

# IP65 FRONT PANEL PC (Metal-5mm)



6.5" LCD monitor, 640x480, LED-400nits, Rear OSD, including rear screw/Clamp/VESA Mount, WT(-30~80C), 12VDC-IN w/Adapter with 5 Wire Resistive Touch Screen + MS-98E1 ( H110 SKU ) / i7-7700 / RAM 8GB ( 0C~70C ) / HDD 1TB ( 0C ~70C )

**MODEL: CPM0650-i7-TR**



## FEATURES:

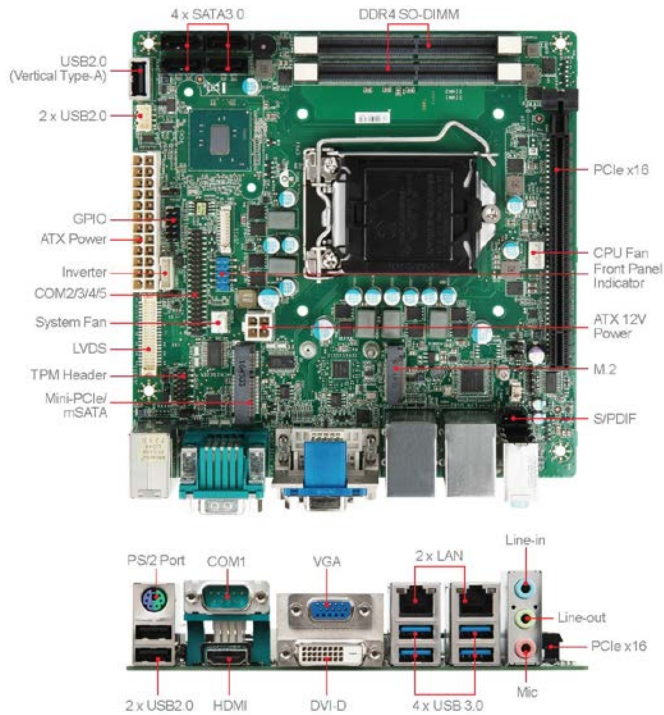
- Modularize mechanical design provides flexible product configuration and easy maintenance
- Optional build-in touch screen for interactive application
- 2 independent displays with multiple video outputs (LVDS, HDMI, DVI-D, VGA)
- Supports DirectX 11.1 and Intel® Clear Video Technology (up to 1080P)
- 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 / 6.5" viewable diagonal area
	Active Area / Pixel Pitch	132.48(H) x 99.36(V) mm / 0.207(H) x 0.207(V) mm
	Native Resolution / Colors	640(H) x 480(V) / 262 K
	Brightness / Contrast	400 cd/m <sup>2</sup> (typ) / 600 : 1
	Response Time	< 25 ms
	Viewing Angle (typical)	H. 160° (- 80° ~ + 80°) , V. 140° (- 70° ~ + 70°)
	Light Source	LED backlight, Long life, 35,000 hrs (typ)
<b>Power</b>	Power Input	12V DC input with adapter
	Power Consumption	21.875 Watt, <1 Watt
<b>Operating Condition</b>	Temperature / Humidity	-30°C ~ 80°C (22°F ~ 176°F) , 10% ~ 90% (no condensation)
<b>Dimensions</b>	Physical	Please refer to Drawing
	Carton	W x H x D = TBD

Options	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 i7-7700
	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:

