

# IP65 FRONT PANEL PC (Metal-5mm)



19" LCD monitor, 1280 x 1024, 250nits, Rear OSD, including rear screw/Clamp/VESA Mount with Projective Capacitive Touch Screen + MS-98E1 ( H110 SKU ) / i5-6500 / RAM 4GB ( 0C~70C ) / SSD 256GB ( 0C ~70C )

**MODEL: CPM1900-i5-PCAP**



## FEATURES:

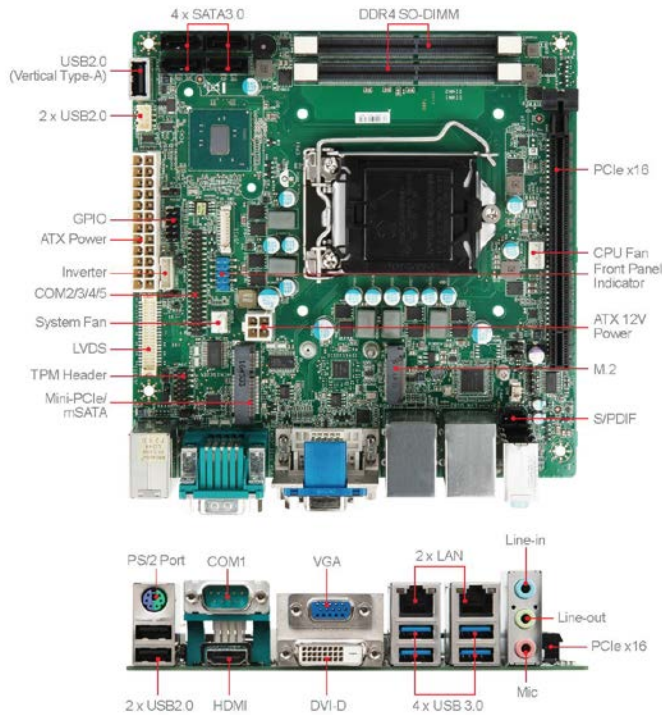
- Modularize mechanical design provides flexible product configuration and easy maintenance
- Optional build-in touch screen for interactive application
- 2 independent displays with multiple video outputs (LVDS, HDMI, DVI-D, VGA)
- Supports DirectX 11.1 and Intel® Clear Video Technology (up to 1080P)
- 3 SATA 3.0 ports for faster and high-capacity storage
- Supports m-SATA function by Mini-PCIe slot
- Plenty USB ports for more peripherals(USB3.0\*4, USB2.0\*4, Vertical Type USB2.0\*1)

## SPECIFICATIONS:

<b>Panel</b>	Cell Type / Glass Surface	TFT LCD / Black Anti-Glare, low reflection coating
	Aspect Ratio / Size	4 : 3 / 19" viewable diagonal area
	Active Area / Pixel Pitch	376.3(H) x 301.1(V) mm / 0.294(H) x 0.294(V) mm
	Native Resolution / Colors	1280(H) x 1024(V) / 16.7 M
	Brightness / Contrast	250 cd/m <sup>2</sup> (typ) / 800 : 1
	Response Time	< 5 ms
	Viewing Angle (typical)	H. 170° (- 85° ~ + 85°) , V. 160° (- 80° ~ + 80°)
	Light Source	LED backlight, Long life, 35,000 hrs (typ)
<b>Power</b>	Power Input	12V DC input with adapter
	Power Consumption	42.5 Watt, <1 Watt
<b>Operating Condition</b>	Temperature / Humidity	0°C ~ 50°C (32°F ~ 122°F) , 10% ~ 90% (no condensation)
<b>Dimensions</b>	Physical	Please refer to Drawing
	Carton	W x H x D = TBD

<b>Options</b>	Touch	Video / TV	Enhanced Panel	Others
	Resistive touch	SV + AV	Panel with LED backlight	Digital Signage(Stand alone)
	Capacitive touch	SV + AV + AV_Looping	High brightness panel	Networking Digital Signage
	SAW touch	SV + AV + TV	Wide Temperature	Motion Sensor
	Infrared touch		Sunlight Readable	Light Sensor
	Protected glass			Auto-Dimming

# MS-98E1 MB Specifications



<b>Processor</b>	CPU	Intel Core i5-6500
	Frequency	2.3GHz-4.0GHz (Depends on CPU)
	L2 Cache	2M - 8M (Depends on CPU)
	CPU Type	Socket (LGA 1151)
	Chipset	Intel® H110 Express
<b>Memory</b>	BIOS	AMI
	Technology	Dual-channel DDR4 (non-ECC) 2133MHz/2400MHz (7th Gen)
	Max. Capacity	Up to 32 GB
<b>Display</b>	Socket	2 x 260-pin SO-DIMMs
	Controller	Intel® HD Graphics
	Graphic Memory	Shared system memory up to 1.7 GB SDRAM
	LVDS	1
	eDP	N/A
	VGA	1
	DVI	1 (DVI-D)
	HDMI	1
	Display port	N/A
	Multiple Display	2 independent displays
<b>Ethernet</b>	Display Interface	LVDS up to 1920 x 1200 HDMI up to 3840 x 2160 DVI-D up to 1920 x 1200 VGA up to 1920 x 1200
	Controller	1 x Intel® I219-LM GbE-PHY 1 x Intel® I211-AT PCIe GbE LAN (Co-lay I210-AT)
<b>Audio</b>		Realtek® ALC887 HD Audio Codec
<b>Super I/O</b>	Controller	Fintek F81866AD-I
<b>H/W Monitor</b>	Watchdog Timer	256-level Watchdog Timer Yes
	Smart Fan	Yes
<b>TPM</b>	Controller	Pin header
<b>I/O Interface</b>	USB	4 x USB 3.0 (4 x rear) 4 x USB 2.0 (2 x rear; 2 x internal) 1 x USB 2.0 (Vertical, internal)
	Serial	5 x COM (1 x rear; 4 x internal) COM1: RS-232/422/485, 0V/5V/12V COM2/3/4/5: RS-232, 0V/5V/12V
	Parallel	N/A
	PS/2	1
	GPIO	8-bits (4 x GPI, 4 x GPO), 5V
<b>Expansion Slot</b>	PCIe x 16	1
	M.2	N/A
	Mini-PCIe	1 x Full-size, mSATA
<b>Storage</b>	SATA	3 x SATA 3.0
	mSATA	1 (shared w/ Mini-PCIe)
<b>Power Supply</b>	DC	N/A
	ATX	ATX-Power 24P, 12V-4P
<b>Environment</b>	Operating Temperature	0 - 60°C
	Operating Humidity	10 - 90%, non-condensing
	Storage Temperature	-20 - 80°C
	Storage Humidity	10 - 90%, non-condensing
<b>Form Factor</b>	Dimension	170mm x 170mm (Mini-ITX)
	Weight EMC	0.37 kg
<b>Certification</b>	EMC	FCC, CE, RCM, VCCI, BSMI
<b>Software Platform</b>	OS Support	Windows 7 (32/64-bit) Windows 8.1 (64-bit) Windows 10 (64-bit) Linux Kernel 4.X, support Fedora 23(64Bit) & Ubuntu 16.04 (64Bit) of Kaby Lake-S & Skylake-S

**MECHANICAL DRAWING:**

