

**ApolloLake**

**Braswell**

Model	JNF694	JNF694L	JNF695HV	JNF695H2	JNF695P	JNF695L	JNF591	JNF596	JNF792	JNF792i
	Sample available	Sample available	July 2018	July 2018	July 2018	July 2018				
Form Factor	Mini-ITX	Mini-ITX	Thin Mini-ITX	Thin Mini-ITX	Thin Mini-ITX	Thin Mini-ITX	Slim Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX
Thermal Solution	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling
Chipset										
CPU	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	Intel Braswell SoC CPU, Celeron N3160 2.24GHz	Intel Braswell SoC CPU, Celeron N3160 2.24GHz	Intel Braswell SoC CPU, Celeron N3160 2.24GHz	Intel Braswell SoC CPU, Celeron N3160 2.24GHz
Memory	2x DDR3L SODIMM up to 8GB	1x DDR3L SODIMM up to 8GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	1* DDR3L 1866MHz SODIMM up to 8GB	2x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	2x DDR3L SO-DIMM, up to 8GB	2x DDR3L SO-DIMM, up to 8GB
SATA	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	2x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)
m.2	1x M.2 (2242/2260)	1x M.2 (2242/2260)	1x M.2 (2242/2260)	1x M.2 (2242/2260)	1x M.2 (2242/2260)	1x M.2 (2242/2260)	1x M.2 (2242/2260)	N/A	1x M.2 (2242/2260)	1x M.2 (2242/2260)
m-SATA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1x mSATA	N/A	N/A
Integrated Graphics	INTEL HD500 Series	INTEL HD500 Series	Intel GFX	Intel GFX	Intel GFX	Intel GFX	Intel HD400	Intel HD400	Intel HD400	INTEL HD400
Audio	Realtek ALC662VD	Realtek ALC662VD	Realtek ALC662VD	Realtek ALC662VD	Realtek ALC662VD	Realtek ALC662VD	Realtek ALC662VD w/ 3W Amplifier	Realtek ALC662VD	Realtek ALC662VD	Realtek ALC662VD
LAN	Dual Gigabit LAN	Gigabit LAN	Dual Realtek RTL8111H GbE	Dual Realtek RTL8111H GbE	One Realtek RTL8111H GbE	One Realtek RTL8111H GbE	Dual Gigabit LAN	Dual Gigabit LAN	Dual Gigabit LAN	Dual Intel i211AT GbE
JetWay 100Pin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
USB	4x Ext. USB3.0 3x Int. USB2.0	4x Ext. USB3.0 3x Int. USB2.0	4x Ext. USB3.0 6x Int. USB2.0	4x Ext. USB3.0 6x Int. USB2.0	4x Ext. USB3.0 6x Int. USB2.0	4x Ext. USB3.0 6x Int. USB2.0	4x Ext. USB3.0 3x Int. USB2.0	4x Ext. USB3.0 3x Int. USB2.0	3x Ext. USB2.0 1x Ext. USB3.0 6x Int. USB2.0	3x Ext. USB 3.0 1x Ext.USB 2.0 4x Int. USB 2.0
RS232	3x Ext. RS232 1x Ext. RS232/485 2x Int. RS232	4x Ext. RS232	1x Int. RS232/422/485 9x Int. RS232 (COM1~3 With Powered 5V/12V)	1x Int. RS232/422/485 9x Int. RS232 (COM1~3 With Powered 5V/12V)	1x Int. RS232/422/485 5x Int. RS232 (COM1~3 With Powered 5V/12V)	1x Int. RS232/422/485 1x Int. RS232 (COM1~2 With Powered 5V/12V)	1x Ext. RS232/RS422/485 5x Int. RS232 (All Powered 5V/12V)	1x Ext. RS232/422/485 1x Ext. RS232 4x Int. RS232	1x Ext. RS232/422/485 1x Ext. RS232 4x Int. RS232	1x Ext. RS232 1x Ext. RS232/422/485 2x Int. RS232
RJ11 (COM)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parallel	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1x LPT
HDMI	1x HDMI	1x HDMI	1x HDMI	2x HDMI	2x HDMI	1x HDMI	N/A	1x HDMI	1x HDMI	1x HDMI
VGA (D-SUB)	N/A	N/A	1x VGA	N/A	N/A	N/A	1x VGA	N/A	1x VGA	1x VGA
DVI	N/A	N/A	N/A	N/A	N/A	N/A	1x DVI-D	1x DVI-D	N/A	N/A
Display Port	1x DisplayPort	1x DisplayPort	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
eDP	N/A	N/A	1x eDP (option)	1x eDP (option)	1x eDP (option)	1x eDP (option)	N/A	N/A	N/A	N/A
LVDS	1x 24bit Dual CH	1x 24bit Dual CH	24bit Dual Channel (co-lay eDP)	24bit Dual Channel (co-lay eDP)	24bit Dual Channel (co-lay eDP)	24bit Dual Channel (co-lay eDP)	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel
PS/2	1x Int. PS/2	1x Int. PS/2	1x Int. PS/2	1x Int. PS/2	1x Int. PS/2	1x Int. PS/2	PS/2	PS/2	PS/2	1x Int. PS/2
PCI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1x
PCI Express X1	1x PCIeX1	1x PCIeX1	N/A	N/A	N/A	N/A	1x PCIeX1	1x PCIeX1	1x PCIeX1	N/A
PCI Express X16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCI Express Mini	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	2x mPCIe (Full Size)
M.2 PCI Express	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TPM	onboard 1.2/2.0 option	N/A	onboard 1.2/2.0 option	onboard 1.2/2.0 option	onboard 1.2/2.0 option	onboard 1.2/2.0 option	N/A	N/A	TPM1.2 option	Optional
SIM Card Holder	Sim Card Holder	SIM Card Holder (Optional)	Sim Card Holder	Sim Card Holder	Sim Card Holder	N/A	Sim Card Holder	Sim Card Holder	Sim Card Holder	Sim Card Holder
SM Bus	SMBus	SMBus	SMBus	SMBus	SMBus	SMBus	SMBus	SMBus	N/A	N/A
GPIO	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit
Power Requirement	ATX Power	ATX Power	12V DC-in jack	12V DC-in jack	12V DC-in jack	12V DC-in jack	12V DC-in (Lockable)	12V DC-in	ATX Power	ATX Power
Successor							JNF9D-2550	JNF9B-2550/ JNF9D-2550		

## Bay Trail

Model	JNF9N Series	JNF9M series	JNF9T series	JNF9U-2930	JNF9V-2930*	JNF9W Series	JNLBT-11900	JNLBT-11900-2L	JNC7K-11900	JIMB-1900-2L
									<b>43221</b>	
Form Factor	Mini-ITX	Slim Mini-ITX	Mini-ITX	Mini-ITX	Slim Mini-ITX	Slim Mini-ITX	Thin Mini-ITX	Thin Mini-ITX	Slim Mini-ITX	Thin Mini-ITX
Thermal Solution	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling
Chipset										
CPU	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	Intel Bay Taril SoC CPU, ATOM E3827 1.75GHz/ Celeron N2930 2.16GHz	Intel Bay Taril SoC CPU, ATOM E3827 1.75GHz/ Celeron N2930 2.16GHz/ N2807 2.16GHz	Intel Bay Taril SoC CPU Celeron N2807 2.16GHz/ N2930 2.16GHz	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	Intel Bay Taril SoC CPU, ATOM E3827 1.75GHz/ Celeron N2930 2.16GHz/ N2807 2.16GHz	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz
Memory	2x DDR3L SO-DIMM, up to 8GB	2x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB (N2807 up to 4GB)	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB (N2807 up to 4GB)	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB
SATA	2x SATA 2.0 (3GB/s) (1x share w /mSATA)	2x SATA 2.0 (3GB/s) (1x share w/ mSATA)	2x SATA 2.0 (3GB/s) (1x share w /mSATA)	1x SATA 2.0 (3GB/s)	1x SATA 2.0 (3GB/s)	2x SATA2.0 (3GB/s) 2x SATA 3.0 (6GB/s)	1x SATA 2.0 (3GB/s)	1x SATA 2.0 (3GB/s)	1x SATA 2.0 (3GB/s)	1x SATA 2.0 (3GB/s)
m.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1x M.2 (2242/2260)
m-SATA	1x mSATA (share w/ SATA)	1x mSATA (share w/ SATA)	1x mSATA	1x mSATA	1x mSATA	N/A	1x mSATA	1x mSATA	1x mSATA	N/A
Integrated Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics
Audio	Realtek ALC662 w/ 3W Amplifier	Realtek ALC662 w/ 3W Amplifier	Realtek ALC662 w/ 3W Amplifier	Realtek ALC887GR w/ 3W Amplifier	Realtek ALC662VD w/ 3W Amplifier	Realtek ALC662VD (co-lay ALC888VD)	Realtek ALC887 w/ 3W Amplifier	Realtek ALC887 w/ 3W Amplifier	Realtek ALC887 w/ 3W Amplifier	Realtek ALC662 w/ 3W Amplifier
LAN	Intel 82574L Gbe	Gigabit	Intel 82583V Gbe	Dual Gigabit LAN	Gigabit LAN	Gigabit LAN	Gigabit LAN	Dual Gigabit LAN	Gigabit LAN	Dual Realtek Gbe
JetWay 100Pin	YES (2nd Gen)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
USB	3x Ext. USB2.0 1x Ext. USB3.0 4x Int. USB2.0	1x Ext. USB3.0 3x Ext. USB2.0 2x Int. USB2.0 2x Int. USB3.0	3x Ext. USB2.0 1x Ext. USB3.0 5x Int. USB2.0	3x Ext. USB2.0 1x Ext. USB3.0 4x Int. USB2.0	3x Ext. USB2.0 1x Ext. USB3.0 4x Int. USB2.0	3x Ext. USB2.0 1x Ext. USB3.0 3x Int. USB2.0	3x Ext. USB2.0 1x Ext. USB3.0 2x Int. USB2.0	3x Ext. USB2.0 1x Ext. USB3.0 2x Int. USB2.0	1x Ext. USB3.0 3x Ext. USB2.0 5x Int. USB2.0	1x Ext. USB3.0 3x Ext. USB2.0 6x Int. USB2.0 (3x header)
RS232	1x Ext. RS232 1x Int. RS232	1x Ext. RS232/422/485 3x Int. RS232 (All Powered 5V/12V)	2x Ext. RS232 3x Int. RS232	1x Ext. RS232 5x Int. RS232 (all 5V/12V Powered)	1x Ext. RS232 1x Int. RS232	1x Ext. RS232 1x Int. RS232	1x Ext. RS232/RS422/485 5x Int. RS232	1x Ext. RS232/RS422/485 5x Int. RS232	1x Ext. RS232 3x Int. RS232	10x Int. RS232 2x Int. RS232/422/485
RJ11 (COM)	N/A	N/A	N/A	1x RJ11	YES (12V/24V)	N/A	N/A	N/A	N/A	N/A
Parallel	1x LPT	1x LPT	1x LPT	1x LPT	1x LPT	N/A	N/A	N/A	1x LPT	1x LPT
HDMI	1x HDMI	N/A	1x HDMI	1x HDMI	N/A	N/A	1x HDMI	1x HDMI	N/A	1x HDMI
VGA (D-SUB)	1x VGA	N/A	1x VGA	1x VGA	1x VGA (Int)	N/A	1x VGA	1x VGA	1x VGA	1x VGA
DVI	N/A	1x DVI-I	N/A	N/A	N/A	1x DVI	N/A	N/A	N/A	N/A
Display Port	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
eDP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1x eDP	1x eDP
LVDS	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel (co-lay eDP)
PS/2	PS/2	PS/2	PS/2	PS/2	PS/2	N/A	PS/2	PS/2	1x Int. PS/2	PS/2
PCI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCI Express X1	1x PCIeX1	1x PCIeX1	1x PCIeX1	1x PCIeX1	1x PCIeX1	1x PCIeX1	1x PCIeX1	1x PCIeX1	N/A	1x PCIeX1
PCI Express X16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCI Express Mini	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)
M.2 PCI Express	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TPM	N/A	N/A	N/A	TPM1.2 option	N/A	N/A	N/A	N/A	N/A	N/A
SIM Card Holder	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Sim Card Holder
SM Bus	N/A	N/A	N/A	N/A	N/A	SMBus	N/A	N/A	N/A	N/A
GPIO	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit
Power Requirement	12V DC-in	9V~ 36V DC-in	12V DC-in	9V~ 24V DC-in	12V DC-in	12V DC-in	12V DC in, 4pin ATX	12V DC in, 4pin ATX	12V DC in	12V DC in, 4pin ATX
Successor				JNC9T-1037, JNC9NDL-2550	JNC9T-1037	JNC9R-1037, JNF9I-2550	JNF9C-2600/ 2800	JNF9C-2600/ 2800		

**Desktop Intel Socket CPU Solution (Haswell)**

**Desktop SkyLake/KabyLake**

Model	JNC9VL-H81	JNF9J-Q87	JNF9Q-Q87	JNF9QU-Q87	JNFS5Z-IH81	JNF594-Q170	JNF595-H110	JNF693-H110	JNF697-Q170	JNF793-Q170
Form Factor	Thin Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX	Thin Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX
Thermal Solution	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling
Chipset	Intel H81	Intel Q87	Intel Q87	Intel Q87	Intel H81	Intel Q170	Intel H110	Intel H110	Intel Q170	Intel Q170
CPU	Intel LGA1150, 4th Gen Intel Haswell Core i7/ i5/ i3/ Pentium CPU	Intel LGA1150, 4th Gen Intel Haswell Core i7/ i5/ i3/ Pentium CPU	Intel LGA1150, 4th Gen Intel Haswell Core i7/ i5/ i3/ Pentium CPU	Intel LGA1150, 4th Gen Intel Haswell Core i7/ i5/ i3/ Pentium CPU	Intel LGA1150, 4th Gen Intel Haswell Core i7/ i5/ i3/ Pentium CPU	Intel LGA1151, 6th Gen Intel SkyLake/ KabyLake-S Core i7/ i5/ i3/ Pentium CPU	Intel LGA1151, 6th Gen Intel SkyLake/ KabyLake-S Core i7/ i5/ i3/ Pentium CPU	Intel LGA1151, 6th Gen Intel SkyLake/ KabyLake-S Core i7/ i5/ i3/ Pentium CPU	Intel LGA1151, 6th Gen Intel SkyLake/ KabyLake-S Core i7/ i5/ i3/ Pentium CPU	Intel LGA1151, 6th Gen Intel SkyLake/ KabyLake-S Core i7/ i5/ i3/ Pentium CPU
Memory	2x DDR3 SO-DIMM, up to 16G	2x DDR3 SO-DIMM, up to 16G	2x DDR3 SO-DIMM, up to 16G	2x DDR3 SO-DIMM, up to 16G	1x SO-DIMM DDR3 /DDR3L 1600/1333, up to 8GB	2x DDR4 SO-DIMM, up to 32GB	2x DDR4 SO-DIMM, up to 32GB	2x DDR4 SO-DIMM, up to 32GB	2x DDR4L SO-DIMM, up to 32GB	2x SODIMM DDR4 up to 32GB
SATA	1x SATA2.0 (3GB/s) 1x SATA 3.0 (6GB/s)	5x SATA 3.0 (6GB/s) (support RAID 0,1,5,10)	4x SATA 3.0 (6GB/s) (support RAID 0,1,5,10)	4x SATA 3.0 (6GB/s) (support RAID 0,1,5,10)	2x SATA 3.0 (6GB/s)	4x SATA 3.0 (6GB/s) (support RAID 0,1,5,10)	2x SATA 3.0 (6GB/s)	2x SATA 3.0 (6GB/s)	4x SATA 3.0 (6GB/s) (support RAID 0,1,5,10)	4x SATA2.0 (3GB/s) (support RAID 0,1,5,10)
m.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1x M.2 (2242/2260)	N/A	N/A
m-SATA	1x mSATA	1x mSATA (share w/ mPCIe)	1x mSATA (share w/ mPCIe)	1x mSATA (share w/ mPCIe)	1x mSATA	1x mSATA	1x mSATA	N/A	N/A	Yes
Integrated Graphics	Integrated by Intel CPU	Integrated by Intel CPU	Integrated by Intel CPU	Integrated by Intel CPU	Integrated by Intel CPU	Integrated by Intel CPU	Integrated by Intel CPU	Integrated by Intel CPU	Integrated by Intel CPU	Integrated by Intel CPU
Audio	Realtek ALC662 w/ 3W Amplifier	Realtek ALC662	Realtek ALC662	Realtek ALC662	Realtek ALC662GR w/ 3W Amplifier	Realtek ALC662VD	Realtek ALC662VD w/ 3W Amplifier	Realtek ALC662VD	Realtek ALC662VD	Realtek ALC662VD
LAN	Intel i217LM Gigabit	Dual Intel Gigabit (i217LM, i211AT)	Dual Intel Gigabit (i217LM, i211)	Dual Intel Gigabit (i217LM, i211)	Dual Realtek Gbe	Dual Intel LAN (i219LM, i211AT)	Intel Gbe LAN i219V	Dual Gigabit LAN	Dual Intel Gbe LAN	Dual Gigabit LAN
JetWay 100Pin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
USB	2x Ext. USB2.0 2x Ext. USB3.0 2x Int. USB2.0 for 4	4x Ext. USB2.0 2x Ext. USB3.0 2x Int. USB2.0 for 4 1x Int. USB3.0 for 2	4x Ext. USB3.0 2x Int. USB2.0 for 4 1x Int. USB3.0 for 2	4x Ext. USB3.0 2x Int. USB2.0 for 4 1x Int. USB3.0 for 2	4x Ext. USB3.0 6x Int. USB2.0	6x Ext. USB3.0 4x Int. USB2.0	4x Ext. USB3.0 4x Int. USB2.0	4x Ext. USB3.0 4x Int. USB2.0	4x Ext. USB3.0 2x Int. USB2.0	4x Ext. USB3.0 2x Int. USB2.0
RS232	N/A	2x Ext. RS232 1x Int. RS232 1x Int. RS485	1x Ext. RS232/485 2x Int. RS232 2x Int. RS232	1x Ext. RS232/485 1x Ext. RS232 2x Int. RS232	1x Ext. RS232/422/485 1x Int. RS232/422/485	1x Ext. RS232/485 1x Ext. RS232 1x Int. RS232 1x Int. RS232/485	1x Int. RS232 1x Int. RS232/485	1x Ext. RS232/485 3x Ext. RS232 1x Int. RS232/485 1x Int. RS232	2x Ext. RS485 4x Int. RS232	2x Ext. RS485 4x Int. RS232
RJ11 (COM)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parallel	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HDMI	1x HDMI 1.4	1x HDMI 1.4	1x HDMI	1x HDMI	1x HDMI	1x HDMI 2.0	1x HDMI	1x HDMI	1x HDMI	3x HDMI
VGA (D-SUB)	N/A	1x VGA	N/A	1x VGA	2x VGA	N/A	N/A	N/A	N/A	N/A
DVI	1x DVI-I	1x DVI-D	1x DVI-I	1x DVI-I	N/A	1x DVI-D	N/A	N/A	N/A	N/A
Display Port	N/A	N/A	N/A	N/A	N/A	1x Display Port	1x Display Port	1x Display Port	2x Display Port	N/A
eDP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1x eDP	N/A	N/A
LVDS	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel	N/A	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel	N/A	24bit Dual Channel	N/A
PS/2	PS/2	PS/2	PS/2	PS/2	PS/2	PS/2	N/A	PS/2	PS/2	1x Int. PS/2
PCI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCI Express X1	1x PCIeX1	N/A	1x PCIeX4	1x PCIeX4	1x PCIeX4	N/A	1x PCIeX1	N/A	1x PCIeX4	1x PCIeX4
PCI Express X16	N/A	1x PCIeX16	N/A	N/A	1x PCIeX16	1x PCIeX16	N/A	1x PCIeX16	N/A	N/A
PCI Express Mini	1x mPCIe (Half Size)	1x mPCIe (Full Size) (share with mSATA)	1x mPCIe (Full Size) 1x mPCIe (Half Size)	1x mPCIe (Full Size) 1x mPCIe (Half Size)	2x mPCIe (Full Size, 1x share w/ mSATA)	1x mPCIe (Half Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Half Size)
M.2 PCI Express	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TPM	N/A	N/A	N/A	N/A	N/A	TPM1.2 option	TPM1.2 option	N/A	TPM1.2 option	Optional
SIM Card Holder	N/A	N/A	N/A	N/A	Sim Card Holder	N/A	N/A	Sim Card Holder	Sim Card Holder	Sim Card Holder
SM Bus	N/A	SMBus	SMBus	SMBus	N/A	SMBus	N/A	SMBus	SMBus	SMBus
GPIO	N/A	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	N/A	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit
Power Requirement	+19V DC-In	24pin ATX and 4pin 12V ATX	9V~ 24V DC-in	9V~ 24V DC-in	24pin ATX and 4pin 12V ATX	24pin ATX and 4pin 12V ATX	19V DC-In	24pin ATX	9V~ 24V DC-in	9V~ 24V DC-in
Successor										

**Socket CoffeeLake (Gen. 8th)**

**Mobile**

Model	JNF796-Q370	JNF796-C246	JNF797-Q370	JNF9G-QM77	JNF791-3855U	JNC6F-I3855	JNC6J-I3855-2L	JNC6J-I3855-6C
	July 2018	July 2018	August 2018					
Form Factor	Mini-ITX	MINI-ITX	MINI-ITX	Mini-ITX	Mini-ITX	Slim Mini-ITX	Thin Mini-ITX	Thin Mini-ITX
Thermal Solution	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling
Chipset	Intel Q370	Intel C246	Intel Q370	Intel QM77	Intel Skylake SOC	Intel Skylake SOC	Intel Skylake SOC	Intel Skylake SOC
CPU	Intel LGA1151, 8th Gen Intel CoffeeLake-S Core i7/ i5/ i3/ Pentium CPU	Intel LGA1151, 8th Gen Intel CoffeeLake-S Core i7/ i5/ i3/ Pentium CPU	Intel LGA1151, 8th Gen Intel CoffeeLake-S Core i7/ i5/ i3/ Pentium CPU	Intel LGA1155, 3rd Gen Intel IVY Bridge, Core i7/ i5/ i3/ Pentium CPU	Intel SkyLake SoC CPU, Celeron 3855U 1.60GHz/ Celeron 3955U 2.00GHz	Intel SkyLake SoC CPU, Celeron 3855U 1.60GHz	Intel SkyLake SoC CPU, Celeron 3855U 1.60GHz	Intel SkyLake SoC CPU, Celeron 3855U 1.60GHz
Memory	2x SODIMM DDR4 up to 32GB	2x SODIMM DDR4, up to 32GB (Support ECC)	2x SODIMM DDR4 up to 32GB	1x DDR3 SO-DIMM, up to 8GB	2x DDR4 SO-DIMM, up to 32GB	2x DDR4 SO-DIMM, up to 32GB	1x DDR4 SO-DIMM, up to 16GB	1x DDR4 SO-DIMM, up to 16GB
SATA	5x SATAIII RAID 0, 1, 5, 10	5x SATAIII RAID 0,1,5,10	2x SATAIII	4x SATA2.0 (3GB/s) 2x SATA 3.0 (6GB/s) (support RAID 0,1,5,10)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)
m.2	N/A	N/A	N/A	N/A	N/A	1x M.2 (2242/2260)	1x M.2 (2242/2260)	1x M.2 (2242/2260)
m-SATA	1x mSATA	1x mSATA	1x mSATA	1x mSATA (share w/ mPCIe)	1x mSATA (share w/ mSATA)	N/A	1x mSATA	1x mSATA
Integrated Graphics	Integrated by Intel CPU	Integrated by Intel CPU	Integrated by Intel CPU	IVY Bridge CPU	Intel HD510	Intel HD510	Intel HD510	Intel HD510
Audio	Realtek ALC662VD	Realtek ALC662VD	Realtek ALC662VD	Realtek ALC662	Realtek ALC662VD w/3W Amplifier	Realtek ALC662GR W/3W Amplifier	Realtek ALC662GR w/ 3W Amplifier	Realtek ALC662GR w/ 3W Amplifier
LAN	Dual Intel Gbe LAN	Dual Intel Gbe LAN	Dual Intel Gbe LAN	Dual Intel Gbe	Dual Gigabit LAN	Gigabit LAN	2x Intel Gbe LAN	Gigabit LAN
JetWay 100Pin	N/A	N/A	N/A	YES (2nd Gen)	N/A	N/A	N/A	N/A
USB	4x Ext USB3.0 2x Ext USB3.0 4x Int. USB3.0	4x Ext USB3.0 2x Ext USB3.0 4x Int. USB3.0	2x Ext USB3.0 2x Ext USB3.0 2x Int. USB3.0 4x Int. USB2.0	2x Ext. USB3.0 2x Ext. USB2.0 2x Int. USB3.0 4x Int. USB2.0	4x Ext. USB3.0 5x Int. USB2.0	2x Ext. USB3.0 2x Ext. USB2.0 2x Int. USB3.0 1x Int. USB2.0	2x Ext. USB3.0 3x Int. USB3.0 3x Int. USB2.0	2x Ext. USB3.0 2x Ext. USB2.0 2x Int. USB3.0 1x Int. USB2.0
RS232	2x Ext. RS485 4x Int. RS232	2x Ext. RS485 4x Int. RS232	2x Ext. RS485 4x Int. RS232	1x Ext. RS232 2x Int. RS232 1x Int. RS485	1x Ext. RS232/422/485 9x Int. RS232 (all 5V/12V Powered)	N/A	2x Int. RS232/422/485 8x Int. RS232	1x Int. RS232/422/485 5x Int. RS232
RJ11 (COM)	N/A	N/A	N/A	N/A	YES (12V/24V)	N/A	N/A	N/A
Parallel	N/A	N/A	N/A	N/A	1x LPT	N/A	1x LPT	1x LPT
HDMI	1x HDMI	1x HDMI	1x HDMI	1x HDMI	1x HDMI	1x HDMI (4096x2160 @24Hz)	1x HDMI	1x HDMI
VGA (D-SUB)	1x VGA	1x VGA	1x VGA	1x VGA	1x VGA	N/A	1x VGA	1x VGA
DVI	N/A	N/A	N/A	N/A	N/A	1x DVI (1920x1080 @60Hz)	N/A	N/A
Display Port	1x Display Port	1x Display Port	1x Display Port	1x Display Port	N/A	N/A	N/A	N/A
eDP	N/A	N/A	N/A	N/A	1x eDP (option)	1x eDP (option)	1x eDP (option)	1x eDP (option)
LVDS	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel (co-lay eDP)	24bit Dual Channel (co-lay eDP)	24bit Dual Channel (co-lay eDP)	24bit Dual Channel (co-lay eDP)
PS/2	1x Int. PS/2	1x Int. PS/2	1x Int. PS/2	PS/2	PS/2	1x Int. PS/2	PS/2	PS/2
PCI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCI Express X1	N/A	N/A	N/A	N/A	1x PCIeX1	1x PCIeX1	N/A	N/A
PCI Express X16	1x PCIeX16	1x PCIeX16	1x PCIeX16	1x PCIeX16	N/A	N/A	N/A	N/A
PCI Express Mini	1x mPCIe (Half Size) (Share mSATA)	1x mPCIe (Full Size) (share w/ mSATA) 1x mPCIe (Half Size)	1x mPCIe (Full Size) (share w/ mSATA) 1x mPCIe (Half Size)	1x mPCIe (Full Size) (share w/ mSATA) 1x mPCIe (Half Size)	1x mPCIe (Full Size) (share w/ mSATA) 1x mPCIe (Half Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)
M.2 PCI Express	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TPM	Optional	Optional	Optional	N/A	N/A	N/A	N/A	N/A
SIM Card Holder	SIM Card Holder	N/A	N/A	N/A	N/A	SIM Card Holder	SIM Card Holder	SIM Card Holder
SM Bus	SMBus	SMBus	SMBus	N/A	SMBus	SMBus	SMBus	SMBus
GPIO	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit
Power Requirement	24pin ATX	24pin ATX	24pin ATX	24pin ATX + 4pin 12V ATX	12V DC-in	19V DC-in	12V DC-In	12V DC-In
Successor					JNC9T-1037			

### 3.5" SBC

Model	JNF3A series	JNF3AE series	JNF3E Series	JNF531M-3160	JNF532 Series	JNF631 Series	JNF632E Series	JNF831 series	JNF832
				July 2018					
Form Factor	3.5"	3.5"	3.5"	3.5"	3.5"	3.5"	3.5"	3.5"	3.5"
Thermal Solution	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling
Chipset									
CPU	Intel Bay Taril-M SoC CPU Celeron N2807 2.16GHz/ N2930 2.16GHz	Intel Bay Taril SoC CPU Celeron J1900 2.42GHz/ N2930 2.16GHz	4th Gen Intel Haswell/ Broadwell-U SoC, Core i7/ i5/ i3/ Pentium CPU	Intel Braswell SoC CPU, Celeron N3160 2.24GHz	Intel Bay Taril-M SoC CPU Celeron N2807 2.16GHz/ N2930 2.16GHz	Intel Apollo Lake SoC CPU Celeron N3350 2.40GHz/ Pentium N4200 2.5GHz	Intel SkyLake SoC CPU, Core i5-6200U 2.80GHz/ Core i5-6300U 3.00GHz/ Celeron 3855U 1.6GHz	Intel Bay Taril-M SoC CPU Celeron N2930 2.16GHz	Intel Apollo Lake SoC CPU Celeron N3350 2.40GHz/ Pentium N4200 2.5GHz
Memory	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	2x SO-DIMM DDR3L, up to 16GB	1x DDR3L SODIMM up to 8GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	2x DDR4 SO-DIMM, up to 32GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB
SATA	1x SATA 2.0 (3GB/s)	1x SATA 2.0 (3GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 2.0 (3GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 2.0 (3GB/s)	1x SATA 3.0 (6GB/s)
m.2	N/A	N/A	N/A	1x M.2 (2242/2260)	N/A	1x M.2 (2242)	N/A	1x M.2 (2242/2260)	1x M.2 (2242)
m-SATA	1x mSATA (share w/ mPCIe)	1x mSATA (share w/ mPCIe)	1x mSATA (share w/ mPCIe)	N/A	1x mSATA (share w/ mPCIe)	N/A (support SD Card)	1x mSATA (share w/ mPCIe)	N/A	N/A
Integrated Graphics	Intel	Intel	i5-4300U: HD4400 i5-5200U: HD5500	INTEL HD400	Intel	INTEL HD500 Series	i5-6300U: HD520 i5-6200U: HD520 3855U: HD510	Intel	INTEL HD500 Series
Audio	Realtek ALC662	Realtek ALC662	Realtek ALC662	Realtek ALC662VD	Realtek ALC662	Realtek ALC662VD	Realtek ALC662VD	Realtek ALC662	Realtek ALC662VD
LAN	2x Intel Gbe LAN	2x Intel Gbe LAN	Dual Intel Gbe LAN (i218LM, i211AT)	Dual INTEL Gbe LAN	Dual Gigabit	2x Intel Gbe LAN	2x Intel Gbe LAN	Gigabit LAN	2x Gigabit LAN
JetWay 100Pin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
USB	3x Ext. USB2.0 1x Ext. USB3.0 4x Int. USB2.0	3x Ext. USB2.0 1x Ext. USB3.0 4x Int. USB2.0	2x Ext. USB2.0 4x Ext. USB3.0 2x Int. USB2.0	4x Ext. USB3.0 2x Int. USB2.0	3x Ext. USB2.0 1x Ext. USB3.0 4x Int. USB2.0	4x Ext. USB3.0 2x Int. USB2.0	2x Ext. USB2.0 4x Ext. USB3.0 4x Int. USB2.0	1x Ext. USB3.0 3x Ext. USB2.0 4x Int. USB2.0	4x Ext. USB3.0 2x Int. USB2.0
RS232	3x Int. RS232 1x Int. RS232/485	3x Int. RS232 1x Int. RS232/485	3x Int. RS232 1x Int. RS232/485	1x Ext. RS232 4x Int. RS232 1x Int. RS232/422/485	3x Int. RS232 1x Int. RS232/485	1x Ext. RS232 (RJ45) 4x Int. RS232 1x Int. RS232/422/485	5x Int. RS232 1x Int. RS232/422/485	1x Int. RS232/485	1x Int. RS232
RJ11 (COM)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parallel	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HDMI	N/A	N/A	2x HDMI	1x HDMI	N/A	N/A	1x HDMI 1.4	1x HDMI	2x HDMI
VGA (D-SUB)	N/A	N/A	N/A	N/A	1x VGA	N/A	N/A	1x VGA	N/A
DVI	1x DVI-I	1x DVI-I	N/A	N/A	1x DVI-I	N/A	N/A	N/A	N/A
Display Port	N/A	N/A	N/A	Yes	N/A	2x Display Port	1x Display Port	N/A	N/A
eDP	N/A	1x eDP (option)	N/A	N/A	N/A	1x eDP	1x eDP (option)	1x eDP	1x eDP
LVDS	24bit Dual Channel	24bit Dual Channel (co-lay eDP)	24bit Dual Channel	24bit Dual Channel	N/A	N/A	24bit Dual Channel (co-lay eDP)	N/A	N/A
PS/2	PS/2	PS/2	PS/2	N/A	PS/2	Int. PS/2	PS/2	Int. PS/2	Int. PS/2
PCI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCI Express X1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCI Express X16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCI Express Mini	2x mPCIe (Full Size) (1x share w/ mSATA)	2x mPCIe (Full Size) (1x share w/ mSATA)	2x mPCIe (Full Size) (1x share w/ mSATA)	1x mPCIe (Half Size)	2x mPCIe (Full Size) (1x share w/ mSATA)	1x mPCIe (Full Size)	1x mPCIe (Full Size) (share w/ mSATA) 1x mPCIe (Half Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)
M.2 PCI Express	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1x E Key	1x E Key
TPM	N/A	N/A	TPM1.2 option	N/A	N/A	N/A	TPM1.2 option	TPM1.2/ 2.0 option	N/A
SIM Card Holder	N/A	N/A	N/A	N/A	N/A	SIM Card holder	N/A	SIM Card Holder	SIM Card Holder
SM Bus	SMBus	SMBus	SMBus	N/A	SMBus	SMBus	SMBus	SMBus	SMBus
GPIO	1x GPIO 8bit	1x GPIO 8bit	YES (Shared)	Yes	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit
Power Requirement	9V~ 24V DC-in	9V~ 24V DC-in	9V~ 24V DC-in	+9V~36V Lockable	9V~ 24V DC-in	12V	9V~ 24V DC-in	12V DC-in	12V DC-in
Successor									

**PICO-ITX**

**1.8"**

**UTX**

**AMD**

Model	JNP93-2930	JNP691	JNP793	JNF711	JNC59-U3160-4G	JNC7C-U3060-2G	JNU792C-3855U	JNU792V-3855U	JNF81-LF
		<b>June 2018</b>	<b>May 2018</b>						
Form Factor	PICO-ITX	PICO-ITX	PICO-ITX	1.8" (84x55mm)	UTX	UTX	UTX	UTX	Mini-ITX
Thermal Solution	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Active Cooling	Active Cooling	Active Cooling
Chipset									Hudson E1
CPU	Intel Bay Trail-M SoC CPU Celeron N2930 2.16GHz	Intel Apollo Lake SoC CPU Celeron N3350 2.40GHz/ Pentium N4200 2.5GHz	Intel Braswell SoC CPU, Celeron N3160 2.24GHz	Intel Bay Trail-M SoC CPU Celeron N2807 2.16GHz/ N2930 2.16GHz	Intel Braswell SoC CPU, Celeron N3160 2.24GHz	Intel Braswell SoC CPU, Celeron N3060 2.48GHz	Intel Skylake U 6200U/6300U	Intel Skylake U 3855U CPU	Ontario APU T56N Dual-Core, 1.6GHz.
Memory	2GB DDR3 on board	1x DDR3L SO-DIMM, up to 8GB	2GB DDR3 on board	2GB DDR3L on board	4GB DDR3L on board	2GB DDR3L on board	2x DDR4 up to 32G	2x DDR4 up to 32G	2x DDR3 1066 SO-DIMM, up to 8GB
SATA	1x SATA 2.0 (3GB/s) (Horizontal)	1x SATA 3.0 (6GB/s)	EMMC 32GB on board <small>(OS support limited Win8,10)</small>	N/A	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	5x SATA 3.0 (6GB/s) (RAID0, 5, 10)
m.2	N/A	1x M.2 (2242)	1x M.2 (2242)	M.2	N/A	N/A	N/A	N/A	N/A
m-SATA	1x mSATA	N/A	N/A	N/A	1x mSATA	1x mSATA	Yes	Yes	Yes
Integrated Graphics	Intel	Intel HD500 (Dual Core) Intel HD505 (Quad C)	INTEL HD400	Intel	Intel HD400	Intel HD400	Intel HD520 GPU	Intel HD520 GPU	DirectX 11 GPU UVD3
Audio	Realtek ALC662	Realtek ALC662VD	Realtek ALC662VD	N/A	Realtek ALC662GR w/ 3W Amplifier	Realtek ALC662GR w/ 3W Amplifier	Realtek ALC662VD with 3W Amplifier	Realtek ALC662VD with 3W Amplifier	VIA VT1705
LAN	Gigabit	1x Gigabit LAN (RTL8111H)	Dual Gigabit LAN by Pin Headers	INTEL Gigabit LAN	Dual Gigabit LAN	Dual Gigabit LAN	Dual Intel Gbe LAN	Dual Intel Gbe LAN	VIA VT1705
JetWay 100Pin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
USB	1x Ext. USB2.0 1x Ext. USB3.0 6x Int. USB2.0	2x USB3.0 2x USB2.0	2x USB3.0 2x USB2.0 All by Pin headers	1x USB3.0 2x USB2.0	3x Ext. USB3.0 1x Int. USB2.0	3x Ext. USB3.0 2x Int. USB2.0	2x Ext. USB3.0 (Front) 2x Ext. USB2.0 (Front) 4x Ext. USB3.0 (Rear) 2x Ext. USB2.0 (Rear) 3x Int. USB2.0	2x Ext. USB3.0 (Front) 2x Ext. USB2.0 (Front) 2x Ext. USB3.0 (Rear) 2x Ext. USB2.0 (Rear) 1x Int. USB2.0	6x Ext. USB 2x Int. USB for 4
RS232	1x Int. RS232 1x Int. RS422/485	1x Int. RS232 1x Int. RS232/485	1x Int. RS232 1x Int. RS232/422/485	1x Int. RS232 1x Int. RS422/485	2x Int. RS232	2x Int. RS232	N/A	N/A	1x Int. RS232
RJ11 (COM)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parallel	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HDMI	1x HDMI 1.4	1x HDMI	1x Int. HDMI	N/A	2x HDMI	2x HDMI	1x HDMI 1.4b	1x HDMI 1.4b	1x HDMI
VGA (D-SUB)	1x VGA (option)	N/A	N/A	1x VGA	N/A	N/A	N/A	1x VGA	1x VGA
DVI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1x DVI
Display Port	N/A	N/A	N/A	N/A	1x Display Port	1x Display Port	1x Display Port	N/A	N/A
eDP	N/A	N/A	1x eDP	1x eDP	N/A	1x eDP	N/A	N/A	N/A
LVDS	24bit Dual Channel	24bit Dual Channel	N/A	N/A	24bit Dual Channel	N/A	N/A	N/A	24bit Dual Channel
PS/2	N/A	N/A	N/A	N/A	PS/2	N/A	N/A	N/A	PS/2
PCI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCI Express X1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCI Express X16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	PCIeX16
PCI Express Mini	1x mPCIe (Half Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size) 1x mPCIe (Half Size)	1x mPCIe (Full Size) 1x mPCIe (Half Size)	1x mPCIe (Full Size) 1x mPCIe (Half Size)	1x mPCIe (Full Size) 1x mPCIe (Half Size)	1x mPCIe
M.2 PCI Express	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TPM	N/A	N/A	N/A	N/A	N/A	N/A	Optional	Optional	N/A
SIM Card Holder	N/A	SIM Card holder (push-in)	N/A	N/A	SIM Card Holder	SIM Card Holder	Yes	Yes	N/A
SM Bus	N/A	SMBus	SMBus	SMBus	N/A	N/A	N/A	N/A	N/A
GPIO	N/A	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	Yes	Yes	Yes
Power Requirement	12V DC-in	12V DC-in	12V DC-in	5V DC-in	9V~ 24V DC-in	9V~ 24V DC-in	12V DC-in	12V DC-in	ATX
Successor									

**NUC**

**EPIC**

Model	JNU91-2930	JNU93-2930	JNU591-3160	JNU691	JNLBT-IE2930	JNLBT-IE2930-4G	JNC55-E2930-2G	JNC7P-E3855-2G	JNC7P-E6100
								July 2018	July 2018
Form Factor	NUC (10 x 10cm)	NUC (10 x 10cm)	NUC (10 x 10cm)	NUC (10 x 10cm)	EPIC	EPIC	EPIC	4.5"	4.5"
Thermal Solution	Active Cooling	Active Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Active cooling	Active Cooling
Chipset									
CPU	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	Intel Braswell SoC CPU, Celeron N3160 2.24GHz	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	Intel Skylake-U SoC CPU, Celeron 3855U 1.60GHz	Intel Skylake-U SoC CPU, Core i3-6100 3.70GHz
Memory	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	4GB DDR3L on board	2GB DDR3L on board	2GB DDR3L on board	1x DDR4 SODIMM, up to 16GB
SATA	N/A	1x SATA 2.0 (3GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 2.0 (3GB/s)	1x SATA 2.0 (3GB/s)	1x SATA 2.0 (3GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)
m.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
m-SATA	1x mSATA	1x mSATA	1x mSATA (share w/ mPCIe)	1x mSATA	1x mSATA	1x mSATA	1x mSATA	1x mSATA	1x mSATA
Integrated Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel HD400	Intel HD500 Series	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics	INTEL HD510	Intel GFX
Audio	Realtek ALC662GR	Realtek ALC887GR w/ 3W Amplifier	Realtek ALC662VD	Realtek ALC662VD	Realtek ALC662	Realtek ALC662	Realtek ALC887GR w/ 3W Amplifier	Realtek ALC887GR w/ 3W Amplifier	Realtek ALC887GR w/ 3W Amplifier
LAN	One Intel Gbe LAN (82574L)	2x Intel Gigabit LAN	2x Intel Gigabit LAN	2x Intel Gigabit LAN	2x Intel Gigabit LAN	2x Intel Gigabit LAN	2x Intel Gigabit LAN	2x Intel LAN (i211AT)	2x Intel LAN (i218LM, i211AT)
JetWay 100Pin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
USB	1x USB3.0 (Front) 2x USB2.0 (Rear)	3x Ext. USB2.0 1x Ext. USB3.0 1x Int. USB2.0	2x Int. USB2.0 4x Ext. USB3.0	4x Ext. USB3.0 2x Int. USB2.0	1x Ext. USB2.0 4x Int. USB2.0 1x Ext. USB3.0	1x Ext. USB2.0 4x Int. USB2.0 1x Ext. USB3.0	3x Ext. USB2.0 1x Ext. USB3.0 2x Int. USB2.0	4x Ext. USB3.0 3x Int. USB2.0	4x Ext. USB3.0 4x Int. USB2.0
RS232	1x Ext. RS232 1x Int. RS232	1x Ext. RS232	1x Ext. RS232	1x Ext. RS232	1x Ext. RS232 2x Int. RS232/485/422 3x Int. RS232	1x Ext. RS232 3x Int. RS232 2x Int. Rs422/485	2x Ext. R422/R485 6x Ext. RS232	2x Ext. RS232/422/485 4x Int. RS232	3x Ext. RS232/422/485 2x Int. RS232
RJ11 (COM)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parallel	N/A	N/A	N/A	N/A	1x LPT	1x LPT	N/A	N/A	N/A
HDMI	2x HDMI	2x HDMI	1x HDMI 1.4b	2x HDMI 1.4 (max. 3840x2160@30Hz)	1x Int. HDMI	1x Int. HDMI	1x HDMI	1x HDMI	1x HDMI
VGA (D-SUB)	N/A	N/A	N/A	1x VGA	1x Ext. VGA, 1x Int. VGA	1x Ext. VGA, 1x Int. VGA	1x VGA	1x Int. VGA	1x Int. VGA
DVI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Display Port	N/A	N/A	1x Display Port	N/A	N/A	N/A	N/A	N/A	N/A
eDP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1x eDP	1x eDP
LVDS	N/A	N/A	N/A	N/A	24bit Dual Channel	24bit Dual Channel	24bit Dual Channel (option)	24bit Dual Channel	24bit Dual Channel
PS/2	N/A	N/A	N/A	N/A	1x PS/2	1x Int. PS/2	N/A	1x PS/2	1x Int. PS/2
PCI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCI Express X1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1x PCIeX1	1x PCIeX1
PCI Express X16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCI Express Mini	1x mPCIe (Half Size)	1x mPCIe (Half Size)	1x mPCIe (Full Size) (share w/ mSATA) 1x mPCIe (Half Size)	1x mPCIe (Half Size)	1x mPCIe (Half Size)	1x mPCIe (Half Size)	1x mPCIe (Half Size)	1x mPCIe (Full Size) 1x mPCIe (Half Size)	1x mPCIe (Full Size) 1x mPCIe (Half Size)
M.2 PCI Express	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TPM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SIM Card Holder	N/A	N/A	Sim Card Holder	SIM Card holder	Sim Card Holder	Sim Card Holder	Sim Card Holder	N/A	N/A
SM Bus	N/A	N/A	SMBus	SMBus	N/A	N/A	N/A	N/A	N/A
GPIO	N/A	N/A	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit
Power Requirement	9V~ 24V DC-in	9V~ 24V DC-in	12V DC-in	12V DC-in	9V~ 24V DC-in	9V~ 24V DC in	9V~ 24V DC in	9V~ 24V DC in	9V~ 24V DC in
Successor					JNL70-IE1037	JNL70-IE1037			

## 5.25"

## Micro ATX Form Factor

Model	JNC7A-P1900-4G	JNC7B Series	JNMF92-H61	JNMF93-Q77	JNMF95-Q87	JNMF94RM-Q87	JNMF691-H110
	April 2018						
Form Factor	5.25"	5.25"	Micro ATX	Micro ATX	Micro ATX	Micro ATX	Micro ATX
Thermal Solution	Passive Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active cooling
Chipset			Intel H61	Intel Q77	Intel Q87	Intel Q87	Intel H110
CPU	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	Intel Skylake-U SoC CPU, Core i5-6200 2.80GHz	Intel LGA1155, 2nd Gen Intel Sandy Bridge, Core i7/ i5/ i3/ Pentium CPU	Intel LGA1155, 3rd Gen Intel IVY/ Sandy Bridge, Core i7/ i5/ i3/ Pentium CPU	Intel LGA1150, 4th Gen Intel Haswell Core i7/ i5/ i3/ Pentium CPU	Intel LGA1150, 4th Gen Intel Haswell Core i7/ i5/ i3/ Pentium CPU	Intel LGA1151, 6th Gen Intel SkyLake-S/ Kabylake-S Core i7/ i5/ i3/ Pentium CPU
Memory	4GB DDR3L on board	1x DDR4 SODIMM, up to 16GB	2x DDR3 SO-DIMM, up to 16GB	4x DDR3 DIMM, up to 32GB	4x DDR3 DIMM, up to 32GB	4x DDR3 DIMM, up to 32GB	2x DDR4 SO-DIMM, up to 32GB
SATA	2 SATA 2.0	1 SATA 3.0	4x SATA 2.0 (3GB/s)	4x SATA 2.0 (3GB/s) 2x SATA 3.0 (6GB/s) (support RAID 0,1,5,10)	5x SATA 3.0 (6GB/s) (support RAID 0,1,5,10)	6x SATA 3.0 (6GB/s) (support RAID 0,1,5,10)	3x SATA 3.0 (6GB/s)
m.2	1x M.2 (2242/2260)	N/A	N/A	N/A	N/A	N/A	1x M.2 (2242/2260)
m-SATA	N/A	Yes (shared)	N/A	1x mSATA	1x mSATA (shared w/ SATA port 6)	1x mSATA (shared w/ SATA port 6)	N/A
Integrated Graphics	Intel GFX	i5-6200U: HD520 C3855U: HD510	Integrated by Intel i3/i5/i7 CPU	Integrated by Intel i3/i5/i7 CPU	Integrated by Intel Haswell CPU (GT1/GT2/GT3)	Integrated by Intel CPU	Integrated by Intel CPU
Audio	Realtek ALC887GR w/ 3W Amplifier	Realtek ALC662GR With 3W Amplifier	Realtek ALC662	Realtek ALC662	Realtek ALC662	N/A	Realtek ALC662VD
LAN	2x INTEL Gbe LAN	2x INTEL Gbe LAN	Dual Gigabit	2x INTEL Gbe LAN	2x Intel Gigabit (i217LM, 82574L)	2x Intel Gigabit (i217LM, i211)	Dual Gigabit LAN
JetWay 100Pin	N/A	N/A	N/A	N/A	N/A	N/A	N/A
USB	2x Ext USB3.0 2x Ext USB2.0 4x Int USB2.0	2x Ext. USB3.0 2x Int. USB3.0 8x int. USB2.0	6x Ext. USB2.0 3x Int. USB2.0	2x Ext. USB3.0 4x Ext. USB2.0 2x Int. USB2.0 for 4 1x Int. USB3.0 for 2	2x Ext. USB3.0 4x Ext. USB2.0 2x Int. USB2.0 for 4 1x Int. USB3.0 for 2	2x Ext. USB3.0 4x Ext. USB2.0 2x Int. USB2.0 for 4 1x Int. USB3.0 for 2	4x Ext. USB3.0 2x Ext. USB2.0 3x Int. USB2.0
RS232	2x Ext RS232/485/422 2x Int. RS232	10x int. RS232	2x Ext. RS232 7x Int. RS232 1x Int. RS485	2x Ext. RS232 7x Int. RS232 1x Int. RS485	1x Ext. RS232 8x Int. RS232 1x Int. RS485	1x Ext. RS232 1x Int. RS422/485	2x Ext. RS232/485 8x Int. RS232
RJ11 (COM)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parallel	N/A	N/A	1x LPT	1x LPT	N/A	N/A	N/A
HDMI	N/A	1x HDMI	1x HDMI 1.4a	1x HDMI 1.4a	1x HDMI 1.4a	1x HDMI	1x HDMI
VGA (D-SUB)	Yes	1x Int. VGA	1x VGA	1x VGA	1x VGA	2x VGA (Int. & Ext.)	1x VGA
DVI	N/A	N/A	1x DVI	1x DVI	1x DVI	N/A	1x DVI
Display Port	N/A	N/A	N/A	N/A	1x Display Port	N/A	N/A
eDP	1x eDP	1x eDP (co-lay LVDS)	N/A	N/A	N/A	N/A	N/A
LVDS	24bit Dual Channel	24bit Dual Channel (co-lay eDP)	N/A	N/A	N/A	N/A	N/A
PS/2	1x PS/2	1x Int. PS/2	PS/2	PS/2	PS/2	PS/2	PS/2
PCI	N/A	N/A	2x PCI	1x PCI	2x PCI	N/A	2x PCI
PCI Express X1	N/A	N/A	1x PCIeX1	1x PCIeX1+ 1x PCIeX4	1x PCIeX4	1x PCIeX1+ 1x PCIeX4	1x PCIeX1
PCI Express X16	N/A	N/A	1x PCIeX16	1x PCIeX16	1x PCIeX16	1x PCIeX16	1x PCIeX16
PCI Express Mini	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size) (share w/ mSATA)	1x mPCIe (Full Size) (share w/ mSATA)	1x mPCIe (Full Size) (share w/ mSATA)	1x mPCIe (Full Size)	1x mPCIe (Full Size)
M.2 PCI Express	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TPM	N/A	N/A	TPM1.2 option	TPM1.2 option	TPM1.2 option	TPM1.2 option	TPM2.0 option
SIM Card Holder	N/A	N/A	N/A	N/A	N/A	N/A	Sim Card Holder
SM Bus	SMBus	SMBus	N/A	N/A	N/A	SMBus	SMBus
GPIO	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit
Power Requirement	9V~28V DC in	9V ~ 24V DC in	24pin ATX+ 8pin 12V	24pin ATX+ 8pin 12V	24pin ATX+ 8pin 12V	24pin ATX+ 8pin 12V	24pin ATX+ 8pin 12V
Successor							



### ATX Form Factor

Model	JNAF92-Q67-LF	JNAF93-Q77-LF	JNAF95-Q87	JNAF591-Q170	JNAF791-Q370	JNC7L-AH110-6C
					<b>July 2018</b>	
Form Factor	ATX	ATX	ATX	ATX	ATX	ATX
Thermal Solution	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling	Active Cooling
Chipset	Intel Q67	Intel Q77	Intel Q87	Intel Q170	INTEL Q370	Intel H110
CPU	Intel LGA1155, 2nd Gen Intel Sandy Bridge, Core i7/ i5/ i3/ Pentium CPU	Intel LGA1155, 3rd Gen Intel IVY/ Sandy Bridge, Core i7/ i5/ i3/ Pentium CPU	Intel LGA1150, 4th Gen Intel Haswell Core i7/ i5/ i3/ Pentium CPU	Intel LGA1151, 6th Gen Intel SkyLake-S/ Kabylake-S Core i7/ i5/ i3/ Pentium CPU	INTEL LGA1151 CoffeeLake-S CPU	Intel LGA1151, 6th Gen Intel SkyLake-S/ Kabylake-S Core i7/ i5/ i3/ Pentium CPU
Memory	4x DDR3 DIMM, up to 32GB	4x DDR3 DIMM, up to 32GB	4x DDR4 DIMM, up to 64GB	4x DDR4 DIMM, up to 64GB	4x DDR4 up to 64GB	2x DDR4 DIMM, up to 32GB
SATA	3x SATA 2.0 (3GB/s) 2x SATA 3.0 (6GB/s) (support RAID 0,1,5,10)	4x SATA 2.0 (3GB/s) 2x SATA 3.0 (6GB/s) (support RAID 0,1,5,10)	6x SATA 3.0 (6GB/s) (support RAID 0,1,5,10)	4x SATA 3.0 (6GB/s) 1x SATA Express (support RAID 0,1,5,10)	5x SATA 3.0 (6GB/s) (support RAID 0,1,5,10)	3x SATA 3.0 (6GB/s)
m.2	N/A	N/A	N/A	1x M.2 (2242/2260)	1x M.2 (2242/2260)	1x M.2 (2242/2260)
m-SATA	1x mSATA	N/A	1x mSATA (shared w/ SATA port 6)	N/A	N/A	N/A
Integrated Graphics	Integrated by Intel i3/i5 CPU	Integrated by Intel i3/i5 CPU	Integrated by Intel Haswell CPU (GT1/GT2/GT3)	Integrated by Intel CPU	Integrated by Intel CPU	Integrated by Intel CPU
Audio	VIA VT1705 6 CH	Realtek ALC662	Realtek ALC662	Realtek ALC662VD	Realtek ALC662VD	Realtek ALC662VD
LAN	Dual Intel Gigabit	Dual Intel Gigabit	Dual Intel Gigabit (i217LM, 82574L)	Dual Intel Gigabit (i219LM, i211AT)	Dual LAN (i219LM, i211AT)	Dual LAN (i219LM, i211AT)
JetWay 100Pin	N/A	N/A	N/A	N/A	N/A	N/A
USB	6x Ext. USB2.0 3x Int. USB2.0 for 6	2x Ext. USB3.0 4x Ext. USB2.0 2x Int. USB2.0 for 4 1x Int. USB3.0 for 2	2x Ext. USB3.0 4x Ext. USB2.0 2x Int. USB2.0 for 4 1x Int. USB3.0 for 2	6x Ext. USB3.0 4x Int. USB2.0	4 Ext. USB3.1 2 Ext. USB3.1 2 Int. USB3.1 4 Int. USB2.0	6x Ext. USB3.0 2x Int. USB3.0 5x Int. USB2.0
RS232	1x Ext. RS232 8x Int. RS232 1x Int. RS422/485	2x Ext. RS232 7x Int. RS232 1x Int. RS485	1x Ext. RS232 8x Int. RS232 1x Int. RS485	1x Ext. RS232/485 8x Int. RS232 1x Int. RS232/485	1 Ext. RS232/485 1 Int RS232/485 8 Int. RS232	2x Ext. RS232/485 4x Int. RS232/485
RJ11 (COM)	N/A	N/A	N/A	N/A	N/A	N/A
Parallel	1x LPT	1x LPT	N/A	N/A	N/A	N/A
HDMI	1x HDMI 1.4a	1x HDMI 1.4a	1x HDMI 1.4a	1x HDMI 2.0	1x HDMI 1.4a	1x HDMI 2.0
VGA (D-SUB)	1x VGA	1x VGA	1x VGA	N/A	1x VGA	1x VGA
DVI	1x DVI	1x DVI	1x DVI	1x DVI-D	1x DVI-D	N/A
Display Port	N/A	N/A	1x Display Port	1x Display Port (1.2)	1x Display Port (1.2)	N/A
eDP	N/A	N/A	N/A	N/A	N/A	N/A
LVDS	N/A	N/A	N/A	N/A	N/A	N/A
PS/2	PS/2 (Combo)	PS/2 (Combo)	PS/2	PS/2	1x Int. PS/2	PS/2 (Combo)
PCI	4x PCI	4x PCI	4x PCI	N/A	2x PCI	5x PCI
PCI Express X1	1x PCIeX1+ 1x PCIeX4	1x PCIeX1+ 1x PCIeX4	1x PCIeX1+ 1x PCIeX4	3x PCIeX1+ 1x PCIeX4	1x PCIeX1+ 1x PCIeX4	1x PCIeX 4
PCI Express X16	1x PCIeX16	1x PCIeX16	1x PCIeX16	1x PCIeX16	2x PCIeX8	1x PCIeX16
PCI Express Mini	1x mPCIe (Full Size)	2x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	N/A	1x mPCIe (Full Size)
M.2 PCI Express	N/A	N/A	N/A	N/A	1x E Key	N/A
TPM	TPM1.2 option	TPM1.2 option	TPM1.2 option	TPM1.2 option	TPM1.2 option	TPM Header
SIM Card Holder	N/A	N/A	N/A	N/A	N/A	N/A
SM Bus	N/A	N/A	N/A	N/A	N/A	N/A
SMBus	N/A	N/A	N/A	N/A	N/A	N/A
GPIO	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit
Power Requirement	24pin ATX+ 8pin 12V	24pin ATX+ 8pin 12V	24pin ATX+ 8pin 12V	24pin ATX+ 8pin 12V	24pin ATX + 8pin 12V	24pin ATX + 8pin 12V
Successor						

## Networking








## Denverton








## Cable-Free

Model	JNF533M-1900	JNF731-3865	JNF9HG-2930	JNF592-Q170	JNF692	JNF795-Q170	JNF699-12HSIO	JNF699-20HSIO	JNF541 series	JNF542
	June 2018					June 2018				
Form Factor	3.5"	3.5"	Slim Mini-ITX	Slim Mini-ITX	Slim Mini-ITX	Slim Mini-ITX	Mini-ITX	Mini-ITX	3.5"	3.5"
Thermal Solution	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Passive Cooling	Active Cooling			Passive Cooling	Passive Cooling
Chipset				Intel Q170		Intel Q170				
CPU	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz.	7th Gen Intel Kabylake-U SoC CPU, Celeron 3865U 1.80GHz	Intel Bay Trail-M SoC CPU, Celeron N2930 2.16GHz	Intel LGA1151, 6th Gen Intel SkyLake-S/ Kabylake-S Core i7/ i5/ i3/ Pentium CPU	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	Intel LGA1151, 6th Gen Intel SkyLake/ Kabylake-S Core i7/ i5/ i3/ Pentium CPU	Denverton 4C	Denverton 8C/12C/16C	Intel Bay Trail SoC CPU Celeron J1900 2.42GHz/ N2930 2.16GHz	4th Gen Intel Haswell-U/ Broadwell-U SoC, Core i7/ i5/ i3/ Pentium CPU
Memory	1x DDR3L SO-DIMM, up to 8GB	1x DDR4 SO-DIMM, up to 16GB	2x DDR3L SO-DIMM, up to 8GB	2x DDR3L SO-DIMM, up to 16GB	1x DDR3L SO-DIMM, up to 8GB	2x SO-DIMM DDR4, up to 32GB	4x DDR4 UDIMM, up to 128G	4x DDR4 UDIMM, up to 128G	1x DDR3L SO-DIMM, up to 8GB	2x DDR3L SO-DIMM, up to 16GB
SATA	1x SATA 2.0 (3GB/s)	1x SATA 3.0 (6GB/s)	2x SATA 2.0 (3GB/s)	4x SATA 3.0 (6GB/s) 1x SATA Express (support RAID 0,1,5,10)	1x SATA 3.0 (6GB/s)	4x SATA 3.0 (6GB/s)	4x SATA 3.0 (6GB/s)	4x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)	1x SATA 3.0 (6GB/s)
m.2	1x M.2 (Mkey 2422)	N/A	N/A	N/A	N/A	N/A	1x M.2 (2242/2260)	1x M.2 (2242/2260)	N/A	N/A
m-SATA	N/A	1x mSATA	1x mSATA (share w/ mPCIe)	N/A	1x mSATA (shared)	1x mSATA	N/A	N/A	1x mSATA (share w/ mPCIe)	1x mSATA (share w/ mPCIe)
Integrated Graphics	Intel® HD Graphics	Intel® HD Graphics	Intel® HD Graphics	Integrated by Intel CPU	INTEL HD500 Series	Integrated by Intel CPU	N/A	N/A	Intel® HD Graphics	i5-4300U: HD4400 i5-5200U: HD5500
Audio	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Realtek ALC662	Realtek ALC662 w/ 3W Amplifier
LAN	4x INTEL i211AT Gbe LAN	4x Intel Gbe LAN	4x Intel Gbe LAN	8x Intel Gbe LAN (1x i219LM, 7x i211AT)	4x Intel Gbe LAN	4x INTEL Gbe LAN	2x Intel i210AT GbE 2x 10G SPF+	2x Intel i210AT GbE 2x 10G SPF+	2x Intel i211AT GbE LAN	2x Intel Gbe LAN (i218LM, i211AT)
JetWay 100Pin	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
USB	1x Ext. USB2.0 1x Ext. USB3.0 2x Int. USB2.0	2x Ext. USB3.0 3x Int. USB2.0	1x Ext. 2.0 1x Ext. 3.0 4x Int. 2.0	2x Ext. USB3.0 4x Int. USB3.0	2x Int. 2.0 2x Ext. 3.0	4x Ext. USB3.0 2x Int. USB3.0 2x Int. USB2.0	2x Ext. USB3.0 1x Int. USB2.0	2x Ext. USB3.0 1x Int. USB2.0	3x Ext. USB2.0 1x Ext. USB3.0	2x Ext. USB2.0 2x Ext. USB3.0 1x Int. USB2.0
RS232	1x Ext. RS232 1x Int. RS232	3x Int. RS232 1x Int. RS232	1x Ext. RS232 (RJ45) 1x Int. RS485	1x Ext. RS232	1x Int. RS232/485 2x Int. RS232	1x Ext. RS232	1x Ext. RS232 (RJ45) 1x Int. RS232	1x Ext. RS232 (RJ45) 1x Int. RS232	1x Ext. RS232/485 (5V/12V selectable)	1x Ext. RS232/485 1x Ext. RS232
RJ11 (COM)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parallel	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
HDMI	N/A	1x HDMI 1.4	N/A	1x HDMI	1x Int. HDMI	1x Int. HDMI	N/A	N/A	N/A	1x HDMI 1.4a
VGA (D-SUB)	1x Int. VGA	N/A	1x VGA	N/A	N/A	N/A	1x VGA (Int)	1x VGA (Int)	1x VGA	N/A
DVI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Display Port	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1x Display Port 1.2
eDP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LVDS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PS/2	1x Int. PS/2	N/A	PS/2	PS/2	1x Int. PS/2	1x Int. PS/2	N/A	N/A	N/A	N/A
PCI	N/A	N/A	N/A	N/A	1x PCIe (side in)	N/A	N/A	N/A	N/A	N/A
PCI Express X1	N/A	N/A	1x PCIeX1 (side)	1x PCIeX4 (side)	N/A	N/A	N/A	N/A	2x PCIeX1 (side)	1x PCIeX1+ 1x PCIeX4 (side)
PCI Express X16	N/A	N/A	N/A	N/A	N/A	1x PCIeX16	N/A	1x PCIeX8	N/A	N/A
PCI Express Mini	1x mPCIe (Full Size) 1x mPCIe (Half Size)	1x mPCIe (Full Size) 1x mPCIe (Half Size)	1x mPCIe (Full Size)	N/A	1x mPCIe (Full Size)	1x mPCIe (Half Size)	1x mPCIe (Full Size) 1x mPCIe (Half Size)	1x mPCIe (Full Size) 1x mPCIe (Half Size)	2x mPCIe (Full Size) (1x share w/ mSATA)	2x mPCIe (Full Size) (1x share w/ mSATA)
M.2 PCI Express	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TPM	N/A	TPM1.2 option	N/A	TPM1.2 option	N/A	TPM1.2 option	TPM 1.2	TPM 1.2	N/A	N/A
SIM Card Holder	Sim Card Holder	N/A	Sim Card Holder	Sim Card Holder	SIM Card holder	SIM Card holder	1x Sim Card Holder	1x Sim Card Holder	N/A	1x Sim Card Holder
SM Bus	SMBus	SMBus	N/A	N/A	SMBus	N/A	SMBus	SMBus	N/A	N/A
GPIO	1x GPIO 8bit	N/A	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x Int. GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit	1x GPIO 8bit
Power Requirement	12V DC-in (Lockable)	12V DC-in	12V DC-in	ATX Power	12V DC-in	ATX Power	24pin ATX + 8pin 12V ATX	24pin ATX+ 8pin 12V	12V DC-in	9V~ 24V DC-in
Successor										








## ARM Solution




Model	JARM-R3328-2N	JARM-R3288-2N
Form Factor	UTX	3.5"
Thermal Solution	Passive Cooling	Passive Cooling
Chipset		
CPU	Rock chip ARM Cortex A53 RK3328, Quad Core 1.5 GHz	Rock chip ARM Cortex A17 RK3288, Quad Core 1.8 GHz
Memory	2GB DDR3 on board	2GB DDR3 on board
SATA	On board 8GB Flash Support MmicroSD	On board 8GB Flash Support MmicroSD
m.2	N/A	1x OTG
m-SATA	N/A	1x TF Card slot
Integrated Graphics	Mali-450MP2 Support OpenGL ES1.1/2.0	Mali-T764 GPU Supports AFBC (ARM Frame Buffer Compression)
Audio	Everest ES8316 w/10W Amplifier	Everest ES8316 w/10W Amplifier
LAN	2x Gigabit LAN	Gigabit LAN
JetWay 100Pin	N/A	N/A
USB	4x Ext. USB3.0 1x Ext. USB2.0	2x Ext. USB2.0 4x Ext. USB2.0
RS232	N/A	4x Int. RS232
RJ11 (COM)	N/A	N/A
Parallel	N/A	N/A
HDMI	1x HDMI	1x HDMI
VGA (D-SUB)	N/A	N/A
DVI	N/A	N/A
Display Port	N/A	N/A
eDP	N/A	1x eDP
LVDS	N/A	24 Bit Dual Channel
PS/2	N/A	N/A
PCI	N/A	N/A
PCI Express X1	N/A	N/A
PCI Express X16	N/A	N/A
PCI Express Mini	1x mPCIe (Full Size)	802.11 b/g/n WLAN, Bluetooth 4.0 Integrated
M.2 PCI Express	N/A	N/A
TPM	N/A	N/A
SIM Card Holder	N/A	1x Sim Card Holder
SM Bus	N/A	N/A
GPIO	N/A	1x GPIO 8bit
Power Requirement	5~12V DC-in	12V DC-input
Successor		

Model	JBC310U91-2930-B	JBC311U93-2930-B	JBC313U591-3160	JBC313U691	JBC320U93-2930-B	JBC323U591-3150-B	JBC323U691	
								
<b>Dimension</b>	116 x 110 x 49mm	116 x 110 x 49mm	116 * 110 * 49 mm	116 * 110 * 49 mm	116 x 110 x 65mm	116 x 110 x 65mm	116 x 110 x 65mm	
<b>Chipset</b>								
<b>CPU</b>	Intel Bay Trail-M SoC CPU, Celeron N2930 2.16GHz	Intel Bay Trail-M SoC CPU, Celeron N2930 2.16GHz	Intel Braswell SoC CPU, Celeron N3160 2.24GHz	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	Intel Bay Trail-M SoC CPU, Celeron N2930 2.16GHz	Intel Braswell SoC CPU, Celeron N3160 2.24GHz	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	
<b>Memory</b>	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	2x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	2x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	
<b>Storage</b>	<b>mSATA/CF</b>	1x mSATA	1x mSATA	1x mSATA	1x mSATA	1x mSATA	1x mSATA (shared)	
	<b>HDD</b>	N/A	N/A	N/A	N/A	1x 2.5" SATA Device	1x 2.5" SATA Device	
<b>Expansion</b>	<b>mPCIe</b>	1x mPCIe (Full size)	1x mPCIe (Full size)	1x mPCIe (Full size) 1x mPCIe (Half size)	1x mPCIe (Half Size)	1x mPCIe (Full size)	1x mPCIe (Half Size) (shared)	
	<b>PCIe</b>	N/A	N/A	N/A	1x mPCIe (Half Size)	N/A	1x mPCIe (Half Size)	
	<b>Other</b>	N/A	N/A	SIM Card Holder	Sim Card Holder	N/A	Sim Card Holder	
<b>System Fan</b>	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	
<b>Front IO</b>	<b>Power Button</b>	YES	YES	YES	YES	YES	YES	
	<b>USB</b>	1x USB3.0	1x USB2.0, 1x USB3.0	2x USB3.0	2x USB3.0	1x USB2.0, 1x USB3.0	2x USB3.0	
	<b>COM</b>	1x COM	1x COM	1x COM	1x RS232/422/485	1x COM	1x RS232/422/485	
	<b>Audio</b>	N/A	N/A	N/A	N/A	N/A	N/A	
	<b>RJ45</b>	N/A	N/A	N/A	N/A	N/A	N/A	
	<b>GPIO</b>	N/A	N/A	N/A	N/A	N/A	N/A	
	<b>DISPLAY</b>	N/A	N/A	N/A	N/A	N/A	N/A	
	<b>Other</b>	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Rear IO</b>	<b>Power Button</b>	N/A	N/A	N/A	N/A	N/A	N/A	
	<b>USB</b>	2x USB2.0	2x USB2.0	2x USB3.0	2x USB3.0	2x USB2.0	2x USB3.0	
	<b>COM</b>	N/A	N/A	N/A	N/A	N/A	N/A	
	<b>Audio</b>	YES	YES	YES	1x LineOUT, 1x Mic	YES	N/A	1x LineOUT, 1x Mic
	<b>RJ45</b>	1x RJ45	2x RJ45	2x RJ45	2x RJ45	2x RJ45	2x RJ45	2x RJ45
	<b>GPIO</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	<b>PS/2</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	<b>VGA</b>	N/A	N/A	N/A	1x VGA (max. 1920×1200 @60Hz)	N/A	N/A	1x VGA (max. 1920×1200 @60Hz)
	<b>DVI</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	<b>HDMI</b>	2x HDMI	2x HDMI	2x HDMI	2x HDMI 1.4 (max.	2x HDMI	2x HDMI	2x HDMI 1.4 (max.
<b>Display Port</b>	N/A	N/A	1x Display Port	N/A	N/A	1x Display Port	N/A	
<b>Other</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Power Connector</b>	9V~ 24V DC-in Jack	9V~ 24V DC-in Jack	12V DC-in Jack	12V DC-in Jack	9V~ 24V DC-in Jack	12V DC-in Jack	12V DC-in Jack	
<b>Optional Accessories</b>	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	





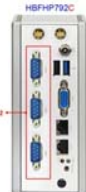

Model	JBC400P93-2930	JBC410P93-2930-B	JBC420U91-2930-B	JBC420U591-3160-B	HBFCU792C-7100	HBFCU792V-7100	JBC365F3A-2930
							
<b>Dimension</b>	129 x 78.4 x 34mm	129 x 78 x 68mm	129 x 109.4 x 34mm	129 x 109.4 x 34mm	144x 117x 65mm	144x 117x 65mm	153 x 111 x 35mm
<b>Chipset</b>							
<b>CPU</b>	Intel Bay Trail-M SoC CPU, Celeron N2930 2.16GHz	Intel Bay Trail-M SoC CPU, Celeron N2930 2.16GHz	Intel Bay Trail-M SoC CPU, Celeron N2930 2.16GHz	Intel Braswell SoC CPU, Celeron N3160 2.24GHz	Intel 7th Gen KabyLake SoC CPU, Core i3-7100 3.19GHz	Intel 7th Gen KabyLake SoC CPU, Core i3-7100 3.19GHz	Intel Bay Trail-M SoC CPU, Celeron N2930 2.16GHz
<b>Memory</b>	2G onboard memory	2G onboard memory	1x DDR3L SO-DIMM, up to 8GB	2x DDR3L SO-DIMM, up to 8GB	2x DDR4 SO-DIMM, up to 32GB	2x DDR4 SO-DIMM, up to 32GB	1x DDR3L SO-DIMM, up to 8GB
<b>Storage</b>	<b>mSATA/CF</b>	1x mSATA	1x mSATA	1x mSATA	1x mSATA	1x mSATA	1x mSATA
	<b>HDD</b>	N/A	N/A	N/A	N/A	1x 2.5" SATA Device	1x 2.5" SATA Device
<b>Expansion</b>	<b>mPCIe</b>	N/A	N/A	1x mPCIe (Full size)	1x mPCIe (Full size)	1x mPCIe (Full size)	1x mPCIe (Full size)
	<b>PCIe</b>	N/A	N/A	N/A	1x mPCIe (Half size)	N/A	N/A
	<b>Other</b>	N/A	N/A	N/A	SIM Card Holder	N/A	N/A
<b>System Fan</b>	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless
<b>Front IO</b>	<b>Power Button</b>	YES	YES	YES	YES	YES	YES
	<b>USB</b>	N/A	N/A	1x USB3.0	2x USB3.0	2x USB2.0, 2x USB3.0	N/A
	<b>COM</b>	N/A	N/A	1x COM	1x COM	1x COM	N/A
	<b>Audio</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>RJ45</b>	N/A	N/A	N/A	N/A	2x RJ45	2x RJ45
	<b>GPIO</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>DISPLAY</b>	N/A	N/A	N/A	N/A	N/A	1x VGA
	<b>Other</b>	N/A	N/A	N/A	N/A	SIM card holder	SIM card holder
<b>Rear IO</b>	<b>Power Button</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>USB</b>	1x USB2.0, USB3.0x1	5x USB2.0, 1x USB3.0	2x USB2.0	2x USB3.0	4x USB3.0	2x USB3.0, 2x USB2.0
	<b>COM</b>	N/A	2x COM	N/A	N/A	N/A	N/A
	<b>Audio</b>	N/A	N/A	YES	1x LineOUT, 1x Mic	1x LineOUT, 1x Mic	1x LineOUT, 1x Mic
	<b>RJ45</b>	1x RJ45	1x RJ45	1x RJ45	2x RJ45	2x RJ45	2x RJ45
	<b>GPIO</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>PS/2</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>VGA</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>DVI</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>HDMI</b>	1x HDMI	1x HDMI	2x HDMI	2x HDMI	1x HDMI 1.4	1x HDMI 1.4
<b>Display Port</b>	N/A	N/A	N/A	1x Display Port	1x Display Port	N/A	
<b>Other</b>	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Power Connector</b>	12V DC-in Jack	12V DC-in Terminal block, 2PIN	9V~ 24V DC-in Jack	12V DC-in Jack	12V DC-in Jack	12V DC-in Jack	12V DC-in Jack
<b>Optional Accessories</b>	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit			802.11 b/g/n WIFI kit








Model	JBC375F3A-2930-B	JBC375F532-2930-B	JBC375F533M	JBC376C55-2930-B	JBC377F531M	JBC377F631	JBC382F3E-4300UB/ 5200UB
							
<b>Dimension</b>	185 x 142 x 48mm	185 x 142 x 48mm	180 x 142 x 48 mm	185 x 142 x 48mm	185 x 142 x 48mm	185 x 142 x 48mm	185 x 142 x 60mm
<b>Chipset</b>							
<b>CPU</b>	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	Intel Braswell SoC CPU, Celeron N3160 2.24GHz	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	4th Gen Intel Haswell/ Broadwell-U SoC, Core i5-4300U, 2.9GHz/ Core i5-5200U, 2.70 GHz
<b>Memory</b>	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	2GB onboard memory	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	2x SO-DIMM DDR3L, up to 16GB
<b>Storage</b>	<b>mSATA/CF</b>	1x mSATA	1x mSATA	1x mSATA	1x M.2 (2242 Only)	1x M.2 (2242 Only)	1x mSATA
	<b>HDD</b>	1x 2.5" SATA Device	1x 2.5" SATA Device	1x 2.5" SATA Device	1x 2.5" SATA Device	1x 2.5" SATA 3.0 (6GB/s) Device	1x 2.5" SATA Device
<b>Expansion</b>	<b>mPCIe</b>	1x mPCIe (Full size) 1x mPCIe (Half size)	1x mPCIe (Full size) 1x mPCIe (Half size)	3x mPCIe (Full size)	1x mPCIe (Full size)	N/A	1x mPCIe (Half Size)
	<b>PCIe</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>Other</b>	N/A	N/A	N/A	N/A	N/A	Micro SD
<b>System Fan</b>	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless
<b>Front IO</b>	<b>Power Button</b>	YES	YES	YES	YES	YES	YES
	<b>USB</b>	2x USB2.0	2x USB2.0	2x USB2.0	5x USB2.0 x5, 1x USB3.0	2x USB2.0	2x USB2.0
	<b>COM</b>	4x COM	4x COM	1x COM (Optional)	N/A	2x COM	2x COM
	<b>Audio</b>	N/A	N/A	N/A	YES	YES	YES
	<b>RJ45</b>	N/A	N/A	N/A	2x RJ45	N/A	N/A
	<b>GPIO</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>DISPLAY</b>	N/A	N/A	1x VGA (Optional)	1x HDMI	N/A	N/A
	<b>Other</b>	N/A	N/A	N/A	Speaker con ( R+/R-/L+/L- ) x1	N/A	N/A
<b>Rear IO</b>	<b>Power Button</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>USB</b>	3x USB2.0, 1x USB3.0	3x USB2.0, 1x USB3.0	1x USB2.0, 1x USB3.0	N/A	4x USB3.0	4x USB3.0
	<b>COM</b>	N/A	N/A	1x COM	COM x6	1x COM (RJ45 type)	1x COM (RJ45 type)
	<b>Audio</b>	YES	YES	N/A	N/A	N/A	N/A
	<b>RJ45</b>	2x RJ45	2x RJ45	RJ45 x4	N/A	2x RJ45	2x RJ45
	<b>GPIO</b>	N/A	N/A	N/A	YES	N/A	N/A
	<b>PS/2</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>VGA</b>	N/A	YES	1x VGA	N/A	N/A	N/A
	<b>DVI</b>	1x DVI-1	1x DVI-D	N/A	N/A	N/A	N/A
	<b>HDMI</b>	N/A	N/A	N/A	N/A	1x HDMI	1x HDMI
	<b>Display Port</b>	N/A	N/A	N/A	N/A	1x Display Port	2x DisplayPort (Max. 4096 x 2160@60Hz)
<b>Other</b>	N/A	N/A	N/A	N/A	N/A	Micro SD	
<b>Power Connector</b>	9V~ 24V DC-in Jack	9V~ 24V DC-in Jack	12V DC-in Jack	12V DC-in Jack (lockable)	12V DC-in Jack (lockable)	12V DC-in Jack (lockable)	9V~ 24V DC-in Jack
<b>Optional Accessories</b>	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit

Model	JBC382F632-6300	JBC385F551-62UB/ 63BU	JBC38AF542 Series	JBC390F541 Series	HBDF731-3855-B	JBC501F9Q-Q87-B	JBC501F9QU-Q87-B
							
<b>Dimension</b>	185 x 142 x 60mm	185 x 142 x 60mm	185 x 175 x 60mm	185 x 165 x 48mm	193x 142x 62mm	260 x 200 x 58mm	260 x 208 x 58.5mm
<b>Chipset</b>						Intel Haswell Q87	Intel Haswell Q87
<b>CPU</b>	Intel Skylake SoC CPU, Core i5-6200U 2.80GHz/ Core i5-6300U 3.00GHz/ Celeron 3855U 1.6GHz	Intel Core™ i5-6200U, 2.8GHz Intel Core™ i5-6300U, 3GHz	Intel Haswell Core i5-4300U CPU	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	7th Gen Intel KabyLake-U SoC CPU, Celeron 3865U 1.80GHz	Intel LGA 1150 Socket Core i7/i5/i3/Pentium Processor (< 35W)	Intel LGA 1150 Socket Core i7/i5/i3/Pentium Processor (< 35W)
<b>Memory</b>	SODIMM DDR4 x2, up to 32GB	SODIMM DDR3L x2, up to 32GB	SODIMM DDR3L x2, up to 16GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR4 SO-DIMM, up to 16GB	2x SODIMM DDR3L, up to 16GB	1x DDR3 SO-DIMM, up to 16GB
<b>Storage</b>	<b>mSATA/CF</b>	1x mSATA	1x mSATA	1x mSATA		1x mSATA	1x mSATA
	<b>HDD</b>	1x 2.5" SATA Device	1x 2.5" SATA Device	1x 2.5" SATA Device	1x 2.5" SATA Device	1x 2.5" SATA Device	1x 2.5" SATA Device
<b>Expansion</b>	<b>mPCIe</b>	1x mPCIe (Full size) 1x mPCIe (Half size)	2x mPCIe (Full Size)	2x mPCIe (Full Size)	2x mPCIe (Full Size)	1x mPCIe (Full size) 1x mPCIe (Half size)	mPCIex1 (Full size) mPCIex1 (Half size)
	<b>PCIe</b>	N/A	N/A	N/A	N/A	N/A	1x PCIeX4
	<b>Other</b>	N/A	N/A	N/A	N/A	N/A	N/A
<b>System Fan</b>	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless
<b>Front IO</b>	<b>Power Button</b>	YES	N/A	YES	YES	YES	YES
	<b>USB</b>	2x USB2.0	2x USB3.0	N/A	N/A	2x USB2.0	2x USB2.0
	<b>COM</b>	2x COM	1x COM (RJ45 type)	8x COM (by model, optional)	8x COM (by model, optional)	1x COM	N/A
	<b>Audio</b>	YES	N/A	N/A	N/A	N/A	N/A
	<b>RJ45</b>	N/A	RJ45 x6 (GbE LAN: Intel i211AT/i219LM/i350AM4)	8x RJ45 (by model, optional)	8x RJ45 (by model, optional)	N/A	N/A
	<b>GPIO</b>	N/A	YES	N/A	N/A	1x GPIO (option)	N/A
	<b>DISPLAY</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>Other</b>	N/A	N/A	N/A	N/A	N/A	N/A
<b>Rear IO</b>	<b>Power Button</b>	N/A	YES	N/A	N/A	N/A	N/A
	<b>USB</b>	2x USB2.0, 4x USB3.0	2x USB2.0, 2x USB3.0	2x USB2.0, 2x USB3.0	3x USB2.0, 1x USB3.0	2x USB3.0	4x USB3.0
	<b>COM</b>	N/A	1x COM (Optional)	2x COM	1x COM	N/A	4x COM
	<b>Audio</b>	YES	N/A	N/A	YES	N/A	YES
	<b>RJ45</b>	2x RJ45	N/A	N/A	2x RJ45	4x RJ45	2x RJ45
	<b>GPIO</b>	N/A	YES	N/A	N/A	N/A	N/A
	<b>PS/2</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>VGA</b>	N/A	N/A	N/A	1x VGA	N/A	N/A
	<b>DVI</b>	N/A	N/A	N/A	N/A	N/A	DVI-I x1
	<b>HDMI</b>	1x HDMI	N/A	1x HDMI	1x HDMI	1x HDMI (Max.:4096 x	1x HDMI
	<b>Display Port</b>	1x Display Port	2x Display Port	1x Display Port	N/A	N/A	N/A
<b>Other</b>	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Power Connector</b>	9V~ 24V DC-in Jack	12V DC-in Jack (Lockable)	12V DC-in Jack (Lockable)	12V DC-in Jack (Lockable)	12V DC-in Jack (Lockable)	19V DC-in Jack	19V DC-in Jack
<b>Optional Accessories</b>	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit JADPIE1LAN4 (4x RJ45) JADP1E1COM4 (4x COM)	802.11 b/g/n WIFI kit JADPIE1LAN4 (4x RJ45) JADP1E1COM4 (4x COM)	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit JADP1E1COM4 (4x COM)	802.11 b/g/n WIFI kit JADP1E1COM4 (4x COM)


Model	JBC501F697-Q170-B	HBFF697-Q170-B	HBFF793-Q170-B	JBC511F595-H110B	JBC512F3A-2930-B	JBC512F532-2930-B	JBC512F3EG series
							
<b>Dimension</b>	406x 148x 380mm	290x 207x 65mm	290x 207x 65mm	406x 148x 380mm	264 x 199.4 x38mm	264 x 199.4 x38mm	264 x 199.4 x 38mm
<b>Chipset</b>	Intel Q170	Intel Q170	Intel Q170	Intel H110			
<b>CPU</b>	Intel LGA1151, 6th/ 7th Gen Intel SkyLake/ Kabylake-S Core i7/ i5/ i3/ Pentium CPU	Intel LGA1151, 6th/ 7th Gen Intel SkyLake/ Kabylake-S Core i7/ i5/ i3/ Pentium CPU	Intel LGA1151, 6th/ 7th Gen Intel SkyLake/ Kabylake-S Core i7/ i5/ i3/ Pentium CPU	Intel LGA1151, 6th/ 7th Gen Intel SkyLake/ Kabylake-S Core i7/ i5/ i3/ Pentium CPU	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	INTEL Haswell Core i5-4300U CPU INTEL Boardwell Core i5-5200U CPU
<b>Memory</b>	2x DDR4 SO-DIMM, up to 32GB	2x DDR4 SO-DIMM, up to 32GB	2x DDR4 SO-DIMM, up to 32GB	2x DDR4 SO-DIMM, up to 32GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB
<b>Storage</b>	<b>mSATA/CF</b>	1x mSATA	1x mSATA	1x mSATA	1x mSATA	1x mSATA	1x mSATA
	<b>HDD</b>	1x 2.5" SATA3.0 (6GB/s)	2x 2.5" SATA3.0 (6GB/s)	2x 2.5" SATA3.0 (6GB/s)	1x 2.5" SATA Device	1x 2.5" SATA Device	1x 2.5" SATA Device
<b>Expansion</b>	<b>mPCIe</b>	1x mPCIe (Full Size)	1x mPCIe (Half Size)	1x mPCIe (Half Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)
	<b>PCIe</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>Other</b>	SIM Card Holder	N/A	N/A	N/A	N/A	N/A
<b>System Fan</b>	N/A	N/A	N/A	Fanless	Fanless	Fanless	Fanless
<b>Front IO</b>	<b>Power Button</b>	YES	YES	YES	YES	YES	YES
	<b>USB</b>	2x USB2.0	2x USB2.0	2x USB2.0	4x USB2.0	2x USB2.0	5x USB2.0
	<b>COM</b>	N/A	N/A	N/A	2x COM	N/A	N/A
	<b>Audio</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>RJ45</b>	N/A	N/A	N/A	1x LineOUT, 1x Mic	N/A	N/A
	<b>GPIO</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>DISPLAY</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>Other</b>	N/A	2x 2.5" HDD tray	2x 2.5" HDD tray	N/A	N/A	N/A
<b>Rear IO</b>	<b>Power Button</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>USB</b>	4x USB3.0	4x USB3.0	4x USB3.0	4x USB3.0	3x USB2.0, 1x USB3.0	3x USB2.0, 1x USB3.0
	<b>COM</b>	6x COM (2x RS232/422/485, 4x RS232)	6x COM (2x RS232/422/485, 4x RS232/ optional)	6x COM (2x RS232/422/485, 4x RS232/ optional)	N/A	N/A	N/A
	<b>Audio</b>	N/A	1x LineOUT, 1x Mic	1x LineOUT, 1x Mic	1x LineOUT, 1x Mic	YES	YES
	<b>RJ45</b>	2x RJ45	2x RJ45	2x RJ45	1x RJ45	RJ45 x6 (includes PoE x4)	RJ45 x6 (includes 100M PoE x4)
	<b>GPIO</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>PS/2</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>VGA</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>DVI</b>	N/A	N/A	N/A	N/A	DVI-I x1	DVI-I x1
	<b>HDMI</b>	1x HDMI	1x HDMI	3x HDMI	1x HDMI	N/A	N/A
	<b>Display Port</b>	2x Display Port	2x Display Port	N/A	1x Display Port	N/A	N/A
<b>Other</b>	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Power Connector</b>	19V DC-in Jack	19V DC-in Jack	19V DC-in Jack	19V DC-in Jack	4PIN terminal block	150W AC to DC OP Power 4PIN terminal block	150W AC to DC OP Power 4PIN terminal block
<b>Optional Accessories</b>	802.11 b/g/n WIFI kit JADP1E1COM4 (4x COM)					802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit








Model	JBC512F3DG/ DP	JBC900C59-3160-B	HBFHP792L-2807-G	HBFHP792G-2807-G	HBFHP792C-2807-G	HBFHP792U-2807-G	HM-1000
							
<b>Dimension</b>	264 x 199.4 x38mm	148 x 116 x 25mm	63 x 89 x149mm	63 x 89 x149mm	63 x 89 x149mm	63 x 89 x149mm	212 x 150 x220mm
<b>Chipset</b>							Intel Haswell Q87
<b>CPU</b>	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	INTEL Braswell-D J3160 2.24GHz	Intel Bay Taril SoC CPU, CeleronN2807 2.16GHz	Intel Bay Taril SoC CPU, CeleronN2807 2.16GHz	Intel Bay Taril SoC CPU, CeleronN2807 2.16GHz	Intel Bay Taril SoC CPU, CeleronN2807 2.16GHz	Support Intel LGA 1150 Socket Core i7/i5/i3 Processor (Max 65W)
<b>Memory</b>	4GB onboard memory	4GB onboard memory	2GB onboard memory	2GB onboard memory	2GB onboard memory	2GB onboard memory	4GB onboard memory, up to 8G
<b>Storage</b>	<b>mSATA/CF</b>	1x mSATA	1x mSATA, 1x M.2	1x mSATA, 1x M.2	1x mSATA, 1x M.2	1x mSATA, 1x M.2	1x M.2 (2260/2280)
	<b>HDD</b>	1x 2.5" SATA Device	N/A	N/A	N/A	N/A	1x 2.5" SATA3.0 (6Gb/s)
<b>Expansion</b>	<b>mPCIe</b>	1x mPCIe (Full Size)	2x mPCIe	N/A	N/A	N/A	1x mPCIe (Full Size)
	<b>PCIe</b>	N/A	N/A	N/A	N/A	N/A	1x PCIeX16
	<b>Other</b>	N/A	N/A	N/A	N/A	N/A	2x PCI
<b>System Fan</b>	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless	Fanless
<b>Front IO</b>	<b>Power Button</b>	YES	YES	YES	YES	YES	N/A
	<b>USB</b>	2x USB2.0	2x USB3.0	1x USB3.0, 1x USB2.0	1x USB3.0, 1x USB2.0	1x USB3.0, 1x USB2.0	3x USB3.0, 5x USB2.0
	<b>COM</b>	N/A	N/A	N/A	N/A	1x RS232, 2x RS232/422/485	1x RS232/422/485
	<b>Audio</b>	N/A	YES	N/A	N/A	N/A	N/A
	<b>RJ45</b>	N/A	2x RJ45	6x RJ45	2x RJ45	2x RJ45	2x RJ45
	<b>GPIO</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>DISPLAY</b>	N/A	N/A	1x VGA	1x VGA	1x VGA	1x VGA
	<b>Other</b>	N/A	N/A	N/A	2x GPIO 16bit	N/A	N/A
<b>Rear IO</b>	<b>Power Button</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>USB</b>	3x USB2.0, 1x USB3.0	N/A	N/A	N/A	N/A	N/A
	<b>COM</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>Audio</b>	YES	N/A	N/A	N/A	N/A	N/A
	<b>RJ45</b>	RJ45 x6 (includes PoE x4)	2x RJ45	N/A	N/A	N/A	N/A
	<b>GPIO</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>PS/2</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>VGA</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>DVI</b>	1x DVI-I	N/A	N/A	N/A	N/A	N/A
	<b>HDMI</b>	N/A	2x HDMI	N/A	N/A	N/A	N/A
<b>Display Port</b>	N/A	1x Display Port	N/A	N/A	N/A	N/A	
<b>Other</b>	N/A	N/A	N/A	N/A	N/A	N/A	
<b>Power Connector</b>	150W AC to DC OP Power 4PIN terminal block	12V DC-in Jack	12V DC-in Jack (Lockable)	12V DC-in Jack (Lockable)	12V DC-in Jack (Lockable)	12V DC-in Jack (Lockable)	9V~ 36V Terminal Block
<b>Optional Accessories</b>	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	WiFi: Support IEEE 802.11a/b/g/n/ac Wireless LAN 2T2R and Bluetooth 4.2	WiFi: Support IEEE 802.11a/b/g/n/ac Wireless LAN 2T2R and Bluetooth 4.2	WiFi: Support IEEE 802.11a/b/g/n/ac Wireless LAN 2T2R and Bluetooth 4.2	WiFi: Support IEEE 802.11a/b/g/n/ac Wireless LAN 2T2R and Bluetooth 4.2	802.11 b/g/n WIFI kit HM-4LAN (4x RJ45+ 16-bit GPIO) HM-USB3X8 (8x USB3.0+ 16-bit GPIO)

Model	HM-1300	HM-2000-3455B	HM-2010-3455B	HM-3000	JBC130F533 Series	JBC130F731 Series	JBC141F9HGXX-29B	
								
<b>Dimension</b>	212 x 150 x 220mm	223 x 170 x 127.5mm	223 x 170 x 87.5mm	212 x 150 x 220 mm	232 x 152 x 44mm	232 x 152 x 44mm	330 x 192 x 44mm	
<b>Chipset</b>	Intel SkyLake Q170			Intel SkyLake H110				
<b>CPU</b>	Intel LGA1151, 6th Gen Intel SkyLake/ KabyLake-S Core i7/ i5/ i3/ Pentium CPU, Max 54W	Intel Apollo Lake SoC Celeron J3455 1.5GHz	Intel Apollo Lake SoC Celeron J3455 1.5GHz	Intel LGA1151, 6th Gen Intel SkyLake/ KabyLake-S Core i7/ i5/ i3/ Pentium CPU, Max 54W	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	Intel SkyLake/ KabyLake-U SoC CPU, Celeron 3855U 1.60GHz	Intel Bay Trail-M SoC CPU, Celeron N2930 2.16GHz	
<b>Memory</b>	2x DDR4 SO-DIMM, up to 32GB	4GB onboard memory, up to 8G	4GB onboard memory, up to 8G	2x DDR4 SO-DIMM, up to 32GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR4 SO-DIMM, up to 16GB	2x DDR3L SO-DIMM, up to 8GB	
<b>Storage</b>	<b>mSATA/CF</b>	1x M.2 (2280)	1x M.2 (2242/2260/2280)	1x M.2 (2242/2260/2280)	N/A	1x mSATA	1x mSATA (Full Size)	
	<b>HDD</b>	1x 2.5" SATA3.0 (6Gb/s)	1x 2.5" SATA3.0 (6Gb/s)	1x 2.5" SATA3.0 (6Gb/s)	1x 2.5" SATA3.0 (6Gb/s)	1x 2.5" SATA3.0 (6Gb/s)	1x 2.5" SATA3.0 (6Gb/s)	2x 2.5" SATA3.0 (6Gb/s)
<b>Expansion</b>	<b>mPCIe</b>	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	3x mPCIe (Full Size)	1x mPCIe (Full size) 1x mPCIe (Half size)	1x mPCIe (Full Size)	
	<b>PCIe</b>	1x PCIeX16	N/A	N/A	1x PCIeX16	N/A	N/A	
	<b>Other</b>	2x PCI	N/A	N/A	2x PCI	SIM Card Holder	SIM Card Holder	N/A
<b>System Fan</b>	Fanless	Fanless	Fanless	Fanless	Fanless	1x System Fan	1x System Fan	
<b>Front IO</b>	<b>Power Button</b>	N/A	N/A	N/A	N/A	N/A	YES	
	<b>USB</b>	N/A	N/A	N/A	N/A	1x USB2.0, 1x USB3.0	2x USB3.8	1x USB2.0, 1x USB3.0
	<b>COM</b>	N/A	N/A	N/A	N/A	1x COM	1x COM	1x COM
	<b>Audio</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	<b>RJ45</b>	N/A	N/A	N/A	N/A	RJ45 x4	4x RJ45 (3x i211AT+ 1x i219LM) 2x RJ45 (Intel i350/ optional)	4x RJ45 8x RJ45 (optional)
	<b>GPIO</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	<b>DISPLAY</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	<b>Other</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Rear IO</b>	<b>Power Button</b>	YES	YES	YES	YES	YES	N/A	
	<b>USB</b>	6x USB3.0, 8x USB3.0 (optional)	4x USB3.0, 4x USB2.0	4x USB3.0, 4x USB2.0	4x USB3.0, 4x USB2.0	N/A	N/A	N/A
	<b>COM</b>	2x COM, 4x COM (optional)	20x COM (RS-232/485, support 5V/12V voltage regulation)	12x COM (RS-232/485, support 5V/12V voltage regulation)	2x COM	N/A	1x COM (or GPIO)	N/A
	<b>Audio</b>	MIC, Line-in, Line-out	MIC, Line-in, Line-out	MIC, Line-in, Line-out	MIC, Line-in, Line-out	N/A	N/A	N/A
	<b>RJ45</b>	2x RJ45, 4x GigaLAN (optional)	2x RJ45 (Intel i211AT GbE)	2x RJ45	2x RJ45	N/A	N/A	N/A
	<b>GPIO</b>	16 bit GPIO (5/12/24V) (Max 32bit) (optional)	N/A	8 bit GPIO support 5V/12V	N/A	N/A	1x GPIO (option)	N/A
	<b>PS/2</b>	1x PS/2	N/A	N/A	1x PS/2	N/A	N/A	N/A
	<b>VGA</b>	1x VGA (1920 x 1200@60Hz)	1x VGA (1920 x 1200@60Hz)	1x VGA (1920 x 1200@60Hz)	1x VGA (1920 x 1200@60Hz)	1x VGA (Optional)	N/A	N/A
	<b>DVI</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	<b>HDMI</b>	1x HDMI 1.4b (4096x 2304@30Hz)	1x HDMI (3840 x 2160@30Hz)	1x HDMI (3840 x 2160@30Hz)	1x HDMI (4096 x 2304@24Hz)	N/A	1x HDMI	N/A
	<b>Display Port</b>	1x DP 1.2 (4096x 2304@30Hz)	N/A	N/A	N/A	N/A	N/A	N/A
<b>Other</b>	N/A	N/A	N/A	N/A	N/A	N/A	1x GND Hold	
<b>Power Connector</b>	9V~ 36V Terminal Block	9V~ 36V Terminal Block	9V~ 36V Terminal Block	9V~ 36V Terminal Block	12V DC-in Jack	12V DC-in Jack	12V DC-in Jack	
<b>Optional Accessories</b>	802.11 b/g/n WIFI kit HM-4LAN (4x RJ45+ 16-bit GPIO) HM-USB3X8 (8x USB3.0+ 16-bit GPIO)	802.11 b/g/n WIFI kit HM-4LAN (4x RJ45+ 16-bit GPIO) HM-USB3X8 (8x USB3.0+ 16-bit GPIO)	802.11 b/g/n WIFI kit HM-4LAN (4x RJ45+ 16-bit GPIO) HM-USB3X8 (8x USB3.0+ 16-bit GPIO)	802.11 b/g/n WIFI kit HM-4LAN (4x RJ45+ 16-bit GPIO) HM-USB3X8 (8x USB3.0+ 16-bit GPIO)	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	

Model	JBC141F692	HBJC142F697-Q170B	HBJC142F791 Series	JBC143F693	JBC143F694	JBC150F9N-2930-B/ BE	JBC150F592-Q170-B
							
<b>Dimension</b>	330 x 192 x 44mm	330x 192x 44mm	330x 192x 44mm	330x 192x 44mm	330x 192x 44mm	430 x 250 x 44 mm	430 x 250 x 44 mm
<b>Chipset</b>		Intel Q170		Intel H110			Intel Q170
<b>CPU</b>	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	Intel LGA1151, 6th Gen Intel SkyLake/ Kabylake-S Core i7/ i5/ i3/ Pentium CPU	Intel SkyLake/ Kabylake-U SoC CPU, Celeron 3855U 1.60GHz	Intel LGA1151, 6th Gen Intel SkyLake/ Kabylake-S Core i7/ i5/ i3/ Pentium CPU	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	Intel LGA1151, 6th Gen Intel SkyLake/ Kabylake-S Core i7/ i5/ i3/ Pentium CPU
<b>Memory</b>	2x DDR3L SO-DIMM, up to 8GB	2x DDR4 SO-DIMM, up to 32GB	2x DDR4 SO-DIMM, up to 32GB	2x DDR4 SO-DIMM, up to 32GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	2x SODIMM DDR4, up to 32GB
<b>Storage</b>	<b>mSATA/CF</b>	1x mSATA (Full Size)	1x mSATA (Full Size)	1x M.2 (2242/ 2260)	N/A	1x mSATA	1x mSATA
	<b>HDD</b>	2x 2.5" SATA or 1x 3.5" SATA	2x 2.5" SATA3.0 (6Gb/s)	1x 2.5" SATA3.0 (6Gb/s)	2x 2.5" SATA3.0 (6Gb/s)	1x 2.5" SATA3.0 (6Gb/s)	2x 2.5" SATA or 1x 3.5" SATA (support RAID 0,1,5,10)
<b>Expansion</b>	<b>mPCIe</b>	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)
	<b>PCIe</b>	N/A	N/A	N/A	N/A	PCI Express	1x PCIeX4 (Support JETC4G)
	<b>Other</b>	N/A	SIM Card Holder	SIM Card Holder	N/A	N/A	SIM Card Holder, TPM (Optional)
<b>System Fan</b>	1x System Fan	N/A	System Fan	System Fan	System Fan	4020 FAN x3, DC-12V-0.1A/8 CFM	4020 FAN x3, DC-12V-0.1A/8 CFM
<b>Front IO</b>	<b>Power Button</b>	YES	YES	YES	YES	YES	YES
	<b>USB</b>	1x USB2.0, 1x USB3.0	2x USB2.0	2x USB2.0	2x USB2.0	2x USB2.0	2x USB2.0
	<b>COM</b>	2x COM	N/A	N/A	N/A	N/A	1x COM (RJ45 type)
	<b>Audio</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>RJ45</b>	4x RJ45 8x RJ45 (optional)	N/A	N/A	N/A	N/A	N/A
	<b>GPIO</b>	1x GPIO (optional)	N/A	N/A	N/A	N/A	N/A
	<b>DISPLAY</b>	1x VGA	N/A	N/A	N/A	N/A	N/A
	<b>Other</b>	N/A	N/A	N/A	N/A	N/A	N/A
<b>Rear IO</b>	<b>Power Button</b>	N/A	N/A	N/A	N/A	N/A	YES
	<b>USB</b>	N/A	4x USB3.0	4x USB3.0	4x USB3.0	4x USB3.0	3x USB2.0, 1x USB3.0
	<b>COM</b>	N/A	2x RS232/422/485), 4x RS232 (optional)	5x COM (1x RS232/422/485, 4x RS232)	6x COM	4x COM	1x COM
	<b>Audio</b>	N/A	N/A	1x MIC, 1x Line-in, 1x Line-out	1x MIC, 1x Line-in, 1x Line-out	1x MIC, 1x Line-in, 1x Line-out	N/A
	<b>RJ45</b>	N/A	2x RJ45	2x RJ45	2x RJ45	1x RJ45	1x RJ45 (optional RJ45 x5)
	<b>GPIO</b>	N/A	N/A	1x GPIO	N/A	N/A	N/A
	<b>PS/2</b>	N/A	N/A	1x PS/2	N/A	N/A	PS/2 x2
	<b>VGA</b>	N/A	N/A	1x VGA	N/A	N/A	1x VGA
	<b>DVI</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>HDMI</b>	N/A	1x HDMI	1x HDMI	1x HDMI 1.4 (Max 3840x	1x HDMI 1.4 (Max 3840x	1x HDMI
<b>Display Port</b>	N/A	2x Display Port	N/A	1x DP (Max 4096x2160@60Hz)	1x DP (Max 4096x2160@60Hz)	N/A	
<b>Other</b>	1x GND Hold	N/A	N/A	N/A	N/A	N/A	
<b>Power Connector</b>	12V DC-in Jack	19V DC-in Jack	AC Power Socket, 1U 200W FLEX POWER	AC Power Socket, 1U 200W FLEX POWER	AC Power Socket, 1U 200W FLEX POWER	AC Power Socket	AC Power Socket
<b>Optional Accessories</b>	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	802.11 b/g/n WIFI kit	JADE4INLANG	

Model	JBC150F792-3160B	JBC152F533 <b>M</b> series	JBC153F592-Q170-B	JBC153F692	JBC153F9HG-2930-B	
						
Dimension	430 x 250 x 44 mm	430 x 252 x 44mm	430 x 250 x 44 mm	430 x 250 x 44 mm	430 x 250 x 44 mm	
Chipset			Intel Q170			
CPU	Intel Braswell SoC CPU, Celeron N3160 2.24GHz	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	Intel LGA1151, 6th Gen Intel Skylake/ Kabylake-S Core i7/ i5/ i3/ Pentium CPU	Intel Apollo Lake SOC CPU, Celeron N3350 2.40GHz/ Celeron N4200 2.50GHz	Intel Bay Taril-M SoC CPU, Celeron N2930 2.16GHz	
Memory	2x DDR3L SO-DIMM, up to 8GB	<b>1x DDR3L SO-DIMM, up to 8GB</b>	2x SODIMM DDR4, up to 32GB	1x DDR3L SO-DIMM, up to 8GB	1x DDR3L SO-DIMM, up to 8GB	
Storage	mSATA/CF	1x M.2 (2242/2260)	1x mSATA	1x mSATA	1x mSATA	
	HDD	1x 3.5" or 2x 2.5" SATA3.0 (6Gb/s)	1x 2.5" SATA Device	2x 2.5" SATA or 1x 3.5" SATA (support RAID 0,1,5,10)	1x 2.5" SATA3.0 (6Gb/s)	2x 2.5" SATA Device
Expansion	mPCIe	1x mPCIe (Full Size)	1x mPCIe (Full Size)	1x mPCIe (Full Size)	2x mPCIe (Full Size)	
	PCIe	1x PCIeX1	N/A	1x PCIeX4 (Support JETC4G)	N/A	2x PCIeX1
	Other	N/A	N/A	SIM Card Holder, TPM (Optional)	N/A	SIM Card Holder
System Fan	4020 FAN x3, DC-12V-0.1A/8 CFM	4020 FAN x4, DC-12V-0.1A/8 CFM	4020 FAN x3, DC-12V-0.1A/8 CFM	System Fan	4020 FAN x3, DC-12V-0.1A/8 CFM	
Front IO	Power Button	YES	N/A	N/A	N/A	N/A
	USB	2x USB2.0	N/A	2x USB3.0	2x USB3.0	1x USB2.0, 1x USB3.0
	COM	N/A	N/A	1x COM (RJ45 type)	1x COM (RJ45 type), 2 COM	2x COM
	Audio	N/A	N/A	N/A	N/A	N/A
	RJ45	N/A	16x PoE (8x by optional) <b>(100M or 1000M)</b>	12x RJ45 (4x by optional)	6x RJ45 (4x by optional)	8x RJ45 (4x by optional)
	GPIO	N/A	N/A	N/A	1x GPIO	1x GPIO
	DISPLAY	N/A	N/A	N/A	1x HDMI	N/A
	Other	N/A	N/A	N/A	N/A	N/A
	Power Button	N/A	YES	YES	YES	YES
Rear IO	USB	1x USB2.0, 3x USB3.0	1x USB2.0, 1x USB3.0	N/A	N/A	N/A
	COM	2x COM	1x COM	N/A	N/A	N/A
	Audio	1x Line-in, 1x Line-out, 1x Mic	N/A	N/A	N/A	N/A
	RJ45	2x RJ45	RJ45 x4	N/A	N/A	N/A
	GPIO	N/A	N/A	N/A	N/A	N/A
	PS/2	N/A	N/A	N/A	N/A	N/A
	VGA	1x VGA	1x VGA	N/A	N/A	N/A
	DVI	N/A	N/A	N/A	N/A	N/A
	HDMI	1x HDMI	N/A	N/A	N/A	N/A
	Display Port	N/A	N/A	N/A	N/A	N/A
	Other	1x LPT	N/A	N/A	N/A	N/A
Power Connector	AC Power Socket	AC Power Socket	AC Power Socket	AC Power Socket, 1U 200W FLEX POWER	AC Power Socket	
Optional Accessories	802.11 b/g/n WIFI kit	N/A	HDMI x 1 GPIO x1 JETC4G (additional 4x Gbe LAN)	802.11 b/g/n WIFI kit	VGA x 1 JETB4G (additional 4x Gbe LAN)	


## Standard Series

Model	HPC104BR-2930-4G	HPC-1215C-2930-4G	HPC150BR-2930-4G	HPC170BR-2930-4G	HPC190BR-2930-4G
					
<b>Panel Size</b>	10.4" LED backlight	12.1" LED backlight	15.0" LED Backlight	17.0" LED Backlight	19.0" LED Backlight
<b>Active Area</b>	211.2(H) x 158.4(V)	245.76(H) x 184.32(V)	304.128(H) x 228.096(V)	337.920(H) x 270.336(V)	377.30 (H) x 302.05(V)
<b>Resolution</b>	800 x 600 @60Hz	1024 x 768 @60Hz	1024 x 768 @60Hz	1280 x 1024 @60Hz	1280 x 1024 @60Hz
<b>Display Color</b>	262K	262K	262K	16.7M	16.7M
<b>Pixel Pitch</b>	0.150 x 0.150 mm	0.24 x 0.24 mm	0.297 x 0.297 mm	0.264 x 0.264 mm	0.294 x 0.294 mm
<b>Aspect</b>	16:9	4:3	4:3	4:3	4:3
<b>Contrast Ratio</b>	500:1	700:1	700:1	1000:1	1000:1
<b>Birghtness (cd/m<sup>2</sup>)</b>	230 cd/m <sup>2</sup>	450 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>
<b>View Angle</b>	H160/V130	H160/V160	H170/V160	H170/V160	H170/V160
<b>Response Time</b>	25ms	8ms	5.7ms	9ms	7ms
<b>Touch</b>	5 Wires Resistive	Project Capacitive	5 Wires Resistive	5 Wires Resistive	5 Wires Resistive
<b>Water Proof</b>	IP65	IP65	IP65	N/A	N/A
<b>Housing</b>	Aluminum + Iron	Aluminum + Iron	Aluminum + Iron	Aluminum + Iron	Iron
<b>Dimension</b>	284x 230x 37mm	308 x 238 x 40mm	376x 300x 54mm	383x 316x 60mm	427x 352x 60mm
<b>Chipset</b>					
<b>CPU</b>	Intel Bay Taril SoC CPU Celeron N2930 2.16GHz	Intel Bay Taril SoC CPU Celeron N2930 2.16GHz	Intel Bay Taril SoC CPU Celeron N2930 2.16GHz	Intel Bay Taril SoC CPU Celeron N2930 2.16GHz	Intel Bay Taril SoC CPU Celeron N2930 2.16GHz
<b>Memory</b>	4G DDR3L onboard	4G DDR3L onboard	4G DDR3L onboard	4G DDR3L onboard	4G DDR3L onboard
<b>Storage</b>	<b>m-SATA/m.2</b>	1x M.2 (2242)	1x mSATA	1x mSATA	1x mSATA
	<b>HDD</b>	1x SATA 2.0 (3GB/s) 2.5" HDD	1x SATA 2.0 (3GB/s) 2.5" HDD	1x SATA 2.0 (3GB/s) 2.5" HDD	1x SATA 2.0 (3GB/s) 2.5" HDD
<b>Expansion</b>	<b>mPCIe</b>	1x mPCIe (For WIFI)	1x mPCIe (For WIFI)	1x mPCIe (For WIFI)	1x mPCIe (For WIFI)
	<b>PCIe</b>	N/A	N/A	N/A	N/A
	<b>Other</b>	N/A	SIM Card Holder	SIM Card Holder	N/A
<b>System Fan</b>	Fanless	Fanless	Fanless	Fanless	Fanless
<b>IO</b>	<b>USB</b>	3x USB2.0, 1x USB3.0	3x USB2.0, 1x USB3.0	3x USB2.0, 1x USB3.0	3x USB2.0, 1x USB3.0
	<b>COM</b>	3x COM	3x COM	3x COM	6x COM
	<b>Audio</b>	N/A	N/A	N/A	N/A
	<b>RJ45</b>	2x RJ45	2x RJ45	2x RJ45	2x RJ45
	<b>GPIO</b>	N/A	N/A	N/A	N/A
	<b>Display</b>	1x VGA	1x VGA	1x VGA	1x VGA
<b>Front IO</b>	<b>USB</b>	N/A	N/A	N/A	N/A
<b>Power Connector</b>	12V DC-in Jack	9~ 24V Terminal Block	9~ 24V Terminal Block	9~ 24V Terminal Block	9~ 24V Terminal Block
<b>Optional Accessories</b>	WIFI module Wall Mount Kit (8pcs/set)	WIFI module Wall Mount Kit (8pcs/set)	WIFI module Wall Mount Kit (8pcs/set)	WIFI module Wall Mount Kit (8pcs/set)	WIFI module Wall Mount Kit (8pcs/set)
<b>Standard Accessories</b>	60W AC Adapter Power Cord	60W AC Adapter Power Cord	60W AC Adapter Power Cord	60W AC Adapter Power Cord	60W AC Adapter Power Cord

## Flat Series

Model	HPC-080SC-HD2807A	HPC-0705C-FP2807A	HPC-0805C-FP2807A	HPC-1015C-FP1900B	HPC150GR-FP6200	HPC-1565C-FP1900B	
							
<b>Panel Size</b>	8.0 inch with LED backlight	7.0" LED backlight	8.0" LED backlight	10.1" LED backlight	15.0" LED Backlight	15.6" LED Backlight	
<b>Active Area</b>	163.05 x 122.54	152.4 x 91.44	163.05 x 122.54	257.1 x 159.66	306.60 x 230.60	387.00(H) x 231.00(V)	
<b>Resolution</b>	1024 x 768 @60Hz	1024 X 600@60hZ	1024 x 768 @60Hz	1280 x 800 @60Hz	1024 x 768 @ 60Hz	1920 x 1080 @ 60Hz	
<b>Display Color</b>	16.7M	16.7M	16.7M	16.2M	262K	262K	
<b>Pixel Pitch</b>	0.158 x 0.158 mm	0.150 x 0.150 mm	0.158 x 0.158 mm	0.1695 x 0.1695 mm	0.297 x 0.297 mm	0.17925 x 0.17925mm	
<b>Aspect</b>	4:3	16:9	4:3	16:10	4:3	16:0	
<b>Contrast Ratio</b>	700:1	500:1	700:1	800:1	800:1	800:1	
<b>Birghtness (cd/m<sup>2</sup>)</b>	400 cd/m <sup>2</sup>	320 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>	450 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>	
<b>View Angle</b>	H160/V160	H150/V145	H160/V160	H170/V170	H160/V160	H170/V170	
<b>Response Time</b>	30ms	30ms	30ms	30ms	12ms	35ms	
<b>Touch</b>	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive	5 Wires Resistive	Projected Capacitive	
<b>Water Proof</b>	IP65 (Option)	IP65 compliance (Front)	IP65 compliance (Front)	IP65 compliance (Front)	IP65 compliance (Front)	IP65 compliance (Front)	
<b>Housing</b>	Aluminum + Iron	Aluminum + Iron	Aluminum + Iron	Aluminum + Iron	Aluminum + Iron	Aluminum + Iron	
<b>Dimension</b>	191 x 150 x 63mm	197 x 136 x 50.7mm	191 x 150 x 57mm	258 x 176 x 59mm	366x 290x 74mm	391 x 239 x 59mm	
<b>Chipset</b>							
<b>CPU</b>	Intel Bay Taril SoC CPU Celeron N2807 2.16GHz	Intel Bay Taril SoC CPU Celeron N2807 2.16GHz	Intel Bay Taril SoC CPU Celeron N2807 2.16GHz	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	INTEL® SkyLake-U Core i5-6200u 2.8GHz	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	
<b>Memory</b>	2G DDR3L onboard	2G DDR3L onboard	2G DDR3L onboard	4G DDR3L onboard	2x DDR4 SO-DIMM, up to 32G	4G DDR3L onboard	
<b>Storage</b>	<b>m-SATA/m.2</b>	1x mSATA	1x mSATA	1x mSATA	M.2 x 1 (2242)	1x mSATA	1x M.2 (2242)
	<b>HDD</b>	N/A	N/A	N/A	1x SATA 2.0 (3GB/s) 2.5" HDD	1x SATA 2.0 (3GB/s) 2.5" HDD	1x SATA 2.0 (3GB/s) 2.5" HDD
<b>Expansion</b>	<b>mPCIe</b>	1x mPCIe (Half Size)	1x mPCIe (Half Size)	1x mPCIe (Half Size)	1x	1x	1x mPCIe (For WIFI)
	<b>PCIe</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>Other</b>	N/A	N/A	N/A	N/A	N/A	SIM Card Holder
<b>System Fan</b>	Fanless	Fanless	Fanless	Aluminum	Aluminum	Fanless	
<b>IO</b>	<b>USB</b>	3x USB2.0, 1x USB3.0	2x USB2.0, 1x USB3.0	3x USB2.0, 1x USB3.0	2x USB2.0, 2x USB3.0	2x USB2.0, 2x USB3.0	USB2.0 x 4, USB3.0 x 2
	<b>COM</b>	2x COM	1x COM	1x COM	2x COM	2x COM	2x COM
	<b>Audio</b>	N/A	N/A	N/A	N/A	N/A	N/A
	<b>RJ45</b>	1x RJ45	1x RJ45	1x RJ45	2x RJ45 (Intel I211AT)	2x RJ45 (Intel I211AT)	2x RJ45 (i211AT Gbe)
	<b>GPIO</b>	N/A	N/A	N/A	8bit DIO	8bit DIO	8bit DIO
	<b>Display</b>	1x HDMI	1x HDMI	1x HDMI	1x VGA	1x VGA	1x VGA
<b>Front IO</b>	<b>USB</b>	N/A	N/A	N/A	N/A	N/A	N/A
<b>Power Connector</b>	12V DC-in Jack	12V DC-in Jack, Terminal Block	12V DC-in Jack, Terminal Block	9-28V DC-in Jack, Lockable	9-28V DC-in Jack, Lockable	9~ 28V DC-in, Lockable	
<b>Optional Accessories</b>	WIFI Module and Antennas Wall Mount Kit VESA Mount Kit	WIFI Module and Antennas Wall Mount Kit VESA Mount Kit	WIFI Module and Antennas Wall Mount Kit VESA Mount Kit	WIFI Module and Antennas Wall Mount Kit VESA Mount Kit	WIFI Module and Antennas Wall Mount Kit VESA Mount Kit	WIFI module Wall Mount Kit (8pcs/set) VESA Mount Kit	
<b>Standard Accessories</b>	60W AC Adapter Power Cord	60W AC Adapter Power Cord	60W AC Adapter Power Cord	60W AC Adapter Power Cord	60W AC Adapter Power Cord	60W AC Adapter Power Cord	

## Heavy Duty






Model	HPC-238SC-FP1900B	HPC-1014GR-HD1900B	HPC-150GR-HD1900B	HPC-170GR-HD1900B	HPC-185SC-HD1900B	
						
<b>Panel Size</b>	23.8" LED Backlight	10.4" LED Backlight	15.0" LED Backlight	17.0" LED Backlight	18.5" LED Backlight	
<b>Active Area</b>	528.04(H) x 297.46(V)	211.58 x 158.72	304.10 (H) x 228.10 (V)	337.00(H) x 269.50(V)	440.80(H) x 271.40(V)	
<b>Resolution</b>	1920 x 1080@60Hz	800 x 600 @60Hz	1024 x 768 @60Hz	1280 x 1024 @60Hz	1366x 768 @60Hz	
<b>Display Color</b>	16.7M	262K	262K	16.7M	16.7M	
<b>Pixel Pitch</b>	0.2745 x 0.2745mm	0.264 x 0.264 mm	0.297 x 0.297 mm	0.294 x 0.294 mm	0.3 x 0.3 mm	
<b>Aspect</b>	16:9	4:3	4:3	4:3	16:9	
<b>Contrast Ratio</b>	1000:1	400:1	700:1	1000:1	1000:1	
<b>Birghtness (cd/m<sup>2</sup>)</b>	250 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>	
<b>View Angle</b>	H160/V160	H130/V140	H170/V160	H170/V160	H178/V178	
<b>Response Time</b>	25ms	25ms	5.7ms	3.5ms	5.5ms	
<b>Touch</b>	Projected Capacitive	5 Wires Resistive	5 Wires Resistive	5 Wires Resistive	Projected capacitive	
<b>Water Proof</b>	IP65 compliance (Front)	IP65 compliance	IP65	IP65	IP65 (Front)	
<b>Housing</b>	Aluminum + Iron	Aluminum + Iron	Aluminum + Iron	Aluminum + Iron	Aluminum + Iron	
<b>Dimension</b>	556 x 347 x 74mm	290 x 226 x 63mm	366 x 290 x 74mm	400 x 224 x 74mm	480 x 308 x84mm	
<b>Chipset</b>						
<b>CPU</b>	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	
<b>Memory</b>	4G DDR3L onboard	4G DDR3L onboard	4G DDR3L onboard	4G DDR3L onboard	4G DDR3L onboard	
<b>Storage</b>	<b>m-SATA/m.2</b>	1x M.2 (2242)	1x M.2 (2242)	1x M.2 (2242)	1x M.2 (2242/2260/2280)	
	<b>HDD</b>	1x SATA 2.0 (3GB/s) 2.5" HDD	1x SATA 2.0 (3GB/s) 2.5" HDD	1x SATA 2.0 (3GB/s) 2.5" HDD	1x SATA 2.0 (3GB/s) 2.5" HDD	
<b>Expansion</b>	<b>mPCIe</b>	1x mPCIe (For WIFI)	1x	1x mPCIe (For WIFI)	1x mPCIe (For WIFI)	
	<b>PCIe</b>	N/A	N/A	N/A	N/A	
	<b>Other</b>	SIM Card Holder	N/A	SIM Card Holder	SIM Card Holder	SIM Card Holder
<b>System Fan</b>	Fanless	Aluminum	Fanless	Fanless	Fanless	
<b>IO</b>	<b>USB</b>	USB2.0 x 4, USB3.0 x 2	2x USB2.0, 2x USB3.0	USB2.0 x 4, USB3.0 x 2	USB2.0 x 4, USB3.0 x 2	USB2.0 xr, 2x USB3.0
	<b>COM</b>	2x COM	2x COM	2x COM	2x COM	2x COM
	<b>Audio</b>	N/A	N/A	N/A	N/A	N/A
	<b>RJ45</b>	2x RJ45 (i211AT Gbe)	2x RJ45 (Intel I211AT)	2x RJ45 (i211AT Gbe)	2x RJ45 (i211AT Gbe)	2x RJ45 (i211AT)
	<b>GPIO</b>	8bit DIO	8bit DIO	8bit DIO	8bit DIO	N/A
	<b>Display</b>	1x VGA	1x VGA	1x VGA	1x VGA	1x VGA
<b>Front IO</b>	<b>USB</b>	N/A	USB2.0 x 2	N/A	N/A	N/A
<b>Power Connector</b>	9~ 28V DC-in, Lockable	9-28V DC-in Jack, Lockable	9~ 28V DC-in, Lockable	9~ 28V DC-in, Lockable	9~ 28V DC-in (Lockable)	
<b>Optional Accessories</b>	WIFI module Wall Mount Kit (8pcs/set) VESA Mount Kit	WIFI Module and Antennas Wall Mount Kit VESA Mount Kit	WIFI module Wall Mount Kit (8pcs/set) VESA Mount Kit	WIFI module Wall Mount Kit (8pcs/set) VESA Mount Kit	WIFI module Wall Mount Kit (8pcs/set)	
<b>Standard Accessories</b>	60W AC Adapter Power Cord	60W AC Adapter Power Cord	60W AC Adapter Power Cord	60W AC Adapter Power Cord	60W AC Adapter Power Cord	



## Stainless Fanless, IP67

## Expansion

## Advertising

Model	HPC121SR-SF1900B (SPC-121A)	HPC150SR-SF1900B (SPC-150A)	HPC170SR-ITQ170 (IPC-170A)	HPC-070SC-AD2807A	HPC-101SC-AD2807A
					
<b>Panel Size</b>	12.1" LED Backlight	15.0" LED Backlight	17.0" LED Backlight	7.0" LED Backlight	10.1" LED Backlight
<b>Active Area</b>	246.8(H) x 185.5(V)	304.10(H) x 228.1(V)	337.00(H) x 269.50(V)	152.4 x 91.44	257.1 x 159.66
<b>Resolution</b>	1024x 768 @60Hz	1024x 768 @60Hz	1280x 1024 @60Hz	1024 X 600@60hZ	1280 x 800 @60Hz
<b>Display Color</b>	262K	262K	262K	16.7M	16.2M
<b>Pixel Pitch</b>	0.24 x 0.24 mm	0.3 x 0.3 mm	0.264 x 0.264 mm	0.150 x 0.150 mm	0.1695 x 0.1695 mm
<b>Aspect</b>	4:3	4:3	4:3	16:9	16:10
<b>Contrast Ratio</b>	700:1	800:1	1000:1	500:1	800:1
<b>Birghtness (cd/m<sup>2</sup>)</b>	500 cd/m <sup>2</sup>	450 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>	320 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>
<b>View Angle</b>	H160/V140	H150/V150	H170/V160	H150/V145	H170/V170
<b>Response Time</b>	25ms	5.7ms	3.5ms	30ms	30ms
<b>Touch</b>	5 Wires Resistive	5 Wires Resistive	5 Wires Resistive	Projected Capacitive	Projected Capacitive
<b>Water Proof</b>	IP67	IP67	IP65 (Front)	IP65 (Option)	IP65 compliance
<b>Housing</b>	Stainless SUS316	Stainless SUS316	Aluminum + Iron	Aluminum + Iron	Aluminum + Iron
<b>Dimension</b>	308 x 247 x 50mm	386 x 310 x 64mm	421 x 354 x 91mm	197 x 136 x 43mm	258 x 176 x 43mm
<b>Chipset</b>					
<b>CPU</b>	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	Intel Bay Trail-D SoC CPU, Celeron J1900 2.42GHz	Intel LGA1151, Skylake-S/ Kabylake-S CPU	Intel Bay Taril SoC CPU Celeron N2807 2.16GHz	Intel Bay Taril SoC CPU Celeron N2807 2.16GHz
<b>Memory</b>	4G DDR3L onboard	4G DDR3L onboard	2x DDR4 SO-DIMM, up to 32GB	2G DDR3L onboard	2G DDR3L onboard
<b>Storage</b>	<b>m-SATA/m.2</b>	1x M.2 (2242/2260/2280)	1x M.2 (2242/2260/2280)	1x mSATA	1x mSATA
	<b>HDD</b>	1x SATA 2.0 (3GB/s) 2.5" HDD	1x SATA 2.0 (3GB/s) 2.5" HDD	1x SATA 2.0 (3GB/s) 2.5" HDD	N/A
<b>Expansion</b>	<b>mPCIe</b>	1x mPCIe (For WIFI)	1x mPCIe (For WIFI)	2x mPCIe	1x mPCIe (Half Size)
	<b>PCIe</b>	N/A	N/A	1x	N/A
	<b>Other</b>	SIM Card Holder	SIM Card Holder	N/A	N/A
<b>System Fan</b>	Fanless	Fanless	Active Fans	Fanless	Fanless
<b>IO</b>	<b>USB</b>	2x USB2.0, 2x USB3.0	2x USB2.0, 2x USB3.0	6x USB3.0	2x USB2.0, 1x USB3.0
	<b>COM</b>	2x COM	2x COM	4x COM	1x COM
	<b>Audio</b>	N/A	N/A	YES	N/A
	<b>RJ45</b>	1x RJ45	2x RJ45	2x RJ45	1x RJ45
	<b>GPIO</b>	N/A	N/A	N/A	N/A
	<b>Display</b>	N/A	1x VGA	1x DVD-D, HDMI, Display Port	1x HDMI
<b>Front IO</b>	<b>USB</b>	N/A	N/A	N/A	N/A
<b>Power Connector</b>	9~ 28V DC-in	9~ 28V DC-in (Lockable)	100~ 240V AC	12V DC-in Jack, Terminal Block	12V DC-in Jack, Terminal Block
<b>Optional Accessories</b>	WIFI module Wall Mount Kit (8pcs/set)	WIFI module Wall Mount Kit (8pcs/set)	WIFI module Wall Mount Kit (8pcs/set)	WIFI Module and Antennas Wall Mount Kit VESA Mount Kit	WIFI Module and Antennas Wall Mount Kit VESA Mount Kit
<b>Standard Accessories</b>	60W AC Adapter Power Cord	60W AC Adapter Power Cord	60W AC Adapter Power Cord	60W AC Adapter Power Cord	60W AC Adapter Power Cord