Vehicle Control
AB-MC-IPC-M20-I7

ATOMBOTIX

Modular Design

Easy customization under same housing, fast scale-up & scale down, supports multiple chipset, multiple interfaces, etc

Super-Efficient Heat Dissipation

With high-precision die-cast aluminum molding and Integrated copper-aluminum, boasts a compact and robust design
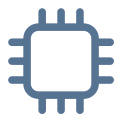
Rich Integrated Interfaces

With Built-in and configurable DI/DO, CAN, RS-485/232, Audio, USB2.0/3.0, don't need external modules, clean wiring & Space friendly

Single-Sided Interface

Features a streamlined single-sided I/O & flexible mounting options, enabling simpler installation in tight spaces

Ultra Powerful Compute

Houses Intel Core I7 processor, 16G DDR4 RAM, 512G SSD, as well as powerful GPU of Intel Iris Xe Graphics for machine vision application

Cable-Free Design

Ensures maximum stability with its cable-free, direct-connect I/O interface

Model	AB-MC-IPC-M20-I7
Operating System	Linux Ubuntu (Windows Optional, with separate License)
System Performance	Processor: Intel@11th CoreTM i7 1165G7 2.8GHz, UP to 4.7GHz, 12M Cache, TDP2-28W
	Memory: Supports DDR4 3200 MHz, up to 32 GB (single memory slot)
	Storage: 1×2.5" SATAIII HDD&SSD+M.2(2242 SATA)
Graphic	Intel Iris Xe Graphics, DirectX12.1, OpenGL 4.6, 1 x HDMI, resolution 4096*2304@60Hz

Interface	Network: LAN1/2: Intel i211 10/100/1000Mbps, supports Wake-on-LAN LAN1/2/3/4: Intel i210 10/100/1000Mbps, Support EtherCAT agreement and internet wake up. (Optional)
	COM1/2/3/4: RS485 COM5/6: RS232 COM7/8: CAN1/CAN2 (COM 1/2 – 3 kV optical isolation, configurable via BIOS for RS-232/485)
	USB: 4 x USB3.0, 2 x USB2.0
	Others: 1 x Mic, 1 x Audio, 1 x HDMI
	DI/DO: 8 x DI, 8 x DO
Voltage	+12 – 28V DC(Supports Overvoltage and Reverse polarity Protection)
Power Consumption	Max. power consumption 65W (i7 1165G7 CPU/8G Memory)
Cooling Method	Fanless, Die-cast aluminum integrated heat dissipation or copper tube heat dissipation (i5 and above)
Installation	Embeded Mounting/DIN Rail Mounting/Wall Mounting
Dimensions	173*52*121mm (length*width*height)
Environment	Electromagnetic Compatibility: IEC60068-2-64
	Working Environment: -20 – 50℃ (optional SSD), 0 – 40℃ (2.5″ HDD)
	Storage Temperature: -30 – 70℃
	Vibration: with SSD: 3Grms EN60068-2-27:2009 Random vibration 5-500HZ, half an hour per axis
Net Weight	1.2 kg
Backup UPS	2500mAH Li-ion battery, can work continuously for 30 minutes after power off at 25℃ ambient temperature (Optional)
Network Modem	Wifi/4G LTE/5G (Optional)

① USB 2.0*2
② 8-Channel Digital Input
③ 8-Channel Digital Output
④ PS484 1/2/3/4
⑤ RS232 5/6
⑥ CAN 1/2
⑦ USB3.0 *4
⑧ USB3.0 *4
⑨ LAN2
⑩ LAN3 + LAN4 (Optional)
⑪ HDMI
⑫ Mic + Line out
⑬ +9 – 28V DC IN
⑭ Remote switch/ Physical switch
⑮ GND
⑯ UPS Expansion slot (Optional)