



Dell Embedded Box PC 3000 and 5000 Series



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Speed your solutions to market with quality, reliable embedded box PCs delivered in weeks, not months

An underserved embedded industry

Do you need reliable embedded PCs, delivered quickly? Some embedded vendors substitute cheaper, unreliable components that can cause expensive downtime and impact your business reputation. Or they provide highly complex systems, difficult to aggregate. Some offer no scalability from small to large quantities, only high volume discounts. Lead times are typically measured in months or quarters, with only basic hardware warranties and no certifications of the device.

Addressing the industrial PC market

Dell now brings to embedded computers (also called industrial PCs) new ruggedized devices, Internet of Things (IoT)-ready, with broad connectivity and backed by Dell's brand and proven heritage of business benefits:

- Delivery in weeks at effective price points, with a configure-to-order approach — for orders of one, small batches or large volumes
- Commercial quality standards for Dell products and suppliers to reduce risk and improve reliability
- Enterprise-grade security and manageability options, to improve protection and flexibility
- Global service and support, with five-year support program options, so you have peace of mind
- Flexible payment options designed to help you acquire the total solution.¹

Ruggedized and ready to commission

Dell Embedded Box PC 3000 and 5000 are designed to MIL-STD-810G standards, building on the expertise of our ruggedized device engineers. They are meant to be used 24x7x365 for a long planned life, headless or with keyboard, mouse and monitor. Dell Embedded Box PCs are ruggedized, fanless, highly reliable devices for a variety of use cases, including process and discrete manufacturing, fleet management, kiosks, digital signage, surveillance and automated retail solutions. Flexible, with many input/output (I/O) options, they run on powerful multi-core Intel® processors. PCI/PCIe card slots provide flexible

expansion for new I/O and graphics capabilities. Form factors are optimized for VESA, DIN-rail and wall mounting and they come with regulatory, mobile, broadband and Wi-Fi certifications complete for many countries.

Right quantities

At Dell, we offer good price points on minimum order quantities of one, small batches and essentially no volume too big for our global organization. Our fully configured systems in stock deliver in weeks, not months. No need to order and store large quantities, so you lower costs of carried inventory and have less risk of technology obsolescence.

Quality and reliability

Lost availability can cause expensive downtime. Dell delivers reliability with stringent process and leading validation practices on our embedded PCs. Our advanced product reliability engineering occurs at all levels of the product prior to release and with rigorous requirements for our suppliers as well. With Dell as your OEM, you can be confident your own solutions support your brand.

End-to-End Support

With the Dell Embedded Box PC, you also get an end-to-end service solution, including Dell Deployment Services and Dell Basic Hardware Warranty that can be extended up to 5 years. Dell ProSupport with options up to 5 years are available. The Dell services solution helps your business streamline deployment and support so you can focus on innovation.

Flexible branding options and OEM

An OEM-Ready version of the Embedded PCs is available. From bezel to BIOS to packaging, your Embedded PCs can look and feel as if they were designed and built by you. Contact your account team for details on options, like additional memory, storage and embedded or other operating systems. Also visit Dell.com/OEM.

Technical Specifications

Model Number ¹	Dell Embedded Box PC 3000		Dell Embedded Box PC 5000	
Dimensions	237 mm wide x 160 mm high x 60 mm deep (9.5 x 6.5 x 2.5 inches)		246 mm wide x 270 mm high x 107 mm deep (9.5 x 10.5 x 4.2 inches)	
Form Factor	Fanless design, optimized for wall, DIN-rail and VESA mounting			
Weight	Minimum 2.1 Kg; Maximum 2.25 Kg		Minimum 5.5 Kg; Maximum 5.8 Kg	
Processor	Intel® Atom™ E3825 1.33GHz 2 cores	Intel® Atom™ E3827 1.75GHz 2 cores	Intel® Celeron® G3900E 2.4GHz 2 cores	Intel® Core i3-6100E 2.7GHz 2 cores
	Intel® Atom™ E3845 1.91GHz 4 cores		Intel® Core i5-6440EQ ² 2.7GHz up to 3.4GHz ³ 4 cores	Intel® Core i7-6820EQ ² 2.8GHz up to 3.5 GHz ³ 4 cores
Operating systems	Factory options for Ubuntu Desktop 16.04. Windows 7 Pro (via Windows 10 Pro downgrade license), Windows 7 Pro for Embedded Systems (FES7), Windows 10 Pro, Windows 10 IoT Enterprise LTSP, Windows Embedded Standard 7 Professional and Enterprise (WES7P and WES7E). Dell OEM may offer additional OSes.			
Memory	DDR3L type @ 1600MHz: 4GB (1x4GB) or 8GB (1x8GB)		DDR4 type @2133MHz: 4GB (1x4GB), 8GB (2x4GB or 1x8GB), 16GB (2x8GB) or 32GB (2x16GB)	
Drive/Storage	Options: 1x SSD or 1x HDD. SSD is 32 GB, 64 GB, 128 GB, 256 GB, 512 GB, or 1TB. Client SATA HDD is 500 GB or 1 TB. (Drive affects temperature.)		Options: 2x SSD or 2x HDD or 1x SSD + 1x HDD. SSD is 32 GB, 64 GB, 128 GB, 256 GB, 512 GB, or 1TB. Client SATA HDD is 500 GB or 1 TB. (Drive affects temperature.)	
I/O	Dual Gigabit Ethernet: 2 x RJ-45. USB: 4 x USB2, 1 x USB3. Serial interfaces: 2 x RS-232/485; 1 x RS-232/422 via multifunction port; set by BIOS. GPIO: 12 bit (via multi-function port). Wireless: Wi-Fi IEEE 802.11n +Bluetooth LE; Mobile Broadband/WWAN (3G or LTE). Options: ZigBee module, CANbus card, Bluetooth option via WLAN. (Limited to 2 out of 3: WWAN, WLAN or CANbus)		Dual Gigabit Ethernet: 2 x RJ-45. USB: 4 x USB2, 4 x USB3. Serial Interfaces: 4 x RS-232/422/485 (set by BIOS). GPIO: 16-bit. Wireless: Wi-Fi IEEE 802.11n +Bluetooth LE; Mobile Broadband/WWAN (3G or LTE). Options: ZigBee module, CANbus card, Bluetooth option via WLAN, Parallel via PCIe card. (Limited to 2 out of 3: WWAN, WLAN or CANbus)	
Expansion	None		2 PCI/PCIe slots: riser card options: 2 x PCI, 1 x PCI + 1 x PCIe x 16 or 2 PCIe x8.	
Video	2 simultaneous displays: 1 x DP++ 1.1, VGA. Resolution: Max DP++ 4096x2304; max VGA 2560x1080@60Hz.		3 simultaneous displays: 2 x DP++ 1.2, HDMI 1.4, VGA. Resolution: Max DP++ 4096x2304; max HDMI 4096x2160@24Hz; max VGA 1920x1200@60Hz.	
Audio	Via multi-function port: Mic-in, Line-in, Line-out.		Native: Mic-in, Line-in, Line-out.	
Power input	Nominal input 24V DC (12-26V). Also accepts Dell AC adapter, 130W with locking plug.		Nominal input 24V DC (12-26V). Also accepts Dell AC adapter, 180W with locking plug.	
Accessories/ Ecosystem	Wall mounting kit. DIN rail mounting kit. Antenna options for 2-Port Wifi, 2-Port LTE or 4-in-1 LTE/Wifi. 7-in-1 cable for multi-function port cable (for I/O connections to 1 x RS-232/422 serial, 12-bit GPIO, Mic-in, line-in, line-out, PS/2 mouse, PS/2 keyboard).		Wall mounting kit. Antenna options for 2-Port Wifi, 2-Port LTE or 4-in-1 LTE/Wifi.	
Environmental/ Design	Temp without airflow	Operating: 0°C to 50°C with SSD, 0°C to 40°C with HDD Non-Operating: -40°C to 65°C (-40°F to 149°F)		
	Temp with 0.7 m/s airflow	Operating: 0°C to 60°C with SSD		
	Relative Humidity	Operating: 10% to 90% (non-condensing) @ 40°C Non-operating: 5% to 95% (non-condensing) @ 40°C		
	Vibration During Operation	ASTM-D4169-04, Random Operational Vibration, 0.52grms MIL-STD-810G, Method 514.7, Procedure 2 MIL-STD-810G, Method 514.6, Procedure 1, Cat 4		
	Thermal Shock	-40°C to 65°C 150 cycles 20°C per minute ramp		

	Shock	Non-Operating: MIL-STD-810G, Method 514.7, Procedure 5 (Shock) - 75G Operating: MIL-STD-810G, Method 514.7, Procedure 1 (Shock) - 40G
	EMC	CE,FCC, VCCI and BSMI
	Safety	AS/NZS 60950.1:2011_A1:2013, CSA C22.2 No.61010-1 +CSA C22.2 No. 61010-2-201, EN60950-1:2006+A1+A2+A11+A12, EN62311:2008, EN61010-1:2010 ed3+ EN61010-2-201:2013, SASO GSO IEC6090-1:2012, CNS14336-1, UL61010-1+UL61010-2-201
	Altitude	Operating: –15.20 m to 5000 m (–50 ft. to 16,404 ft.) Non-Operating: –15.20 m to 10,668 m (sea level to 35,000 ft.)
	Ingress Protection	IP30, IEC 60529
Security	Trusted Platform Module (TPM) v2.0 capable for Windows 10 OS; TPM v1.2 for Win7 and Ubuntu OS. Secure Boot, BIOS password and I/O port disablement.	
Manageability	Available Microsoft® SCCM integration (on Windows platforms) and remote cloud management option via Dell Edge Device Manager. All options are purchased as separate submissions.	
Software	Support for third-party software solutions, including offerings from our curated IoT technical partners (software, sensors, platforms, etc.) – more information at Dell IoT Solutions Partner Program web site http://www.delliotpartners.com	
Data integration and analytics	Embedded Box PC 3000 and 5000 Series can support a wide variety of third-party solutions, including offerings from our qualified ISV partners (www.delliotpartners.com).	
Warranty	Commercial services vary. Limited hardware warranty ⁴ with mail in service; Optional ProSupport with on-site service ⁵ after remote diagnosis, contracts up to 5 years. Custom warranties available. Restrictions apply.	
Configuration Services	Image load, BIOS customization, Laser Etching, Asset tagging and reporting. Custom configuration services available. Restrictions apply. ⁶	
OEM/Co-branding	OEM-Ready version available: from bezel to BIOS to packaging, your system can look and feel as if they were designed and built by you. For more information, visit Dell.com/OEM .	

Visit online for more information: dell.com/embedded

1. Terms subject to product availability, credit approval, execution of documentation provided by and acceptable to DFS.

2. Some configurations may enable power protection management in your operating environments above 35°C.

3. Max turbo frequency is the maximum single core frequency at which the processor is capable of operating using Intel® Turbo Boost Technology.

4. For copy of Limited Hardware Warranty, write Dell USA LP, Attn: Warranties, One Dell Way, Round Rock, TX 7882 or see www.dell.com/warranty

5. Onsite Service after Remote Diagnosis: Remote Diagnosis is determination by online/phone technician of cause of issue; may involve customer access to inside of system and multiple or extended sessions. If issue is covered by Limited Hardware Warranty (www.dell.com/warranty) and not resolved remotely, technician and/or part will be dispatched, usually within 1 business day following completion of Remote Diagnosis. Availability varies. Other conditions apply.

6. Dell Services: availability and terms of Dell Services vary by region. For more information visit dell.com/servicedescriptions.

