Quick Start Guide
UP Squared Pro
Industrial, Efficient and Fast

I/O interfaces include USB 3.0 OTG, USB 3.2 Type-A 2x GbLAN, HDMI 1.4b, DP 1.4, 40-pin GPIO, COM Ports (2x RS232/422/485), M.2 2230 E key, M.2 2280 M key. Supports SG Module (M.2 3052) with micro-SIM card port.

What's in your kit?

1x UP Squared Pro board
1x active heatsink (attached)
1x RTC battery (attached)

You will need the following, not included:
- 12V - 24V Power adapter and Power cord
- USB drive for OS installation
- A monitor with HDMI or DP
- USB keyboard and mouse
- Ethernet cable or WiFi (optional for online installation/updates)

1. GET READY

Please refer to https://github.com/up-board/up-community/wiki/Setup for instructions on how to prepare the bootable USB drive for your preferred Operating System:

- The UP Squared Pro board comes with the already attached passive heatsink and RTC battery

2. CONNECT HARDWARE

3. HARDWARE SETUP DETAILS

1. Insert USB drive before connecting the 12V - 24V DC adapter.
2. Please connect HDMI before powering on the device. Upon receiving power, the board will turn on automatically.
3. The board is set to automatically try to boot from the inserted USB drive.
4. You do not need to make change to the BIOS setting to install the operating system.

For more info on the BIOS and how to change the BIOS password, see https://github.com/up-board/up-community/wiki

Caution: This is a high performance system and get hot during operation

www.up-board.org / www.up-shop.org / www.up-community.org
**Product Specifications**

<table>
<thead>
<tr>
<th>System</th>
<th>UP Squared Pro</th>
</tr>
</thead>
<tbody>
<tr>
<td>SoC</td>
<td>Intel® Celeron® N3350 (up to 2.4 GHz)</td>
</tr>
<tr>
<td></td>
<td>Intel® Pentium® N4200 (up to 2.5 GHz)</td>
</tr>
<tr>
<td></td>
<td>Intel Atom® x7-E3950 (up to 2.0 GHz)</td>
</tr>
<tr>
<td># of Cores</td>
<td>2</td>
</tr>
<tr>
<td>Graphics</td>
<td>Intel® HD Graphics 500+ N3350</td>
</tr>
<tr>
<td></td>
<td>Intel® HD Graphics 500+ N4200/E3950</td>
</tr>
<tr>
<td>VPU</td>
<td>optional (via m.2 2280)</td>
</tr>
<tr>
<td>FPGA</td>
<td>Intel® FPGA Altera MAX 10</td>
</tr>
<tr>
<td>System memory</td>
<td>2GB</td>
</tr>
<tr>
<td></td>
<td>4GB</td>
</tr>
<tr>
<td></td>
<td>6GB</td>
</tr>
<tr>
<td>Storage capacity</td>
<td>32GB</td>
</tr>
<tr>
<td></td>
<td>64GB</td>
</tr>
<tr>
<td>Power Requirement</td>
<td>DC-IN (12V-24V) lockable power connector</td>
</tr>
<tr>
<td>Power Supply Type</td>
<td>AT/ATX (default AT mode)</td>
</tr>
</tbody>
</table>

**Safety Precaution**

Please read the following safety instructions carefully.

1. All cautions and warnings on the device should be noted.
2. Make sure the power source matches the power rating of the device.
3. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
4. Always completely disconnect the power before working on the system’s hardware.
5. No connections should be made when the system is powered with a sudden rush of power as it may damage sensitive electronic components.
6. If the device is not to be used for a long time, disconnect it from the power supply to avoid damage by transient over-voltage.
7. Always disconnect this device from any power supply before cleaning.
8. While cleaning, use a damp cloth instead of liquid or spray detergents.
9. Make sure the device is installed near a power outlet and is easily accessible.
10. Keep this device away from humidity.
11. Place the device on a solid surface during installation to prevent it from falling.
12. Do not cover the openings on the device. This is to ensure optimal heat dissipation.
13. Keep an eye for high temperatures when the system is running.
14. Do not touch the heat sink or heat spreader when the system is running.
15. Never pour any liquid into the openings. This could cause fire or electric shock.
16. As most electronic components are sensitive to static electrical charge, be sure to ground yourself when installing internal components to prevent static charge. Use a grounding wrist strap and contain all electronic components in any static-shielded containers.
17. If any of the following situations arise, please contact our service personnel:
   - Damaged power cord or plug
   - Liquid intrusion through the device
   - Exposure to moisture
   - Device is not working as expected or in a manner as described in this manual
   - The device is dropped or damaged
   - Any obvious sign of damage displayed on the device
18. Do not leave this device in an uncontrolled environment with temperatures beyond 60 °C. The device’s permitted storage temperatures are (-40°C – 85°C) in order to prevent damage.

**China RoHS Requirements**

<table>
<thead>
<tr>
<th>Component Name</th>
<th>Hazardous or Toxic Materials or Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB and Components</td>
<td>0 0 0 0 0 0 0</td>
</tr>
<tr>
<td>Wires &amp; Connectors, for Ext. Connections</td>
<td>0 0 0 0 0 0 0</td>
</tr>
</tbody>
</table>

Notes:
- This form is prepared in compliance with the provisions of SJ/T 11364. 
- The level of toxic or hazardous material present in this component is below the limit specified by GB/T 26572.
- The level of toxic or hazardous material present in the component exceeds the limits specified by GB/T 26572, but is still in compliance with EU Directive 2011/65/EU (RoHS 2).

**FCC Statement**

This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation. 

**Regulatory**

- CE
- FCC
- RoHS

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