

24" Industrial Panel 1920 x 1200 300 nits, Panel Mount (with 3mm front bezel) / clamp / VESA mount / Resistive Touch \*MS-98E1 ( H110 SKU ) / i5-6500 / RAM 4GB ( 0C~70C ) / SSD 256GB ( 0C ~70C ) I/O : 12VDC with external 100~240VAC power cord  
Windows 10 Enterprise 2016 LTSC

**Model: EMCW2400X-i5-V1**

## FEATURES:

- Modularize mechanical design provides flexible product configuration and easy maintenance
- Optional build-in touch screen for interactive application
- Intel Core i5
- Panel Mount (with 3mm front bezel)

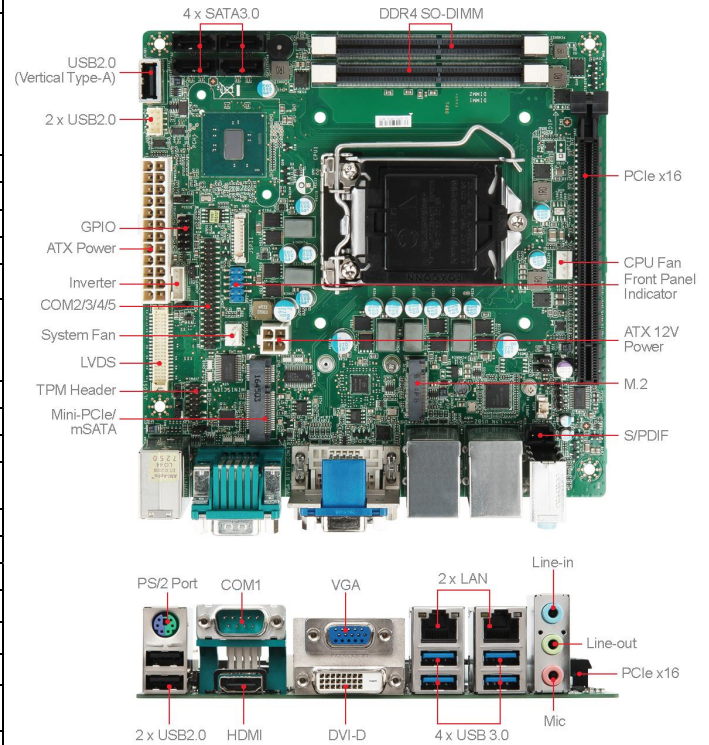
## LCD SPECIFICATIONS:

<b>Panel</b>	Cell Type / Glass Surface	TFT LCD / Black Anti-Glare, low reflection coating
	Aspect Ratio / Size	Wide / 24.1" viewable diagonal area
	Active Area / Pixel Pitch	518.4(H) x 324.0(V) mm / 0.27(H) x 0.27(V) mm
	Native Resolution / Colors	1920(H) x 1200(V) / 16.7M
	Brightness / Contrast	300 cd/m <sup>2</sup> (typ) / 1000 : 1
	Response Time	< 14ms (G-to-G)
	Viewing Angle (typical)	H.178° (- 89° ~ + 89°) , V. 178° (- 89° ~ + 89°)
	Light Source	LED backlight, Long life, 35,000 hrs (typ)
<b>Power</b>	Power Input	<b>12V DC</b> input with adapter
	Power Consumption	50 Watt, <1 Watt
<b>Operating Condition</b>	Temperature / Humidity	0°C ~ 70°C (32°F ~ 158°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
	Infrared touch	SV + AV + TV	Wide Temperature	Motion Sensor
	Protected glass		Sunlight Readable	Light Sensor
				Auto-Dimming

# MS-98E1 PC SPECIFICATIONS

<b>Processor</b>	CPU	C236 SKU 7th/6th Gen Intel® Desktop Kaby Lake/Skylake Xeon/i7/i5/i3/Pentium®/Celeron Series Processor, Max 80W	H110 SKU 7th/6th Gen Intel® Desktop Kaby Lake/Skylake Core™ i7/i5/i3/Pentium®/Celeron® Series Processor, Max 65W	
	Frequency L2	2.3GHz~4.0GHz (Depends on CPU)		
	L2 Cache	2M ~ 8M (Depends on CPU)		
	CPU Type	Socket (LGA 1151)		
	Chipset	Intel® C236 Express	Intel® H110 Express	
	BIOS	AMI		
<b>Memory</b>	Technology	Dual-channel DDR4 (ECC) 2133MHz/2400MHz (7th Gen)	Dual-channel DDR4 (non-ECC) 2133MHz/2400MHz (7th Gen)	
	Max. Capacity	Up to 32 GB		
	Socket	2 x 260-pin SO-DIMMs		
<b>Display</b>	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	3 independent displays	2 independent displays	
	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		
<b>Ethernet</b>	Controller	1 x Intel® I219-LM GbE-PHY 1 x Intel® I211-AT PCIe GbE LAN (Co-layer 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 Time		
	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	1 x M key (PCIe x4, SATA3.0, 2242)	N/A	
	M.2 Mini-PCIe	1 x Full-size, mSATA		
<b>Storage</b>	SATA	4 x SATA 3.0	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	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		



- 3 independent displays with multiple video outputs (LVDS, HDMI, DVI-D, VGA)
  - Supports DirectX 11.1 and Intel® Clear Video Technology (up to 1080P)
  - 4 SATA 3.0 ports for RAID
  - 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)
- 
- 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)

**MECHANICAL DRAWING:**

