UP Squared 6000 Edge Computing Kit
UP Squared 6000 Edge Computing Kit with Intel® Atom® Processor SoC

Features
- Intel® Atom® x6425RE Processor SoC
- Onboard LPDDR4 Memory 8GB
- Onboard eMMC Storage 64GB
- GbE x 3, 2.5GbE x 1
- USB 3.2 x 3 (Type A x 2, Type C x 1)
- 40 pin GPIO x 2 (1x from MB, 1x from CB(PSE))
- DP 1.2 / HDMI 2.0b
- COM x 2 (1x from MB, 1x from CB(PSE))
- M.2 2230 E-Key / M.2 2280 M-Key / 3052 B-Key x 1
- SATA3 x 2 (1x from MB, 1x from CB)
- TPM 2.0
- 12V DC-in, 6A

Specifications

System
- CPU Intel® Atom® X6425RE Processor SoC
- Memory Onboard 8GB DDR4
- Graphics Intel® UHD Graphics
- Storage Onboard eMMC 64GB
- Ethernet GbE x 3 (Intel® i210-IT x 1, Marvell Alaska x 2 from PSE), 2.5GbE x 1 (i225-IT)
- WIFI/BT Optional with M.2 2230 E-key x 1
- Audio Line out x 1
- Mic in x 1
- USB
  - USB 3.2 Gen 2 Type A x 2
  - USB 3.2 Gen 2 Type C (support OTG) x 1
  - Micro USB (PSE debug port) x 1
- Expansion Slot
  - 40 pin GPIO x 2 (1x from MB, 1x from CB(PSE))
  - M.2 2230 E-key x 1
  - M.2 2280 PCIe Gen3.0x2 M-key x 1
  - SATA3 x 2 (1x from MB, 1x from CB)
  - M.2 3052 B-key x 1
  - Mini PCIe slot x 1 (via USB only)
  - Micro SIM slot x 2
  - TPM 2.0

I/O Placements
- Power DC-in Jack x 1, Power Button x 1
- USB
  - USB 3.2 Gen 2 Type A x 2
  - USB 3.2 Gen 2 Type C (support OTG) x 1
  - Micro USB (PSE debug port) x 1
- Display Port
  - HDMI 2.0b x 1
  - DP 1.2 x 1
- Ethernet RJ45 x 4
- COM RS232/RS422 x 1 (From MB)
- RS232 x 1 (From CB(PSE))

Environment
- Power 12V DC-in (Lockable plug)
- Form Factor 4.6” x 4.2” x 3.2” (11.7 x 10.6 x 8.2 cm)
- Gross Weight 2.65lb (1.2Kg)
- Operating Temperature 32°F ~ 122°F (0°C ~ 50°C)
- Operating Humidity 0% ~ 90% relative humidity, non-condensing
- Certification CE/FCC Class A, RoHS Compliant, REACH
- OS Support Preinstalled Software, Ubuntu 20.04 LTS and 5.13 Kernel
  - Intel® Media SDK, Intel® Distribution for Python*
  - MRAA and UPM I/O and sensor libraries for C++, Python*, Java*, and JavaScript*
  - Docker-CE, k3s Kubernetes, ONNX, AWS Greengrass, SQLite 3
- *CB=Carrier board; MB=Main board

Note: All specifications are subject to change without notice.
UP Squared 6000 Edge Computing Kit

Dimension

Unit: mm

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPN-EDGE-EHLX4RE-A10-0864-FDK</td>
<td>UP Squared 6000 system, Atom x6425RE CPU, 8GB RAM, 64GB eMMC, FDK image pre-load</td>
</tr>
</tbody>
</table>

Optional Accessories

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-P512VGA2WRF</td>
<td>Power Supply Unit 12V@6A, 72 Watt</td>
</tr>
<tr>
<td>EP-P512V8A96WFPX</td>
<td>Power Supply Unit 12V@6A, 96 Watt</td>
</tr>
<tr>
<td>EP-CIPC2500NPSU</td>
<td>Power cord (EU plug)</td>
</tr>
<tr>
<td>EP-CIPC12500PSU</td>
<td>Power cord (US plug)</td>
</tr>
<tr>
<td>EP-CIPC2500PKUK</td>
<td>Power cord (UK plug)</td>
</tr>
<tr>
<td>RE-WFV7-9260NMP</td>
<td>Intel® Wireless-AC 9260 M.2 2230 WiFi kit</td>
</tr>
<tr>
<td>EP-SSM280256TKS</td>
<td>M.2 SSD 256GB, PCIe Gen3 x 4, M Key, 3D TLC, Kingston</td>
</tr>
<tr>
<td>RE-FM5G150NA210</td>
<td>5G module North America M.2 3052 with RF cable and Antenna</td>
</tr>
<tr>
<td>RE-FM5G150AE210</td>
<td>5G module Asia (excluding China)/Europe/Australia M.2 3052 with RF cable and Antenna</td>
</tr>
</tbody>
</table>

Packing List

- UP Squared 6000 Edge Computing Kit
- Quick Start Guide
- 40pin Phoenix Connector x 2
- 12V/6A Power adapter x 1
- Power Cord for EU x 1
- Power Cord for US x 1
- Ubuntu License sticker x 1

Note: All specifications are subject to change without notice.