



MES-4190

Ultra-slim Embedded PC w/Intel® Celeron® J1900



KEY FEATURES

- Intel® Bay Trail-D, J1900 @2G/2.4Ghz, optional for E3894
- Fanless operation
- Slim design: 22mm
- Flexible custom the different I/O by BTO
- Operate in -10 °C ~ 50 °C environment

The entry-level MES4190 is designed with streamlined features specific to each of its intended application. We provide the custom I/O by BTO. Its LAN ports can not only transform it into a small network appliance, it can be used in machine vision. In addition, the PC measures 198mm x 183.8 mm x 22.4mm and is tested to work in an extended operating temperature range of -10 ~ 50°C, making it perfect for industrial automation equipment.

Specifications

Product	MES-4190
Systems	
Atom CPU (SOC)	Bay Trail - D, J1900@2G/2.42GHz, quad - core, 688M/854MHz GPU clock, TDP: 10W Option: Bay Trail - I, E3845@1.91GHz, quad - core, 542M/792Mz GPU clock
Graphics	Intel HD Graphics, Gen 7 with 4 EU, 542M/854MHz, DX*11, OGL 3.0 & OCL 1.1
Memory	Intel NM10 Express Chipset (1.5W) for CF
Graphics	DX9 (CT) or DX11 (BT), On-die GPU within CPU
Memory	One DDR3L SODIMM Slot: 2GB (up to 8GB)
OS Support	Windows 7, WES7/WES8, Windows Embedded 8.1 Industry Pro, Windows 10 (IoT) for Industrial devices. Android Kitkat 4.4.4 (64 - bit), Ubuntu 14.04 and 14.10
Watchdog Timer	255-level timer interval, configurable under BIOS setup menu
Storage	
eMMC on board (V4.51)	16GB, (none to 64GB MLC - type Flash), SKU with SMT mounte
One M.2 - SATA (Key - B/M)	32GB to 256GB MLC - type Flash, by one M.2 - 2242 card
Optional Dual - SATA Tray	Carrier board with Dual - SSD (M.2 - 2242/2280) supports RAID - 0/1
I/O ports (Front)	
USB2	3x USB2 ports, two ports can be optioned as USB3
Audio (Realtek ALC283)	1x 3.5mm 4 - Pole Audio Jack (Headphone & ext. Microphone)
LED	1x Power Status Indicator
Buton	1x Power On/Off Button
RF Antenna	2x RP - SMA female for external dipole antenna (option)



I/O ports (Rear)	
DC - IN	5.5mm round - tip jack (12V/36W or 19V/60W Power Adaptor)
Mini - Display Port	Up to 2560 x 1600, converts to HDMI or VGA (external Dongle)
LAN (RJ45)	Realtek RTL8111F GbE Controller (supports Wakeup - On - LAN)
USB3	1x Standard USB3 port, two or more USB3 ports aa options
Serial Port	1x DE - 9 for standard RS232/422/485 port (USB to serial bridge)
Mini - Display Port	Up to 2560 x 1600, supports HDMI or VGA via external Dongle
PoE(iEEE 802.3AT/BT)card	25W (802.3at, PoE+) or 50W(UPoE) from Cat-5e cables
VGA (DE - 15)	Supports up to 2048 x 1280, dual display as mDP+VGA
Optional I/O ports & Internal Slot	
I/O port	2nd LAN + USB3, 2nd LAN +2nd mDP, 2 x USB3
PCI - e Mini Card Slot	2x Half - Size mini - cards (for 2nd LAN & 802.11ac WLAN cards)
Mechanical & Environmental	
Construction	Two - piece Metal box, and one configurable SATA storage Tray
Mounting	VESA/DIN - Rail/Wall Mount Kits (Customized for Various Applications)
Operating Temperature	- 10°C to 50°C (with industrial - grade SSD/SATA - Slim/DRAM) 0°C to 40°C (with standard HDD/SSD/SATA - Slim/DRAM)
Storage Temperature	- 20°C to 60°C , relative humidity 95% @ 40° C (non - condensing)
Size (W x H x D)	198mm x 183.8 mm x 22.4mm (Aluminum fins)
Weight	~1.15Kg

Ordering Information

MES-4190	Ultra-slim Embedded PC w/custom I/O by BTO, & Bay Trail - D, J1900 Processor SoC
MES-4190E	Ultra-slim Embedded PC w/custom I/O by BTO, & Bay Trail - I, E3845 Processor SoC

Diagram

Front View

Back View

