

PowerBrick™ Ultra Plus

Quick Guide Edition 2.0



Small and rugged Industrial Computer with Intel® Gen4th Core™ i5



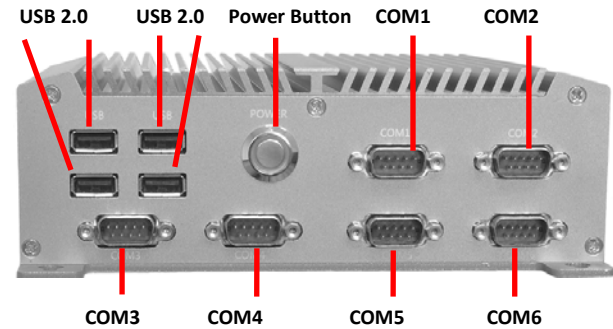
Acura Embedded Systems Inc.

1. OVERVIEW

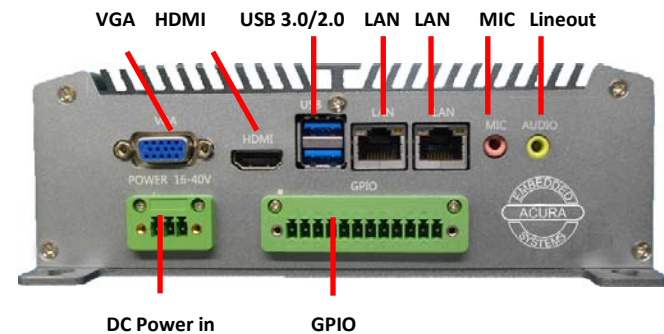
PowerBrick Ultra Plus is based on an **Intel® Gen 4th Core™i5 4200U** processor with **Intel® HD Graphics 4400** and **Intel® Haseell U SOC** chipset. Its on board default **4 GB** can early upgrade to **12 GB**. The design focuses on elements essential for a variety of industrial applications and environments excluding unnecessary hardware. The architecture is modular which allows for upgrading and expansions.

2. MAIN FEATURES

- PowerBrick Ultra Plus front Interface



- PowerBrick Ultra Plus rear Interface



System

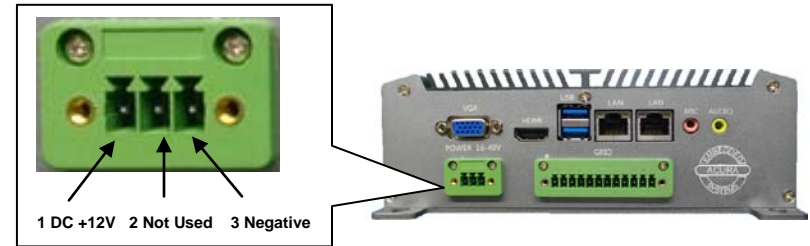
CPU	Onboard Intel Gen 4 Core i5 4200U
Chipset	INTEL Haswell U SOC BIOS EFI BIOS
Memory	Onboard default 4GB with Technology framework Signal Channel DDR3 1066/1333/1600MHz,maximum up to 12GB.
Graphics	Intel HD Graphics 4400 VGA+HDMI, Synchronous or asynchronous display
Resolution	VGA maximum:1920x1200 HDMI maximum:2048x1536
Storage	2xSATA2.0 Maximum transmission rate 3Gb/s M-SATA 1xmSATA socket ,Supported SANDISK protocol ,Max. transmission rate 3Gb/s (default installed 120GB SANDISK)
I/O	
Serial Port	5xRS232 (COM1,2,4,5&6) ,1xRS485 (COM3 only), RS485 supported automatic flow control PS/2
USB Port	2xUSB3.0 (compatible USB1.1/2.0) 4xUSB2.0, Max. Current supported 5V/1A
LAN	2x 1000M RJ45 LAN ,RTL8111E-VL,10/100/1000Mbps
Wireless(Optional)	1x WIFI with Bluetooth (miniPCIE card)
Audio	1x Line-out, Realtek ALC662 HD AUDIO 1x Mic-in onboard power amplifier(6W 8Ω)SPDIF
GPIO	1x 8 bit (4pin in/4pin out)/ 3.3V@24mA / Sample code optional/Free definition of input/output
Extended bus	1x miniPCIE socket ,supported PCIE and USB device SMBUS (default installed WIFI with Bluetooth card)
Watchdog	Watchdog Timer Support, Offer 1 – 255 Step(Optional)
Environment	
Operating Temp	-20°C~60°C (-32°F~140°F)
Storage Temp	-40°C~85°C (-104°F~185°F)
Relative Humidity	10%~90% (non-condensing)

Power input DC12V5A/7A Power consumption 35W

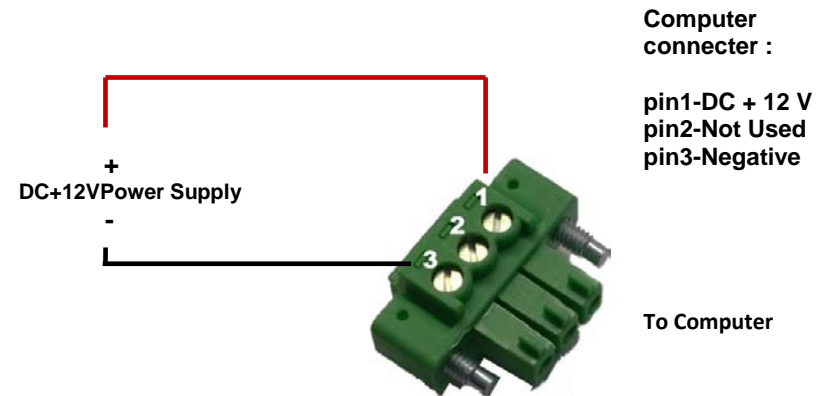
Qualification Certifications CE, FCC,, ROHS

Mechanical Construction Aluminum alloy
Mounting Supports wall-mount
Weight 2.3 kg (5 LBs)
Dimensions 195 x 185 x 65 mm (7.7"x7.3"x2.6")

3. POWER INPUT CONNECTOR



Power Brick Ultra Plus's Power Wiring Diagram



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