

BETA Panel PC

Panel PC configuration of the modular BETA platform featuring a 9.7" LCD and dual-core x86 APU for Windows applications.

PROCESSOR



OPERATING SYSTEM



I/O



> Windows Ready

Runs all of your existing Windows-based applications with minimal effort in migration.

> Passively Cooled

At 4.5W TDP, the AMD G-Series APU is ideal for power-conscious applications.

> Pre-Integrated for Simplicity

Single board computer, LCD and touch screen delivered as one pre-integrated unit.

> Easily Connect Your Own Product

Add your own electronics via the 50-pin general purpose connector.

SUMMARY

The BETA Panel PC is a pre-integrated touch screen module configuration designed for industrial automation applications and in the upgrade of legacy x64 systems. Run Windows 10, Ubuntu or Android x86 and just load your existing software to get started.

- 9.7" LCD screen
- Projected Capacitive touch overlay
- Dual-core 1GHz AMD Jaguar x64 / x86 APU
- Radeon graphics supporting DirectX® 11.2
- 4GB 64-bit DDR3L (low power) 1333 memory
- MicroSD, M.2 SATA SSD storage & SATA connector
- USB 3.0 and USB 2.0 ports
- SMBUS and 12 GPIOs
- Three serial ports - RS232 and RS232/422/485
- LVDS and HDMI display options
- WiFi, Bluetooth and 3G available via M.2 modules



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TECHNICAL SPECIFICATIONS

Core System

Processor	AMD Embedded G-Series LX, dual-core CPU x2 'Jaguar' x64 / x86 cores, 1MB shared L2 cache 1GHz clock speed
Memory	2GB or 4GB DDR3L (low power) DDR-1333 memory speed 64-bit memory bandwidth
Storage	MicroSD socket, M.2 SSD or SATA options
Graphics	AMD Radeon R1E graphics processor DirectX 11.2 HDMI display LVDS display Dual independent displays
Audio	High definition audio Cirrus Logic CS4207 codec Stereo Inputs and Outputs 3W Class-D amplifier
Watchdog	Yes
Real Time Clock	Yes - battery backup option

Display & Touch

Touch Interface Type	Projected Capacitive or Resistive
LCD Size	9.7"
LCD Resolution	1024x768
LCD Brightness	400 cd/m ² typical
LCD Contrast	800 typical
LCD Viewing Angles	89, 89, 89, 89 typical

Operating System

OS Support	Windows 10 Linux Ubuntu Android x86
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I/O

Ethernet	10/100/1000 LAN via Intel I211 Controller
Wireless	WiFi, Bluetooth, 3G and GPS via USB or M.2 modules SIM socket
Serial	x1 USB 3.0 connector x1 USB 2.0 connector x1 USB 2.0 via 50-way expansion interface SMBUS up to 400KHz x2 RS232 ports x1 RS232 / RS422 / RS485 ports (factory option) <i>Note: The RS485 TX/RX switch timing may be subject to operation system latency</i>
GPIO	12 signals
Camera Interface	USB
Expansion/Other	x2 M.2 sockets (2230 Key A, 2242 Key B) 50-way expansion interface Various adapters available (see right of page)

Power

Input Connector	Screw Terminal
Input Voltage	Recommended operating voltage for reliable operation: 12V DC +/- 5% Absolute maximum voltage: 17v DC
Power Consumption	TBD

Physical

Operating Temperature	Standard (0 to 50°C)
Storage Temperature	-10 to 60°C
Humidity	5 - 85% non-condensing
Overall Dimensions	241mm (W) x 185mm (H) x 36mm (D)
Mounting Options	Panel mount stud fix
Approvals	CE EMC

EXPANSION ADAPTERS, EXPLAINED

The BETA platform features a unique 50-way expansion interface that enables you to integrate the system into your existing electronics with minimal additional development. This expansion interface can make use of adapters to provide alternative connectivity options, such as Screw Terminal, Pico Blade and CAN bus.



ALTERNATIVE CONFIGURATIONS

We also offer a variety of other configurations of the BETA platform to suit different requirements and applications:



› BETA Lite

Low-cost configuration with a 4.3" LCD and Resistive touch screen.



› BETA Standard

General-purpose configuration featuring a 7.1" LCD and Projected Capacitive touch screen.



› BETA Mobile

Packed with communications features including 3G, GPS, WiFi and Bluetooth, plus a rear panel and battery enabling mobile handheld use.



› Create Your Own BETA Configuration

The BETA platform is modular, giving you the flexibility to create your own configuration of screen size, touch interface, processing power, I/O and much more.

For more information, visit bluechiptechnology.com

