3L SO-DIMM		1x DDR3L SO-DIMM			
Display Size	19" (5:4)		15" (4:3), 17" (5:4)		10.4" (4:3)	12.1" (4:3)	15" (4:3), 17" (5:4)	21.5" (16:9)
Touch	5-wire Resistive		5-wire Resistive		5-wire Resistive			
DP	2 (on rear)		-		-			
HDMI	-		1 (on rear, v1.4)		1 (on rear, v1.4)			
DVI	1 (Type D on rear)		1 (Type D on rear)		-			
VGA	-		1 (on rear)		1 (on rear)			
Multiple Display	3		3		2			
GbE	2 (RJ45 on rear)		2 (RJ45 on rear)		2 (RJ45 on rear)			
USB 3.0	4 (Type A on rear)		4 (Type A on rear)		1 (Type A on rear)			
USB 2.0	2 (Type A on rear)		-		2 (on rear)	4 (Type A on rear / right)		
RS232/422/485	3 (DB9 on rear)		2 (DB9 on rear)		2 (DB9 on rear)			
RS232	3 (DB9 on rear)		2 (DB9 on rear)		2 (on rear)	-		
DIO	-		1 (DB9 Female on rear)		-			
2.5" HDD / SSD	1 (SATA 2.0)		1 (SATA 2.0)		1 (SATA 2.0)			
mSATA	-		-		1			
mSATA / mPCIe	1		-		-			
mPCIe	1		2		1			
PCIe	2 (x8, accessible on rear)		-		-			

Sandy Bridge based models are available. Please contact us for details.

## Flat Panel PCs

PPC Series is a collection of fanless 10-point PCT multi-touch flat panel PCs. Its IP65-rated flat front design with glass surface makes it resistant to water spray, dust ingress, contamination and scratch. In addition, the intuitive multi-touch interface allows operators to easily control and manage production processes.



**PPC-2150 Series**

Processor	Intel® Core™ i7-7600U / i3-7100U / i7-6600U / i5-6300U / Celeron® 3965U
Memory	2x DDR4 SO-DIMM
Display Size	21.5" (16:9)
Touch	10-point PCT
DP	1 (on rear)
HDMI	1 (on rear, v2.0)
Multiple Display	3
GbE	2 (RJ45 on rear)
USB 3.0	4 (Type A on rear)
RS232/422/485	2 (DB9 on rear)
RS232	-
2.5" HDD / SSD	1 (SATA 3.0)
mPCIe	1
M.2	1 (Key B)



**PPC-1500/1700/1900**

Processor	Intel® Celeron® N3160
Memory	1x DDR3L SO-DIMM
Display Size	15" (4:3), 17" (5:4), 19" (5:4)
Touch	10-point PCT
DP	1 (on rear)
HDMI	1 (on rear, v1.4)
Multiple Display	3
GbE	2 (RJ45 on rear)
USB 3.0	4 (Type A on rear)
RS232/422/485	2 (DB9 on rear)
RS232	2 (DB9 on rear)
2.5" HDD / SSD	1 (SATA 2.0)
mPCIe	2
M.2	-

15" / 17" / 19" square-screen and 21.5" widescreen flat panel monitors are available. Please contact us for details.

## Open Frame Panel PCs

OPC Series can be easily integrated into a custom enclosure or machine, allowing integrators to create specific functional design on the enclosure / machine or to build an aesthetical appearance compatible with the environment / brand.



**OPC-1562/1852**

Processor	Intel® Pentium® N4200
Memory	2x DDR3L SO-DIMM
Display Size	15.6" (16:9), 18.5" (16:9)
Touch	5-wire Resistive / 10-point PCT
DP	1 (on rear)
HDMI	1 (on rear, v1.4)
Multiple Display	3
GbE	2 (RJ45 on rear)
USB 3.0	4 (Type A on rear)
RS232/422/585	2 (DB9 on rear)
2.5" HDD / SSD	1 (SATA 3.0)
mPCIe	1
M.2	1 (Key B)

15" / 17" / 19" square-screen and 15.6" / 18.5" widescreen open frame monitors are available.

## General-purpose Panel PCs

HPC Series Fanless panel PCs are enclosed within a plastic housing. They feature IP65 front design and 5-wire resistive touch screen.



**HPC-1050 Series**

Processor	Intel® Celeron® J1900 / Atom™ E3825
Memory	1x DDR3L SO-DIMM
Display Size	10.1" (16:9)
Touch	5-wire Resistive
HDMI	1 (on rear, v1.4)
VGA	1 (on rear)
Multiple Display	2
GbE	2 (RJ45 on rear)
USB 3.0	1 (Type A on rear)
USB 2.0	4 (2x Type A on rear, 2x Type A on left)
RS232/422/585	2 (DB9 on rear)
2.5" HDD / SSD	1 (SATA 2.0)
mSATA	1
mPCIe	1

# Edgeless Flat Panel PCs



XPC Series is a collection of fanless 10-point PCT multi-touch flat panel PCs. Its IP65-rated flat front design with glass surface makes it resistant to water spray, dust ingress, contamination and scratch. And more importantly, the ultra-slim frame design provides an almost zero-frame screen and puts no boundary on the visual enjoyment.



## XPC-1500/1800 Series

## XPC-1510/1810 Series

Processor	Intel® Core™ i7-7600U / i5-7300U / i3-7100U / Celeron® 3965U	Intel® Atom™ x7-E3950 / x5-E3940 / x5-E3930 / Pentium® N4200 / Celeron® N3350
Memory	2x DDR4 SO-DIMM	2x DDR3L SO-DIMM
Display Size	15.6" (16:9), 18.5" (16:9)	15.6" (16:9), 18.5" (16:9)
Touch	10-point PCT	10-point PCT
DP	1 (on rear)	1 (on rear)
HDMI	1 (on rear, v2.0)	1 (on rear, v1.4)
Multiple Display	3	3
GbE	2 (RJ45 on rear)	2 (RJ45 on rear)
USB 3.0	4 (Type A on rear)	4 (Type A on rear)
RS232/422/485	2 (DB9 on rear)	2 (DB9 on rear)
2.5" HDD / SSD	1 (SATA 3.0)	1 (SATA 3.0)
mPCIe	1	1
M.2	1 (Key B)	1 (Key B)

## About Quanmax

Founded in 1999, Quanmax is committed to supply high-quality embedded computing systems and solutions to help its clients develop a variety of computer-aided facilities for individual users and business firms in all industries including but not limited to the following four categories: Infotainment, Automation, IoT and Network Communications, on the basis of different levels of customization.



## Quanmax Inc.

### Headquarter

5F. No. 415, Ti-Ding Blvd., Sec. 2,  
Neihu District, Taipei, Taiwan 11493  
Tel.: +886 2 2799-2789  
Fax: +886 2 2799-7399  
sales@quanmax.com

[www.quanmax.com](http://www.quanmax.com)



Latest Revision  
Download