

**Allen-Bradley**

by ROCKWELL AUTOMATION

# ASEM 6300B Box PC and 6300T Box Thin Client

## Features and Benefits

### Intel Atom Class Box PC and Thin Client

- Intel Apollo Lake Atom processor
- Available with Microsoft® Windows 10 IoT Enterprise 2019 LTSC
- Single DisplayPort units support up to 4K high resolution
- Single DisplayPort unit features 2x Ethernet and 2x USB 3.0 (Type A) ports
- Offers M.2 SSD up to 240 GB (PC Only)
- 4 GB or 8 GB DDR4 RAM
- Fanless, book mount construction, 24V DC
- 0 to 50°C operating temperature
- ThinManager-ready BIOS preinstalled
- DIN and wall mount kits are available

### Intel Core i Class Box PCs

- Core i3, i5 and i7 dual and quad core 7th generation 64 bit processors (ASEM 6300B-JB1 features an 11th generation processor)
- Available with Microsoft Windows 10 IoT Enterprise 2019 LTSC (ASEM 6300B-JB1 is available with Windows 10 IoT Enterprise 2021)
- No OS version allows customers to load their own custom operating systems
- 4 x Ethernet, 3 x USB 3.0 (Type A), 2 x USB 2.0 (Type A), 1 x RS-232 (DB9M), 1 x DVI-D
- M.2/mSATA and 2.5" SSD up to 1 TB SATA III SSD
- Up to 32 GB DDR4 SODIMM modules
- Up to 3 PCIe expansion slots
- Fanless design with book mount, wall mount, 24V DC
- Fan cooled unit with wall mount, 100V/230V AC
- Up to 50°C operating temperature (0°C to 45°C for i7 processors 6300B-PBC\* and 6300B-BMB\*)



Intel Core i Class  
Book Mount Box PC



Intel Atom Class Book  
Mount Box PC and Thin Client



ASEM 6300B-JB1 (Front)



Intel Core i Class  
Wall Mount Box PC

**Allen-Bradley® ASEM™ 6300B Box PCs** are available in multiple form factors and processors to match your application. Book mounting units have a fanless design making them optimal for applications requiring low maintenance. The most compact units in this family feature Apollo Lake Atom processors, making them ideal for human machine interface (HMI), IIoT gateway and data logging applications.



**THINMANAGER**  
A ROCKWELL AUTOMATION TECHNOLOGY

Atom class units  
are also available as

ThinManager® ready thin clients and are not equipped with an operating system or solid-state drive (SSD).

Slightly larger book mount units feature a choice of Core i3, i5 and i7 processors for mid-size applications.

Wall mount units with Core i3, i5 and i7 processors are available in designs with fans or without. Fan-cooled units perform well in challenging environments with elevated temperatures. These PCs may be paired with FactoryTalk® View SE or FactoryTalk Optix software to provide the optimal HMI interface experience within the Rockwell Automation® Connected Enterprise.



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Automation**

## Allen-Bradley® ASEM™ 6300B Box PCs (continued)

All PCs come standard with the Windows 10 IoT Enterprise 2019 LTSC operating system. All units are optionally available without an operating system.

Robust mass storage is supplied by an M.2 SSD for Atom class units and RAM is permanently soldered to the motherboard to help prevent issues from shock and vibration.

Atom class, single DisplayPort units currently ship configured as book mount, but do offer kits to leverage DIN rail and wall mounting. Dual DisplayPort units will be offered as book and DIN rail mount options.




## ASEM 6300B Box PC and 6300T Box Thin Client – Intel Atom Class

Operating system	Microsoft Windows 10 IoT Enterprise LTSC 2019 64 bit
Processor	Intel Atom x7-3950 1.6 GHz(2.0 GHz Burst), 4 cores/4 threads, 2 MB L2 cache)
Video controller	Intel HD Graphics 505 integrated in x7-3950, 500/650MHz
System memory – RAM	4 GB/8 GB, LP-DDR4 - 2400 (soldered)
Mass storage	M.2 size 2242 key B SSD SATA III (up to 240GB)
LAN	2 x Ethernet 10/100/1000 Mbps (Intel I210, RJ45)
USB	Single DisplayPort - 2 x USB 3.0 (Type-A) / Dual DisplayPort - 4 x USB 3.0 (Type-A)
Video output	1 x DisplayPort or 2 x DisplayPort (Model Dependent)
Audio output	Standard 3.5mm audio output jack (Only available on Dual Display model)
Power	24V DC (18V to 32V DC) isolated
Mounting	DIN rail mount, wall mount (single Display Port model)
Case material	Aluminum alloy
Operating temperature	0°C to 50°C
Storage temperature	-10°C to +60°C
Approvals	CE (EN 61326-1, EN 61010-1, EN 61010-2-201), cULus LISTED (UL61010), RCM
Humidity	80% (non-condensing)

**Note:** Thin Client ships without SSD or OS

## ASEM 6300B Box PC – Intel Core i Class

	6300B-BMB	6300B-PBC	6300B-PBD	6300B-JB1
Operating system	Microsoft Windows 10 IoT Enterprise 2019 64 bit (also available with no OS)			Windows 10 LTSC 2021 or no OS
Processor	Intel Core i3-7100E 2.90GHz 64bit, 2 cores / 4 threads, 3MB Smart Cache  Intel Core i5-7440EQ, 2.90GHz (3.60GHz Turbo), 6MB Smart Cache, 4 cores, 4 threads  Intel Core i7-7820EQ 3.00GHz (3.70GHz Turbo) 64bit, 4 cores / 8 threads, 8MB Smart Cache		Intel Core i3-7101E 3.9Ghz, 2 Cores - 4 threads - 3MB Smart Cache  Intel Core i5-7500, 3.40GHz (3.80GHz Turbo) 6MB Smart Cache, 4 cores - 4 threads  Intel Core i7-7700 3.6Ghz (4.2GHz Turbo), 4 Cores - 8 threads - 8MB Smart Cache	Intel Celeron 6305E 1.8GHz, 2 cores - 2 threads - 4MB Smart Cache  Intel Core i3-1115G4E 2.20GHz (3.90GHz Burst), 2 cores - 4 threads - 6MB Smart Cache  Intel Core i5-1145G7E 1.50GHz (4.10GHz Burst), 4 cores - 8 threads - 8MB Smart Cache  Intel Core i7-1185G7E 1.80GHz (4.40GHz Burst), 4 cores - 8 threads - 12MB Smart Cache
Chipset	Intel HM175 PCH (Platform Controller Hub)		Intel C236 PCH (Platform Controller Hub)	Intel Tiger Lake PCH (Platform Controller Hub), Included into processor chip (SoC)
Video controller	Intel HD Graphics 630 integrated into Intel Core microprocessor 950 MHz/1 GHz Video RAM (shared)		Intel HD 630 Graphics integrated in Intel Core i3 & i5 350 MHz/1.10 GHz  Intel HD 630 Graphics integrated in Intel Celeron microprocessor Intel Core i7 350 MHz/1.15 GHz	Intel UHD Graphics integrated in Intel Celeron, Intel Core i3-1115G4E and i3-1115GRE  Intel Iris X Graphics integrated in Intel Core i5-1145G7E, i7-1185G7E
System memory - RAM	Up to 32GB DDR4-2400 2 SODIMM modules			Celeron: 4 or 8GB (LPDDR4X) i3, i5: 8 or 16GB (LPDDR4X) i7: 16 or 32GB (LPDDR4X)
Mass storage	Up to 1 TB 2.5" SSD SATA III 1 x mSATA SATA III interface		Up to 1 TB 2.5" SSD SATA III 1 x M.2 2280 onboard connector, PCIe	No Storage 128GB ... 2TB M.2 SSD (NMVe)
LAN	4 x Ethernet 10/100/1000 Mbps (RJ45)			
Video output	1 x DVI-D Single Link (max resolution: 1920x1080 Full HD)			2 or 4x DisplayPort++ V1.2
Power	24V DC (18V to 32V DC) isolated		6300B-PBD*: 100V/230V AC	24V DC (18V to 32V DC) isolated
Operating temperature	0°C to 50°C with Core i3 processor 0°C to 45°C with Core i7 processor		0°C to 50°C	0°C to 50°C
Storage temperature	-10°C to +60°C			S-20°C to 65°C
Approvals	CE (EN 61326-1, EN 61010-1, EN 61010-2-201), cULus LISTED (UL61010), RCM, KC			
Serial	1 x RS-232 (DB9M)			1 x RS-232 (DB9M; four display only)
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)			4x USB 3.1 Gen2 (Type-A)
Mounting	Book mount only, fan or fanless option	Wall mount only, fanless	Wall mount only, with fan	DIN rail or book mount, fanless
Expansion slots	No expansion 1 PCIe x4 and PCI half size 2 x PCIe x4	No expansion 1 PCI/PCIe 2 slots for 2.5" HDD/SDD (RAID 1)	No expansion 1 PCIe x16  1 PCIe x16, 1 PCIe x4, 1 PCIe x1 2 x PCIe x8 + 1x PCIe x4	No expansion
Battery	1x (CR2032 or BR2032) Internal access			

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Publication 6300B-PP001E-EN-P – February 2024 | Supersedes Publication 6300B-PP001D-EN-P – August 2023  
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