BM3300

Fanless Book Mounting IPC based on Intel® Skylake U platform

ASEM
DIGITAL AUTOMATION TECHNOLOGIES

Book Mounting IPCs - Concepts

On top interfaces

- Ergonomic cabling
- Reduced installation space
- Protection against accidentally cable disconnection

Front access

- Better visibility of signals/warnings
- Better access to removable devices like CFast and battery

Mechanic

- Full aluminum
- Compact, solid and robust
- Elegant industrial design
- Front interfaces protection door

Thermic dissipation

- Fanless operation and 0÷50°C operating temperature even with Core i7 processor

BM3300 - Highlights

- **Fanless Book Mounting IPC** (0÷50°C operating temperature)
  - Compact dimensions
  - Cabling from top
  - Front access to signaling, interfaces and extractable devices
- **ASEM UBIQUITY Basic Win32/64** runtime included
- **Intel® Skylake U** 15W dual core processors
- **1 x SODIMM DDR4 RAM** system memory expandable up to **16GB**
- **On top interfaces**
  - 3 x Ethernet 10/100/1000 Mbps
  - 2 x USB 3.0
  - 1 x DVI-D or 1 x Remote Video link (DVI-D and USB 2.0 up to 100 m)
  - Serial and USB add-on boards (optionals)
- **Front access**
  - Signaling LEDs and control buttons
  - 1 x CFast slot
  - 1 x system battery removable
  - 1 x USB 3.0
- Mass storage **1 x CFast, 1 x mSATA SSD** and **1 x 2,5" HDD/SSD** with SATA III interfaces
- A **DVI-D** video output or in alternative an integrated **Remote Video Link video output** for remotation of DVI-D and USB 2.0 signals up to 100 m
- **Isolated 24V DC power supply** input and optionally UPS with external battery pack

UBIQUITY INSIDE

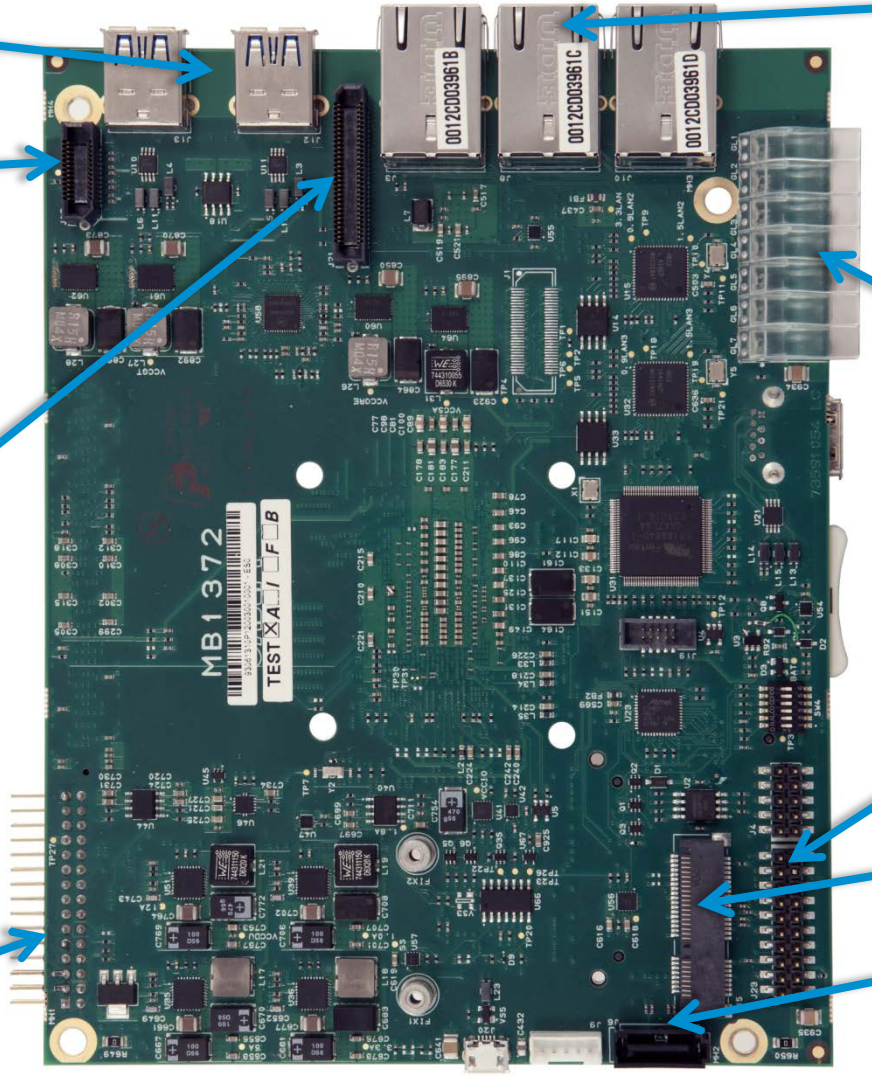
BM3300 - Features 1/2

	BM3300	BM3300 RVL
PROCESSOR	Intel® Celeron 3955U 2.00GHz 64bit, 2 cores / 2 threads, 2MB Smart cache, soldered Intel® Core i3-6100U 2.30GHz 64bit, 2 cores / 4 threads, 3MB Smart cache, soldered Intel® Core i5-6300U 2.40GHz (3.00GHz Turbo) 64bit, 2 cores / 4 threads, 3MB Smart cache, soldered Intel® Core i7-6600U 2.60GHz (3.40GHz Turbo) 64bit, 2 cores / 4 threads, 4MB Smart cache, soldered	
CHIPSET	Intel® Skylake U PCH (Platform Controller Hub) included into processor chip	
VIDEO CONTROLLER	Intel® HD Graphics 510 integrated in Celeron processor, 300MHz / 900MHz Intel® HD Graphics 520 integrated in Core processors, 300MHz / 1GHz (i3/i5) or 1,05GHz (i7) DirectX 12 and OpenGL 4.4 support	
SYSTEM MEMORY - RAM	4GB or 8GB or 16GB (1 x SODIMM DDR4 module)	
MASS STORAGE	1 x bootable CFast SATA III slot on board with external front access 1 x onboard connector for direct insertion of mSATA SSD SATA III 1 x onboard connector for 2,5" SSD/HDD 24x7 SATA III with internal installation kit	

BM3300 - Features 2/2

		BM3300	BM3300 RVL
LAN		3 x LAN 10/100/1000Mbps, top (2 x Intel® I210, 1 x Intel® I219LM))	
USB		1 x USB 3.0, front (Type-A) 2 x USB 3.0, top (Type-A)	
VIDEO OUTPUT		1 x DVI-D	1 x RJ45 Remote Video Link (DVI-D and USB 2.0 up to 100 m)
ADD-ON INTERFACES (optional, max 1)		1 x RS232/422/485 (DB15M) + 1 x USB 2.0 (Type-A), top 1 x RS232/422/485 (DB15M) isolated + 1 x USB 2.0 (Type-A), top 2 x RS232, top (DB9M) 2 x USB 2.0, top (Type-A)	
POWER SUPPLY UNIT		24VDC isolated or 24VDC isolated with UPS and external battery pack	
CASE	Installation	For wall book mounting	
	Material	Alluminum alloy 6082/5754/5056	
O.S. CERTIFIED		Microsoft Windows 10 IoT Enterprise 2016 64bit; Microsoft Windows 8.1 Industry Pro 32/64bit; Windows 7 Pro/Ultimate 32/64bit; Microsoft Windows Embedded Standard 7E/7P 32/64 bit; Linux	
		Other operating systems, such as VxWorks, QNX, etc., have not been certified by ASEM but they are reasonably supported by the Intel platform after verification of compatibility.	
OPERATING TEMPERATURE		0°C÷+50°C 0°C÷+45°C with 24x7 HDD	
APPROVALS		CE, cULus 61010 (pending)	

BM3300 - Motherboard «All-in-one» 1372, top



2 x USB 3.0

3 x LAN 10/100/1000

DVI-I / RVL connector

POWER ON
UPS
HDD ACTIVITY
OVER TEMPERATURE / BATTERY FAULT
WATCHDOG / RESET FACTORY DEFAULT

Add-on I/F connector

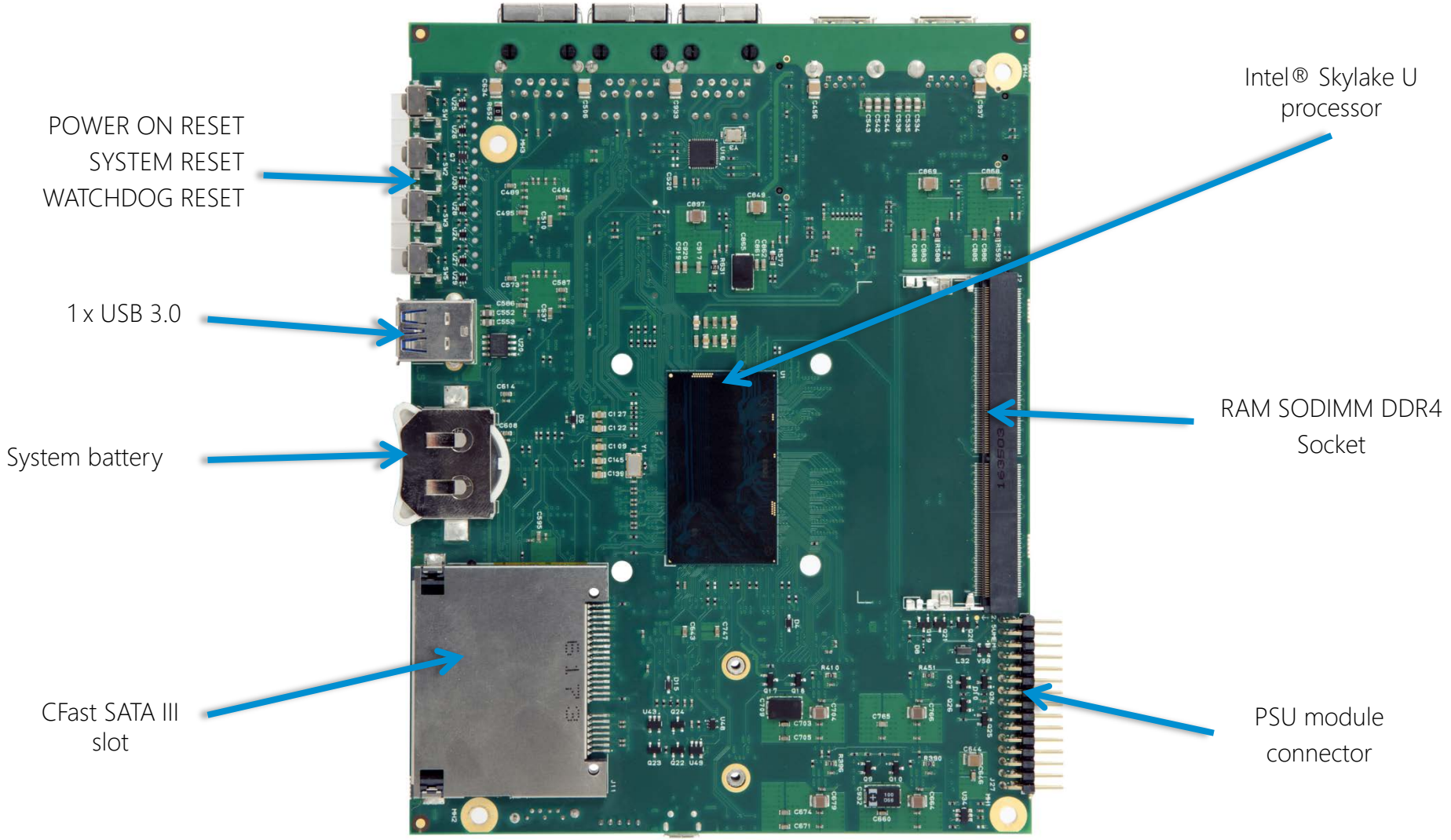
TPM module connector

mSATA SATA III connector

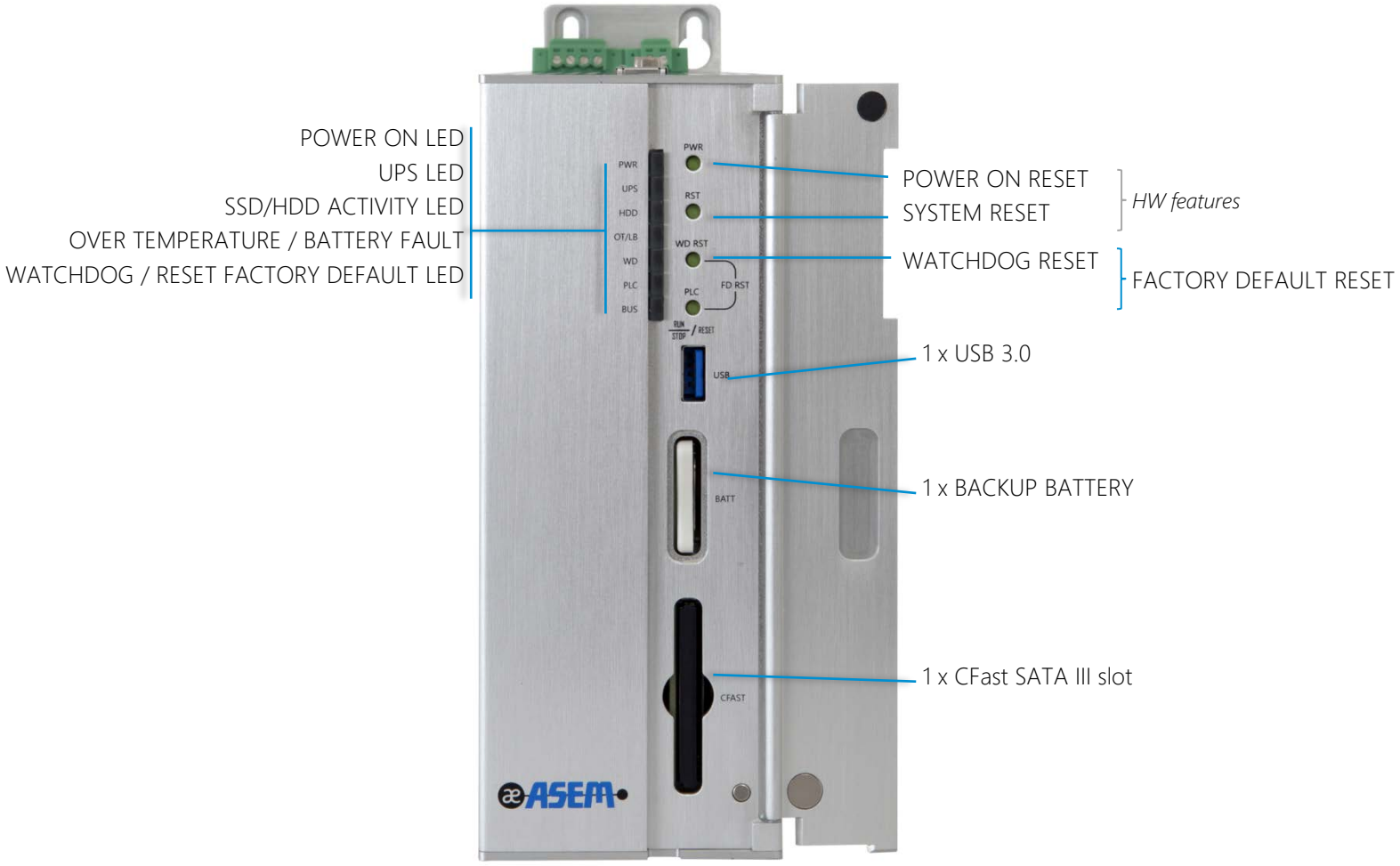
2,5" SSD/HDD SATA III connector

PSU module connector

BM3300 - Motherboard «All-in-one» 1372, bottom

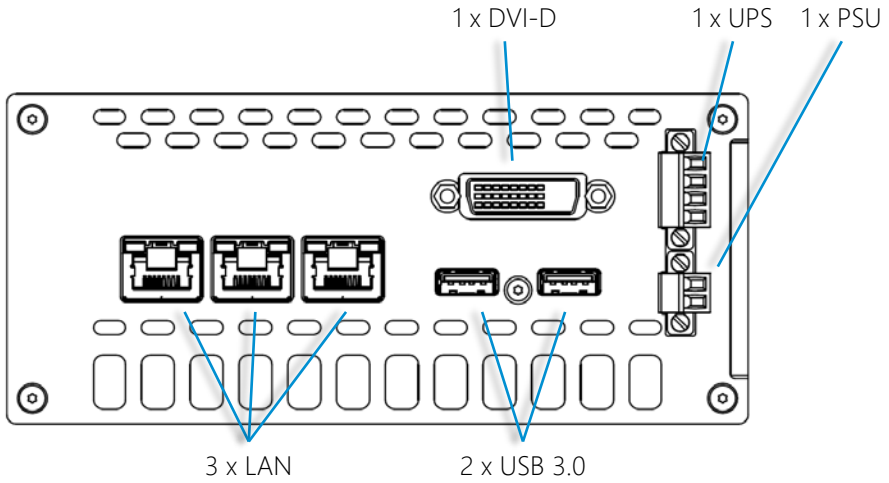


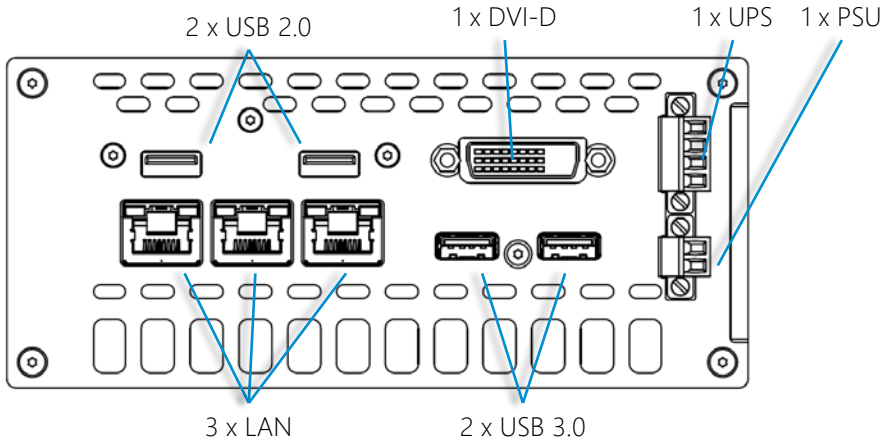
BM3300 – Front interfaces & Connectors



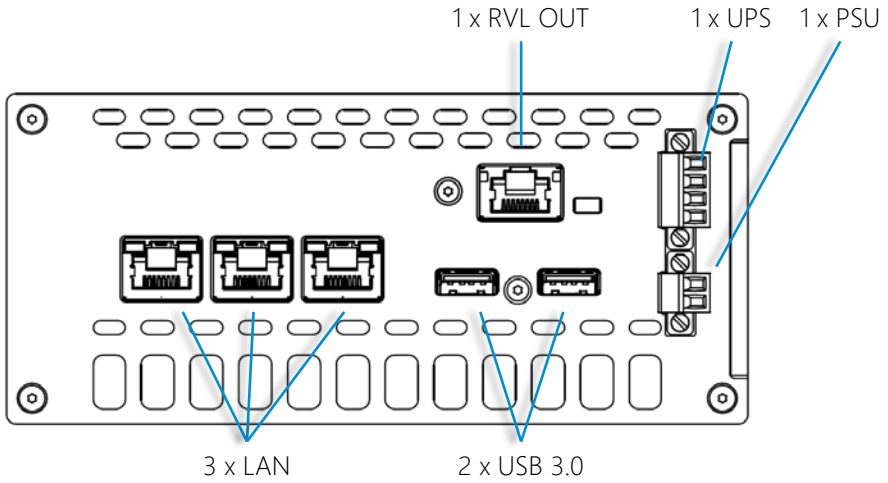
BM3300 – Top interfaces & Connectors 1/2

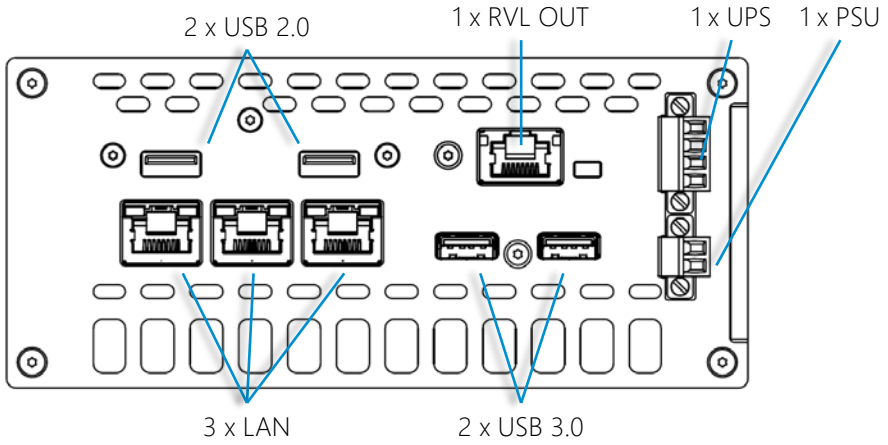
BM3300



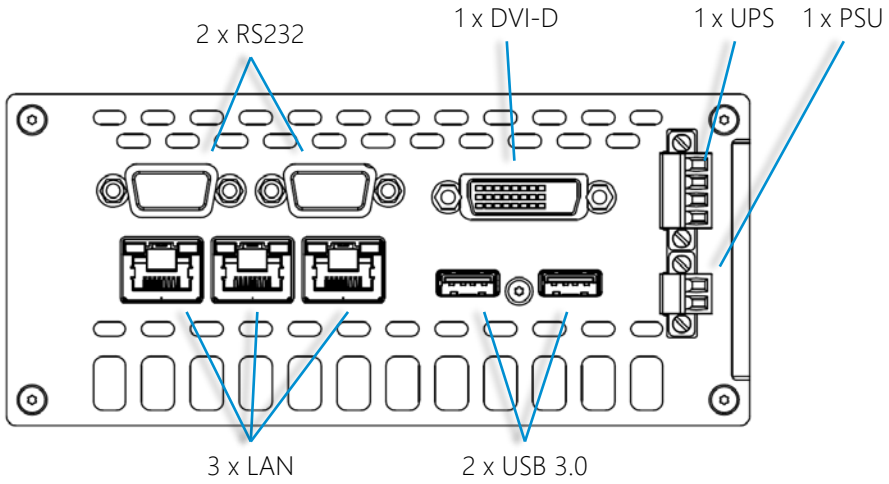


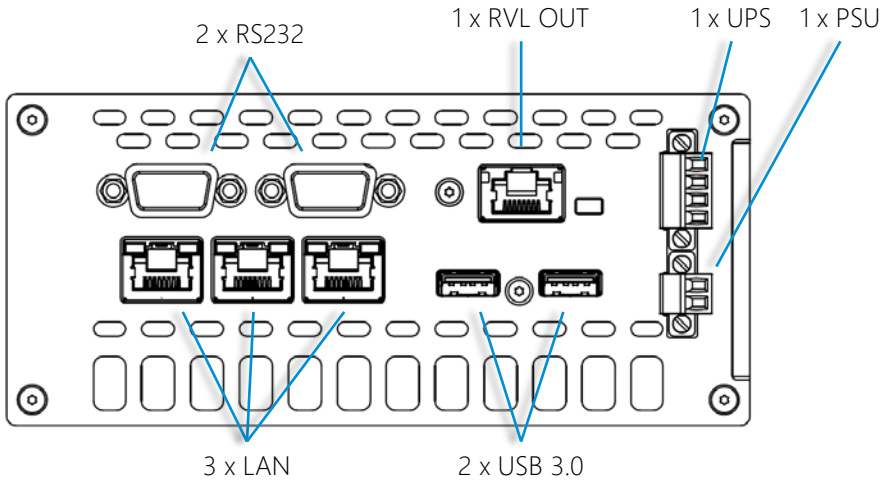
BM3300 RVL

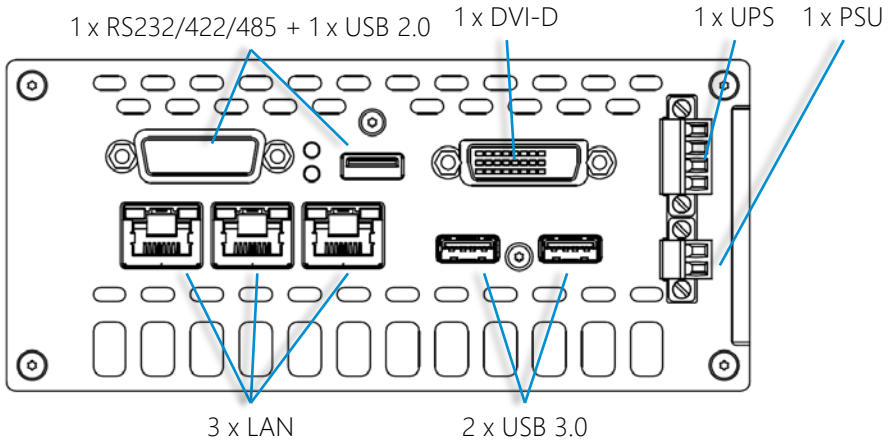


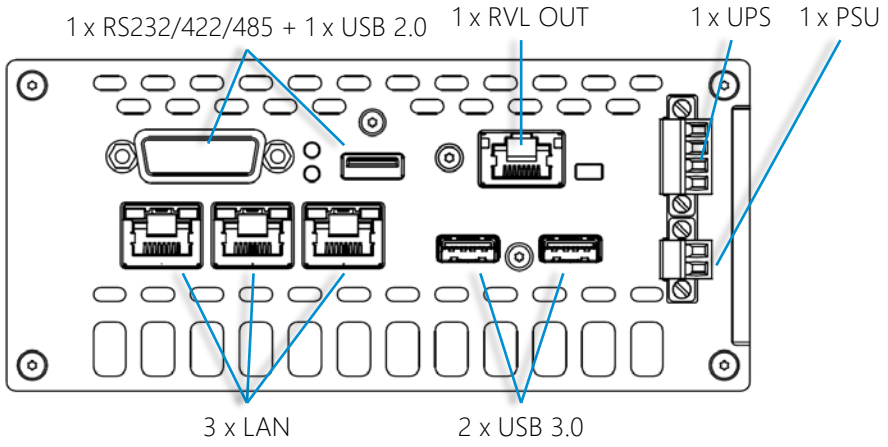


BM3300 – Top interfaces & Connectors 2/2

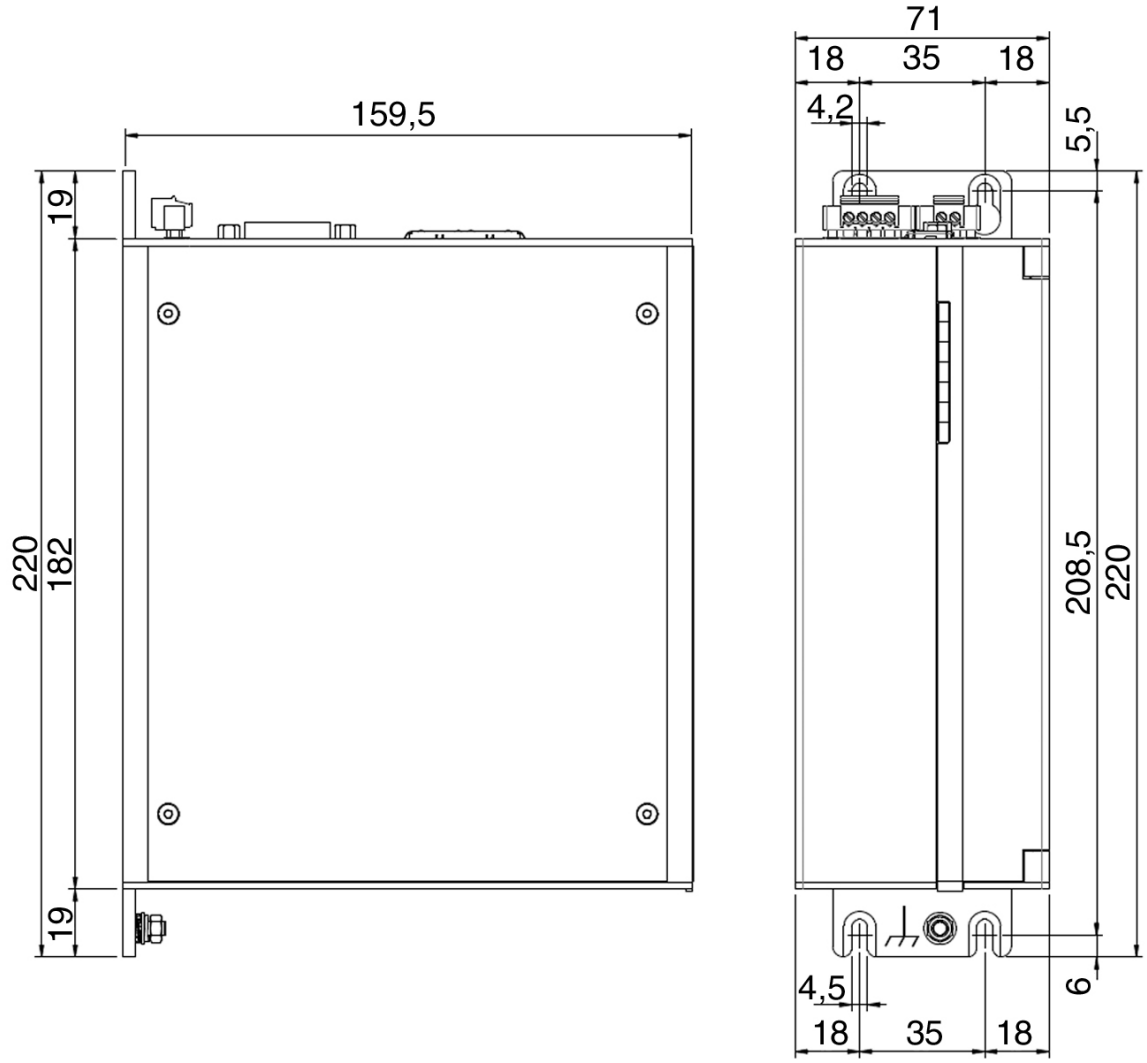








BM3300 – Dimensions



BM3300 - O.S. compatibility

- Operating systems **certified by ASEM**
  - Win 10 IoT Enterprise 2016 LTSB 64bit
  - Win 8.1 Industry Pro 32/64bit
  - Win 7 Pro/Ultimate 32/64bit
  - Win Embedded Standard 7E/7P 32/64Bit
  - Linux

- Intel® **Skylake platform** does not support:
  - Win XP Pro 32/64bit
  - Windows Embedded Standard 2009 (XPe SP3) 32/64bit
  - Win 2000/ 98/ NT

- The Intel platform can support other operating systems but they are not certified by ASEM

BM3300 - Integrated UPS (optional)

UPS integrated in the internal power supply unit

- With external battery pack - standalone wall mounting

UPS features

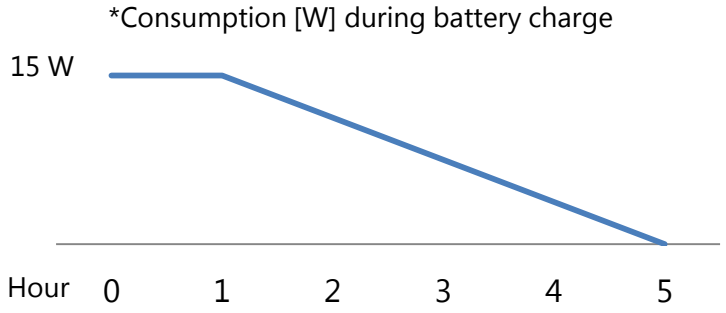
- 12V DC UPS battery backup system
- Input voltage intervention threshold 18V DC
- 10' nominal duration at 25°C, full charge, 5A load (estimated value)
- 15W max consumption during battery charge*

External battery pack

- 2500mAh 12V/6A max lead battery (Pb)
- Full charge in 5 hours
- Lifetime 10y at 25°C, full charge

Software Management Tools

- Smart battery management to extend lifetime
- Battery estimated duration for individual system configuration



BM3300 - Mass Storage

CFast

- 1 x bootable CFast SATA III slot on board with external front access

CFast card

SSD mSATA

- 1 x onboard connector for direct insertion of mSATA SSD SATA III

mSATA SSD

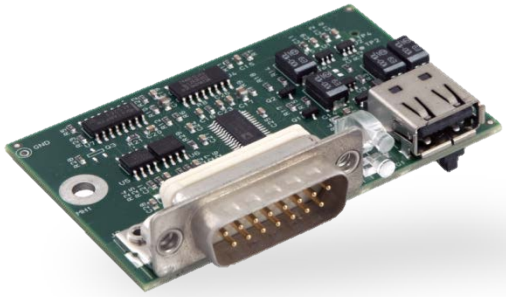
2,5" SSD/HDD

- 1 x onboard connector for 2,5“ SSD/HDD SATA III with internal installation kit

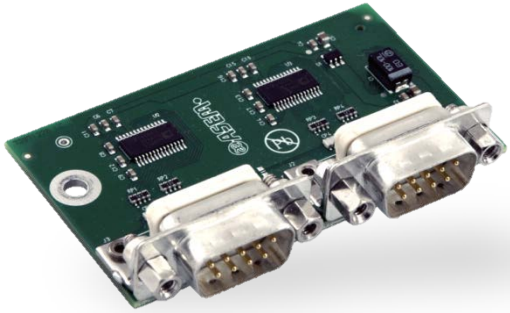
2,5" SSD/HDD

BM3300 - ASEM add-on Interfaces (optional)

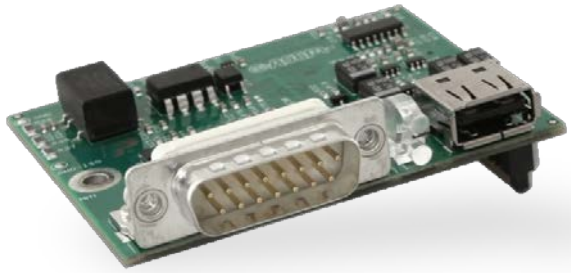
1 x RS232/422/485 (DB15M) + 1 x USB 2.0



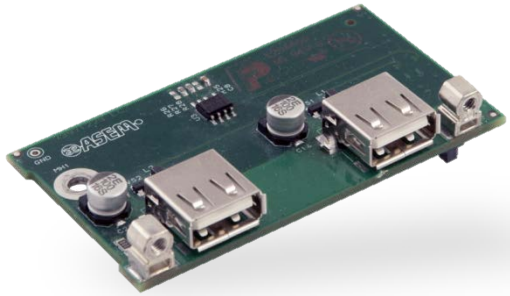
2 x RS232 (DB9M)



1 x RS232/422/485 isolated (DB15M) + 1 x USB 2.0



2 x USB 2.0 (Type A)



BM3300 - Long term availability

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