# **CV-117/P1101 Series**

17" TFT LCD Panel PC, w/ Intel® Atom® / Pentium® Processor, 4x USB, 4x COM, 1x VGA and 1x DisplayPort



- Onboard Intel® Atom® / Pentium® Processor
- Triple Independent Displays (via VGA and DisplayPort outputs)

■ 17" TFT-LCD SXGA with Resistive 5-wire / Projected Capacitive Touch

- 2x LAN, 4x USB, 4x COM, 1x VGA, 1x DisplayPort, 4x DI/4x DO
- 2x Full Size Mini-PCle, 1x 2.5" SATA Drive Bay, 1x mSATA Socket
- Designed with Aluminum Die-Casting Front Frame
- True Flat IP65 Front Panel Protection
- Supports Panel / VESA / Rack Mounting
- Supports CDS Technology, Ignition Sensing and Power over Ethernet







### Overview

CV-117/P1101 Series is a 17" TFT-LCD touch panel PC offering 350 nits high brightness and 1280 x 1024 (SXGA) resolution. The system is based on Intel® Atom® / Pentium® processor and supports triple independent displays (via VGA and DisplayPort outputs). CV-117/P1101 Series features extensive connectivity including 2x GbE, 4x USB 3.0, 4x COM, and 8x isolated DIO. It also offers 2x full size Mini-PCle socket and 1x SIM socket for a variety of wireless data connections.

Through the ready-to-use CFM modules, users can easily add power ignition sensing and Power over Ethernet (PoE) functions for a variety of applications. CV-117/P1101 Series also supports Convertible Display System (CDS) technology. Comparing with regular standalone panel PCs, it is more flexible and reduces maintenance cost dramatically. Featuring with rigorous industrial protections, wide range operating temperature, IP65 dust/waterproof front panel, and wide range DC power input (9 to 48VDC), CV-117/P1101 Series is appropriate for harsh environments and critical applications.

## **Highlights**



#### **Power Efficient**

CV-117/P1101 Series is an energy-saving fanless panel PC. Based on Intel® Atom® / Pentium® processor, the system can operate up to triple independent displays and support up to 4K display resolution (via DisplayPort).



#### **Multiple Functions**

CV-117/P1101 Series provides extensive I/O, Mini-PCle slot, 2.5" SATA drive bay, mSATA socket, and SIM card slot. It also supports power ignition sensing and PoE by adding ready-to-use CFM modules.



#### **CDS Technology**

CDS (Convertible Display Systems) is a Cincoze patented technology, which allows for easy system maintenance, upgrades or replacement.



# **CV-117 Specifications**

Model Name	CV-117R	CV-117C	CV-117G
Display			
LCD Size	• 17" (5:4)		
Max. Resolution	• 1280 x 1024		
Brightness (cd/m2)	• 350		
Contrast Ratio	• 800 : 1		
LCD Color	• 16.7M		
Pixel Pitch (mm)	• 0.264 (H) x 0.264 (V)		
Viewing Angle (H-V)	• 160 / 140		
Backlight MTBF	• 50,000 hrs (LED Backlight)		
Touch Screen			
Touch Type	Resistive 5-wire	- Projected Capacitive	Glass Screen
Physical			
Dimension ( W x D x H )	• 450 x 350 x 63.2mm		
Weight Information	• 5.64 kg		
Mechanical Construction	Die-Casting Flat Surface		
Environment			
Front Panel Protection	• IP 65 Compliant		
Operating Temperature	Ambient with Air flow: -20°C to 75°C (with Industrial Grade Peripherals)	Ambient with Air flow: -20°C to 80°C (with Industrial Grade Peripherals)	Ambient with Air flow: -30°C to 85 °C (with Industrial Grade Peripherals)
Storage Temperature	30°C to 80°C		30°C to 85°C
Relative Humidity	• 80% RH @ 40°C (non-Condensing)		• 90% RH @ 40°C (non-Condensing)
EMC	• CE, UKCA, FCC, ICES-003 Class A		



# **P1101 Specifications**

Model Name	P1101		
System			
Processor	Onboard Intel® Atom® x7-E3950 Quad Core Processor, up to 2.00 GHz Onboard Intel® Pentium® N4200 Quad Core Processor, up to 2.50 GHz		
Memory	• 1x DDR3L 1333/1600/1866 MHz 204-Pin SO-DIMM Socket • Supports up to 8GB (un-buffered and non-ECC)		
Graphics			
Graphics Engine	Integrated Intel® HD Graphics 505		
Maximum Display Output	Supports Triple Independent Display (1x CDS, 1x VGA, 1x DisplayPort)		
VGA	• 1x VGA Connector (1920 x 1200 @60Hz)		
DP	1x DisplayPort Connector (4K x 2K @60Hz)		
Audio			
Audio Codec	Realtek® ALC888, High Definition Audio		
Line-out	• 1x Line-out, Phone Jack 3.5mm		
Mic-in	• 1x Mic-in, Phone Jack 3.5mm		
1/0			
LAN	• 2x GbE LAN (Supports WoL, Teaming, Jumbo Frame & PXE), RJ45 - GbE1: Intel® I210 - GbE2: Intel® I210		
USB	• 4x USB 3.2 Gen1 (Type A)		
Serial Port	• 4x RS-232/422/485 with Auto Flow Control Support 5V/12V, DB9		
DIO	8x Isolated Digital I/O (4in/4out), 10-Pin Terminal Block		
Power Mode Switch	• 1x AT/ATX Mode Switch		
Power Switch	• 1x Power Switch		
Reset Button	• 1x Reset Button		
Clear CMOS Switch	• 1x Clear CMOS Switch		
Remote Power On/Off	• 1x Remote Power On/Off Connector, 2-pin Terminal Block		
Storage			
SSD/HDD	• 1x 2.5"SATA HDD Bay (SATA 3.0)		
mSATA	1x mSATA Socket (SATA 3.0, Shared by Mini-PCIe Socket)		
Expansion			
Mini PCI Express	2x Full-size Mini-PCle Sockets		
SIM Socket	•1 x SIM Socket		
CFM (Control Function Module) Interface	Optional CFM IGN Module for Power Ignition Function Optional CFM PoE Module for Power over Ethernet Function		
CDS (Convertible Display System) Technology	1x CDS Interface for Convertible Display Module		
Antenna Holes	4x Antenna Holes		



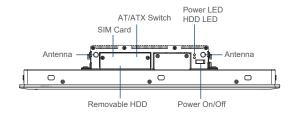
Other Function		
Instant Reboot	Support 0.2sec	
Watchdog Timer	Software Programmable Supports 256 Levels System Reset	
Internal Speaker	• AMP 2W + 2W	
OSD Function	LCD On/Off, Brightness Up, Brightness Down	
Power		
AT/ATX Power	Support AT, ATX Mode	
Power Input	• 1x 3-pin Terminal Block Connector with Power Input 9~48VDC	
Power Adapter (Optional)	• 1x Optional AC/DC 12V/5A, 60W or 24V/5A 120W	
Physical		
Dimension ( W x D x H )	- 204.5 x 149 x 41.5 mm	
Weight Information	• 1.49kg	
Mechanical Construction	Extruded Aluminum with Heavy Duty Metal	
Mounting	- Wall / VESA / CDS / DIN Rail	
Physical Design	Fanless Design     Jumper-less Design	

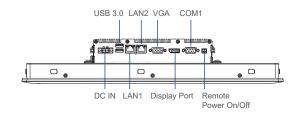
Reliability & Protection		
Reverse Power Input	• Yes	
Over Voltage Protection	Protection Range: 51~58V Protection Type: shut down operating voltage, re-power on at the present level to recover	
Over Current Protection	• 15A	
ESD Protection	• +/-8kV (air), +/-4kV (contact)	
Surge Protection	• 2kV	
CMOS Battery Backup	SuperCap Integrated for CMOS Battery Maintenance-free Operation	
MTBF	• Time: 294,617 hours	
Operating System		
Microsoft® Windows®	• Windows®10	
Linux	Supports by project	
Environment		
Operating Temperature	Ambient with Air Flow: -40°C to 70°C (with Extended Temperature Peripherals)	
Storage Temperature	• -40°C to 85°C	
Relative humidity	• 95% RH @ 75°C (Non-condensing)	
Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)	
Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)	
EMC	• CE, UKCA, FCC, ICES-003 Class A	
Safety	• LVD IEC/EN 62368-1	

## CV-117/P1101 External Layout

## Front I/O

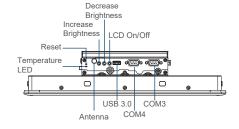
Rear I/O

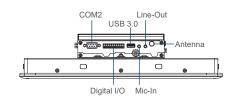




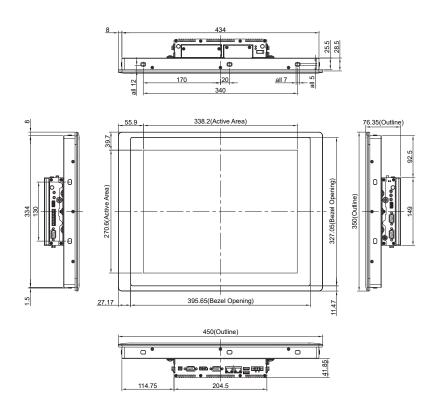
Left I/O

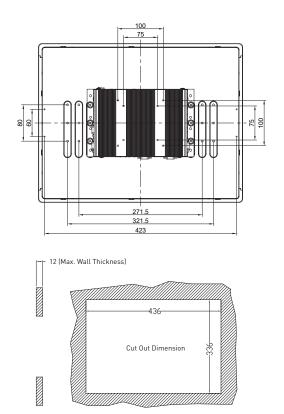
Right I/O





## CV-117/P1101 Dimensions







# **Ordering Information**

### **Available Models**

Model No.	Description
CV-117R-R10/P1101-E50-R10	17" TFT-LCD SXGA 5:4 Modular Touch Panel PC with Intel® Atom® E3950 Quad Core Processor and Resistive 5-wire Touch
CV-117C-R11/P1101-E50-R10	17" TFT-LCD SXGA 5:4 Modular Touch Panel PC with Intel® Atom® E3950 Quad Core Processor and P-Cap. Touch
CV-117G-R10/P1101-E50-R10	17" TFT-LCD SXGA 5:4 Modular Touch Panel PC with Intel® Atom® E3950 Quad Core Processor and without Touch
CV-117R-R10/P1101-N42-R10	17" TFT-LCD SXGA 5:4 Modular Touch Panel PC with Intel® Pentium® N4200 Quad Core Processor and Resistive 5-wire Touch
CV-117C-R11/P1101-N42-R10	17" TFT-LCD SXGA 5:4 Modular Touch Panel PC with Intel® Pentium® N4200 Quad Core Processor and P-Cap. Touch
CV-117G-R10/P1101-N42-R10	17" TFT-LCD SXGA 5:4 Modular Touch Panel PC with Intel® Pentium® N4200 Quad Core Processor and without Touch

## **Model Configuration**

	CV-117R	CV-117C	CV-117G	P1101-E50	P1101-N42
CV-117R/P1101-E50	V			V	
CV-117C/P1101-E50		V		V	
CV-117G/P1101-E50			V	V	
CV-117R/P1101-N42	V				V
CV-117C/P1101-N42		V			V
CV-117G/P1101-N42			V		V

V : Compatible

## **Package Checklist**

• CV-117/P1101 Series Panel PC x 1	Power Terminal Block Connector (Female) x 1
Panel Mounting Kit x 1	• Screw Pack x 1
• Utility DVD Driver x 1	Remote Power On/Off Terminal Block Connector x 1
DIO Terminal Block Connector (Female) x 1	Thermal Pad (for CPU Thermal Block) x 1

### **Optional Modules and Accessories**

Model No.	Description
CFM-IGN101	CFM Module with Power Ignition Sensing Control Function, 12V/24V Selectable (43 x 36 mm)
CFM-PoE02	CFM Module with PoE Control Function, Individual Port 25.5W
URM01	Universal 19" Rack Mount Kit for Industrial Panel PC & Industrial Monitor
GST60A12-CIN1	Adapter AC/DC 12V 5A 60W, GST60A12-CIN1, wide temp (-30°C ~ +70°C)
GST120A24-CIN	Adapter AC/DC 24V 5A 120W, GST120A24-CIN, wide temp (-30°C ~ +70°C), level VI
SL2-SL3	US 2 heads power cord, US B type to IEC C13, SVT 18AWG/3C Black 1.8M SL-2+SL-3
SL6-SL3	EU 2 heads power cord, EU G type to IEC C13, H05VV-F 0.75mm2/3G Black 1.8M SL-6+SL-3
QP026-SL3	UK 2 heads power cord, UK I type to IEC C13, H05VV-F 0.75mm2/3G Black 1.8M QP026+SL-3