

Christ IIoT Blue Box

Datasheet

- Made in Germany
- USV Integrated
- Ultra Compact Design, Fanless
- Secure Element

System

| | | |
|------------------|--------------------------------------|----------------------------|
| CPU | NXP® i.MX6DL, Dual Core 1 GHz | NXP® i.MX6Q, QuadCore 1GHz |
| Graphic | 3D Vivante GC880 2D Vinante GC320 | |
| Video Decoder | H.264, MPEG-4/XviD, MPEG-2, H.263 | |
| Memory | 1 / 2 GB DDR3 RAM | |
| Storage | 4 / 8 GB eMMC FLASH | |
| CMOS Battery | Lithium Battery (CR2450/610 mAh) | |
| Operating System | Linux Embedded | |
| USV | Integrated | |
| Secure Element | Integrated | |

Standard Interfaces

| | |
|---------------|--------------------------------------------------------------------------------------------------------------------|
| USB | 2 x USB Host 2.0 (Type A) 1 x USB Device 2.0 (Type B) |
| Ethernet | 1 x 1 Gbit Ethernet (RJ45, Connector 1) 1 x 100 Mbit Ethernet (RJ45, Connector 2) |
| Communication | 1 x RS-232 / RS-485 (Sub-D) |
| Digital I/O | 1 x Digital I/O Connector (including 8 x input and 1 x output) galvanic isolated (Phoenix DMC 1,5/6-G1-3,5-P20THR) |
| Antenna | 2 x SMA Connector |
| Status LEDs | 6 x Status LED (mobile communications) |

Internal Interfaces

| | |
|---------------|---------------------------------------------------|
| M.2 Connector | 1 x Key B: USB, SIM, SATA 1 x Key E: USB, PCIe |
| SIM | 1 x SIM Socket |
| Storage | 1 x MicroSD (up to 64GB) |
| LTE | 1 x M.2 LTE Modul Fibocom L830-EB-01 |

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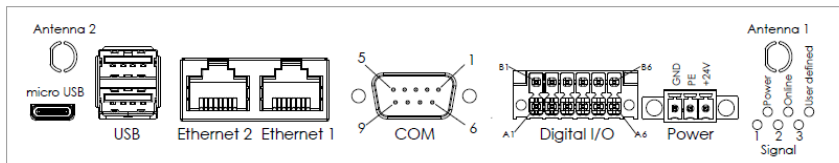
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Power Supply

| | | |
|-------------------------------------|------------------------------------------------|-----|
| Supply Voltage | 24 VDC \pm 20% | |
| Power Consumption (nom/max*) | Tbd | Tbd |
| Power Button | No | |
| Power Connector | Phoenix 3-pol MC 1,5/ 3-STF-3,5 BK (screwable) | |

*max. periphery consumption included (e.g. 1xUSB 2.0 equals 2.5W)

INTERFACES



COM Connector Pinning

| PIN | Function | Description |
|-----|------------|------------------------|
| 1 | NC | Not Connected |
| 2 | RS-232 RX | RS-232 Receive Data |
| 3 | RS-232 TX | RS-232 Transmit Data |
| 4 | RS-485 N | RS-485 Negative |
| 5 | GND | Ground |
| 6 | RS-485 P | RS-485 Positive |
| 7 | RS-232 RTS | RS-232 Request to Send |
| 8 | RS-232 CTS | RS-232 Clear to Send |
| 9 | NC | Not Connected |

Digital I/O Connector Pinning

| PIN | Function |
|-----|----------|
| A1 | GND_IN |
| B1 | IN0 |
| A2 | IN1 |
| B2 | IN2 |
| A3 | IN3 |
| B3 | IN4 |
| A4 | IN5 |
| B4 | IN6 |
| A5 | IN7 |
| B5 | OUT_NO |
| A6 | OUT_COM |
| B6 | OUT_NC |

Status LED (left to right)

| LED | Signal |
|-----|--------------------|
| 1 | Power |
| 2 | Online |
| 3 | User defined (RGB) |
| 4 | Signal 1 (mobile) |
| 5 | Signal 2 (mobile) |
| 6 | Signal 3 (mobile) |

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Mechanical & Environmental

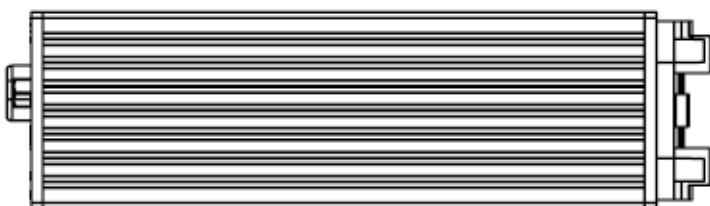
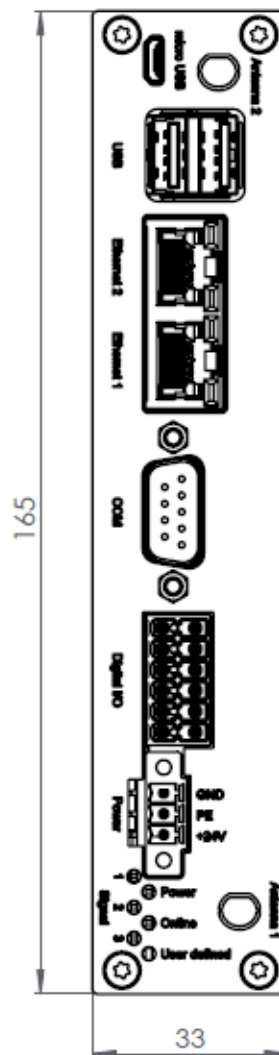
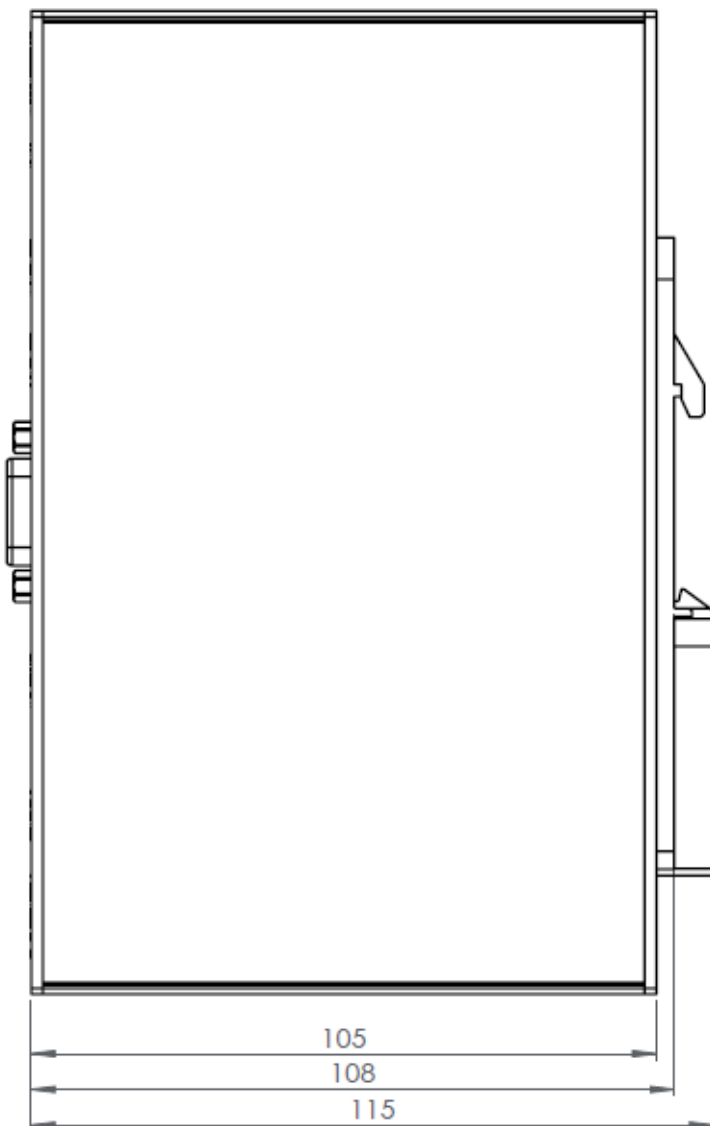
| | |
|------------------------------|-----------------------------------------------------|
| Housing Front | Aluminium / Silver |
| Dimensions | 115 mm x 165 mm x 33 mm |
| Mounting | DIN Rail, 35 mm x 7.5 mm DIN Rail, 35 mm x 15 mm |
| Weight | Tbd kg |
| Cooling | Passive |
| Operating Temperature | 0 ~ 60 °C |
| Storage Temperature | -20 ~ 80 °C |
| Humidity | 0 ~ 90% (non condensing @60°) |
| Protection Class | IP20 |
| Certification | CE, EN55032 Class A, EN55024 |

Never cover the Christ IIoT Blue Box completely or build it in a small closed and unvented housing.

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Dimensions



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Ordering Information

| Art. No.: | CPU | | RAM | | Storage | | LTE |
|-----------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| | NXP i.MX6DL | NXP i.MX6Q | 1 GB | 2 GB | 4 GB eMMC FLASH | 8 GB eMMC FLASH | M.2 LTE Module |
| E786250 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| E786251 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| E786253 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

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Contact

Christ Electronic Systems GmbH
Alpenstraße 34
87700 Memmingen

Phone:
+49 8331 8371-0 (Main Office)
+49 8331 8371-500 (Service)

Mail:
info@christ-es.de

Homepage:
<https://www.christ-es.com>

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