



Part type designation	Part number
PPC1207WM/BE1/AM72/4G/P/LX	On request
PPC1210WM/BE1/AM72/4G/P/LX	On request
PPC1212WM/BE1/AM72/4G/P/LX	On request
PPC1215WM/BE1/AM72/4G/P/LX	On request

PPC1200 – ECO

Panel PC

Panel PCs from the PPC1200 ECO product series are ideal for compact web visualizations. The brilliant displays impress with high brightness, vibrant colors, and exceptionally wide viewing angles. The modern widescreen displays in sizes 7", 10.1", 12.1", and 15.6" feature high resolutions – the 15.6" display already offers Full HD. The lifespan exceeds 50 000 operating hours.

User input via projected capacitive multi-touch (PCAP) enables gesture control such as pinch-to-zoom, swipe and two-hand operation. The visually appealing, hardened glass surface is easy to clean. The exclusive use of industrial components guarantees a long service lifespan and availability. Permanently soldered RAM and eMMC storage, combined with the absence of moving parts, ensure maximum resistance to shock and vibration. High temperature ranges from 0°C up to +60 °C allow operation under harsh environmental conditions.

The pre-installed browser is designed for industrial applications. The integrated on-screen keyboard enables intuitive data entry while reducing application development effort. Unwanted, automatic updates are prohibited by the browser. This ensures that only released software is used in the field, reducing downtime to a minimum.

The Linux system (based on Debian) provides an user-friendly, web-based configuration tool. Configuration settings can be changed directly on the device or remote via browser. The system software includes further useful services such as SSH, NTP, VNC as well as a Web-API for secure hardware access. This enables for example direct control of LEDs and display brightness from within web applications.

The system software can be adapted individually to customer requirements and can be factory shipped already preconfigured to ensure efficient commissioning.

Features

- Industrial dual-core processor at up to 3.2 GHz
- 4 GB LPDDR5 RAM
- 4 GB eMMC storage medium
- 1x Ethernet 100/1000 Mbit/s with IEEE 1588
- 2x USB-A 2.0
- Brilliant high-resolution widescreen displays in 7" / 10.1" / 12.1" / 15.6"
- Diagnostics and status LEDs
- Standard operating temperature from 0 °C to +60 °C fanless

Common properties

Basic function	PPC1200 - ECO Dual-core processor 1x RJ45 interfaces 100/1000 Mbit/s 2x USB-A 2.0 interface 4 GB onboard eMMC mass storage 4 GB LPDDR5 RAM 7" / 10.1" / 12.1" / 15.6" widescreen display Operating system Linux
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Processor and memory

Processor	Intel® Atom x7211RE
Cores	2
Base clock frequency	1.0 GHz
Max. turbo frequency	3.2 GHz
RAM	4 GB LPDDR5

Mass storage

Internal Storage	4 GB eMMC
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Display	PPC1207	PPC1210	PPC1212	PPC1215
Diagonal	7.0"	10.1"	12.1"	15.6"
Resolution	800 × 480	1280 × 800	1280 × 800	1920 × 1080
Display brightness	500 cd/m ²	500 cd/m ²	800 cd/m ²	350 cd/m ²
Contrast	600:1	800:1	1200:1	1000:1
Half brightness min.	50 000 h	50 000 h	30 000 h	50 000 h
Viewing angle (L, R, U, D)	80°/80°/80°/80°	80°/80°/80°/80°	85°/85°/85°/85°	89°/89°/89°/89°
Touch	Projected capacitive multi-touch			

Interfaces

Ethernet	1x 100/1000 Mbit
USB	2x USB-A 2.0

Synchronization/clocks

Real time clock	Yes
Synchronization	SNTP / PTP / NTP

Diagnostics

Electronic type plate	Yes (application interface and in the engineering tool)
Machine readable type plate	Yes (QR code with type and part information and internet link)
Environmental conditions sensor	Integrated temperature sensor
Operational indications	LED "MOD" (red/green) module status LED "COM" (green/red) communication status LED "APP" (green/red) application-controlled indication

Energy supply

Supply voltage, nominal	24 V DC
Supply voltage, range	18 V to 32 V
Power consumption, continuous, max.	PPC1215: 23.5 W
Input current, continuous, max.	1.3 A @ 18 V DC, T _a = 25 °C
Maximum residual ripple	2.4 V _{ss} at 50 Hz, 60 Hz, 100 Hz and 120 Hz
Permitted voltage interruptions	< 1 ms
Reverse polarity protection	Yes, continuously (up to -32 V)
Power dissipation, typ./max.	PPC1215: 19.6 W / 21.6 W

Product safety				
Galvanic isolation	850 V AC			
Degree of protection acc. IEC 60529	IP65 front / IP20 rear			
Environmental conditions				
Temperature, operating	0 °C to +60 °C			
Temperature, transport and storage	-20 °C to +70 °C			
Installation altitude, max.	4500 m			
Relative humidity, operation	0 % to 100 % noncondensing			
Vibration	1 g (8.4 Hz to 150 Hz) 3.5 mm amplitude (5 Hz to 8.4 Hz) Test duration: 7.5 h			
Shock	15 g max. (test scope 18 shocks)			
Approvals/certificates				
Product safety	CE, UKCA in preparation cULus (NRAQ, NRAQ7) in preparation			
Hazard area operation	ATEX in preparation			
Hazardous substances and waste treatment	RoHS, RoHS China, REACH, WEEE			
Quality management	ISO 9001 for development and production			
Software				
Operating system	Linux Embedded (Debian)			
Software components	Bachmann industrial browser Web configurator Device interface (REST API)			
Mounting/installation				
Mounting type	Assembly of the control cabinet Support arm mounting via VESA 75 in preparation			
Ground connection for protection class I	Yes			
Dimensions	PPC1207	PPC1210	PPC1212	PPC1215
Outer contour W × H [mm]	201.5 × 142	273 × 194	322 × 224	409 × 261
Cutout W × H [mm]	187 × 129	259 × 180	308 × 210	395 × 247
Depth [mm]	54	74	74	74

Order data

Part type designation	Part number	Description
PPC1207WM/BE1/ AM72/4G/P/LX	On request	Panel PC 7.0" (800 × 480) Projected capacitive (PCAP) multi-touch; Intel® Atom x7211RE; 4 GB LPDDR5 RAM; 1x Eth 100/1000; 2x USB 2.0; 4 GB eMMC onboard; OS: Linux embedded; operating temp. 0 °C to +60 °C
PPC1210WM/BE1/ AM72/4G/P/LX	On request	Panel PC 10.1" (1280 × 800) Projected capacitive (PCAP) multi-touch; Intel® Atom x7211RE; 4 GB LPDDR5 RAM; 1x Eth 100/1000; 2x USB 2.0; 4 GB eMMC onboard; OS: Linux embedded; operating temp. 0 °C to +60 °C
PPC1212WM/BE1/ AM72/4G/P/LX	On request	Panel PC 12.1" (1280 × 800) Projected capacitive (PCAP) multi-touch; Intel® Atom x7211RE; 4 GB LPDDR5 RAM; 1x Eth 100/1000; 2x USB 2.0; 4 GB eMMC onboard; OS: Linux embedded; operating temp. 0 °C to +60 °C
PPC1215WM/BE1/ AM72/4G/P/LX	On request	Panel PC 12.1" (1920 × 1080) Projected capacitive (PCAP) multi-touch; Intel® Atom x7211RE; 4 GB LPDDR5 RAM; 1x Eth 100/1000; 2x USB 2.0; 4 GB eMMC onboard; OS: Linux embedded; operating temp. 0 °C to +60 °C