

# BM3400 / BM3600 [new]

## Intel® Skylake™ H and Kaby Lake™ H based fanless book mounting IPCs



The fanless Book Mounting IPC family BM3400 is based on the 6th generation Core i3, i5, i7 and Celeron of the Intel® Skylake™ H and the BM3600 family is based on the 7th generation Core i3, i5, i7 of the Intel® Kaby Lake™ H platform. The systems are supplied with a sturdy aluminum chassis, highly refined in every aesthetic and ergonomic detail. The "all in one" motherboard provides, on top, four Ethernet

10/100/1000Mbps ports, that support "Jumbo Frame" and "Wake on Lan" functionalities, two USB 3.0 ports, two USB 2.0 ports, a serial RS232 interface and one DVI-D video output; on front, a USB 3.0 port, a SATA III CFast slot, a slot for the extractable system battery, the signalling LEDs and optionally two slots for extractable storage units drawers. The motherboard has also an mSATA connector for a SATA III SSD, two SATA

III connector for 2.5" SSDs/HDDs, the possibility to set the mass storage devices in RAID 0, 1 configuration, up to 32 GB RAM with two DDR4 SODIMM modules and two internal connectors for additional interfaces, including the remotation of the video and USB signals up to 100m (Remote Video Link). BM3400 and BM3600 systems have an isolated 24 VDC power supply input and optionally an integrated UPS

with external battery pack. The systems are available in two versions, the S0 with the possibility to install additional interfaces, the S2 and the S3 with respectively two and three PCI or PCIe expansion slots. Optionally a forced ventilation kit is available to ensure 0°C÷50°C operating temperature with Core i7 processor or expansions cards with a maximum total consumption of 20W.



### Highlights

- UBIQUITY remote assistance software providing remote access to the system
- Highly refined aluminium chassis
- Extractable drawers for 2.5" storage devices
- RAID 0,1
- Up to 2 Remote Video Link - remotation of DVI and USB 2.0 signals up to 100m
- "All in one" motherboard
- High performance Intel® Skylake™ H and Kaby Lake™ H platforms
- Fanless book mounting IPC with 0°C÷50°C operating temperature
- Isolated 24 VDC power supply input
- Onboard connector for NETcore X fieldbus boards
- Integrated UPS with external battery pack (optional)
- S2 version with two PCI or PCIe 4x expansion slots
- CE, cULus LISTED (61010) certifications

## Gallery



## Add-On boards

### Position A

- 1 x RS232/422/485 + 1 x USB 2.0
- 1 x RS232/422/485 isol. + 1 x USB 2.0
- 2 x RS232
- 2 x USB 2.0
- 1 x NETcore X fieldbus board

### Position B

- 1 x RJ45 Remote Video Link (RVL OUT)
- 2 x RJ45 Remote Video Link (RVL OUT)



## Technical data

		BM3400/BM3600
PROCESSORS	BM3400	Intel® Celeron G3900E 2.40GHz 64bit, 2 cores / 2 threads, 2MB Smart cache Intel® Core i3-6100E 2.70GHz 64bit, 2 cores / 4 threads, 3MB Smart cache Intel® Core i5-6440EQ 2.70GHz (3.40GHz Turbo) 64bit, 4 cores / 4 threads, 6MB Smart cache Intel® Core i7-6820EQ 2.80GHz (3.50GHz Turbo) 64bit, 4 cores / 8 threads, 8MB Smart cache
	BM3600	Intel® Core i3-7100E 2.90GHz 64bit, 2 cores / 4 threads, 3MB Smart cache Intel® Core i5-7440EQ 2.90GHz (3.60GHz Turbo) 64bit, 4 cores / 4 threads, 6MB Smart cache Intel® Core i7-7820EQ 3.00GHz (3.70GHz Turbo) 64bit, 4 cores / 8 threads, 8MB Smart cache
	CHIPSET	Intel® HM170 PCH (Platform Controller Hub) Intel® HM175 PCH (Platform Controller Hub) Intel® CM236 PHC (Platform Controller Hub)
S2/S3 versions with 2x PCIe x4		Intel® CM236 PHC (Platform Controller Hub)
VIDEO CONTROLLER	BM3400	Intel® HD Graphics 510 integrated in Celeron processor • 350MHz/950MHz • DirectX 12 and OpenGL 4.4 support Intel® HD Graphics 530 integrated in Core i3 processor • 350MHz/950MHz • DirectX 12 and OpenGL 4.4 support Intel® HD Graphics 530 integrated in Core i5, Core i7 processors • 350MHz/1,00GHz • DirectX 12 and OpenGL 4.4 support
	BM3600	Intel® HD Graphics 630 integrated in Core i3 processor • 350MHz/950MHz • DirectX 12 and OpenGL 4.5 support Intel® HD Graphics 630 integrated in Core i5, Core i7 processors • 350MHz/1,00GHz • DirectX 12 and OpenGL 4.5 support
SYSTEM MEMORY - RAM		4GB (1 x SODIMM DDR4 module) or 8GB or 16GB or 32GB (2 x SODIMM DDR4 modules)
TPM		TPM module (optional)
MASS STORAGE	S0	1 x bootable CFast SATA III slot onboard with external access 1 x onboard connector for direct insertion of mSATA SSD SATA III w/o RVL: onboard connectors for 1 x SSD/HDD 2.5" SATA III with internal installation kit or max 2 x SSDs/HDDs 2.5" SATA III with front extractable drawers with RVL: onboard connector for 1 x SSD/HDD 2.5" SATA III with internal installation kit or with front extractable drawer
	S2/S3	1 x bootable CFast SATA III slot onboard with external access 1 x onboard connector for direct insertion of mSATA SSD SATA III 2 x onboard connectors for SSDs/HDDs 2.5" SATA III with internal installation kit or with front extractable drawers
LAN		4 x LAN 10/100/1000Mbps top (RJ45 - 3 x Intel® I210 + 1 x Intel® I219LM)
USB		1 x USB 3.0 front (Type-A) 2 x USB 2.0 top (Type-A) + 2 x USB 3.0 top (Type-A)
SERIAL		1 x RS232 (DB9M)
BATTERY		1 x CR2032 Removable front access
VIDEO OUTPUT		1 x DVI-D, top 1 or 2 x RJ45 connectors Remote Video Link (DVI-D and USB 2.0 signals remotation up to 100 m, optional)
ADD-ON INTERFACES		1 x RS232/422/485 (DB15M) + 1 x USB 2.0 (Type-A)
	Position A (max 1)	1 x RS232/422/485 (DB15M) isolated + 1 x USB 2.0 (Type-A) 2 x RS232 (DB9M) 2 x USB 2.0 (Type-A)
	Position B (max 1)	1 x NETcore X fieldbus boards for EtherCAT, EtherNet IP, PROFINET, PROFIBUS, CANopen protocols 1 x connector Remote Video Link (RJ45 - RVL OUT) 2 x connectors Remote Video Link (RJ45 - RVL OUT)
EXPANSION SLOTS	S2	2 x PCIe x4 or 1 x PCI + 1 x PCIe x4, max 10W total
	S3	2 x PCIe x4 + 1 x PCIe x1, max 10W total
VENTILATION (optional)		Forced ventilation kit for 0°C÷50°C operating temperature with Core i7 processors or expansion card with max 20W total
POWER SUPPLY INPUT		24VDC (18÷32VDC) isolated
POWER SUPPLY OPTIONS		UPS with external battery pack Kit for ATX mode power supply
CASE	Installation	For book mounting
	Material	Aluminium Alloy 6082/5754/5056
O.S. CERTIFIED	BM3400	Microsoft Windows 7 Pro/Ultimate 32/64bit Microsoft Windows Embedded Standard 7E/7P 32/64 bit Microsoft Windows 10 IoT Enterprise 2016/2019 64bit
	BM3600	Microsoft Windows 10 IoT Enterprise 2016/2019 64bit
OPERATING TEMPERATURE		without forced ventilation: 0°C÷50°C, 0°C÷45°C with HDD 24x7 or Core i7
		with forced ventilation: 0°C÷50°C, 0°C÷45°C with HDD 24x7