**Introduction**

Windows 10 IoT is a family of Windows 10 editions targeted towards a wide range of intelligent devices, from small industrial gateways to larger, more complex devices like point of sales terminals and ATMs. Combined with the latest Microsoft development tools and Azure IoT services, partners can gather, store and process data, creating actionable business intelligence that affects business outcomes. Partners building solutions based on Windows 10 IoT will realize expanded opportunities when they harness the full breadth of Microsoft technologies to offer end-to-end solutions.

**Feature Details**

**Universal Windows apps (UAP)**
Leverage the same code to deliver an intuitive experience across a wide range of Windows 10 devices. Tools like Visual Studio work across all Windows 10 editions and Azure to help reduce the time and complexities of building IoT solutions for the enterprise.

**Consistent Device Management**
Reduce complexities with a consistent device management approach across PCs, phones, and IoT devices. A modern device management stack based on industry standards enables enterprise mobility and support for first and third party management solutions.
- MDM Enablement
- Ability to control and block modern app updates
- Ability to block unenrollment
- Context Manager
- Bulk provisioning through Barcode/NFC/SD card

**Enterprise Grade Security**
With security threats on the rise, Windows 10 delivers entirely new ways to protect your systems and data. Windows 10 has built-in defenses to help protect your critical business information from leaks or theft. Technologies like Secure Boot, Bitlocker, Device Guard and Credential Guard help ensure your devices are protected, from power-on to power-off.
- Advanced Device Security
  - Only allows trusted peripherals
  - Secure IoT Devices with Trusted Platform Modules (TPM)
- Next Generation Credentials – two-factor authentication
- Device Guard - Run only trusted apps with Advanced Threat Resistance

**Advanced Lockdown**
Additional capabilities help create a purpose-built device experience for business applications. Whether it’s booting to a desired Universal app and/or locking down access to unauthorized USB peripherals, Windows 10 IoT provides these capabilities and more to help create a dedicated device experience.
- Unified Write Filter
  - Create read-only devices
  - Protect system against write operations
- Assigned Access
  - Block edge gestures, hotkeys and other key combinations
  - Launch a Universal Windows app on login plus lock access to system
  - Multi-user profiles for mobile with Application and Settings Allow lists
  - Button Remapping and Lockdown
- AppLocker
  - Eliminate unwanted/unknown applications
  - Suppress system dialogs and control process permissions
- MDM & Group Policies
  - Suppress toast notifications
  - Restrict USB devices / peripherals on the system
- Shell Launcher
  - Launch a Classic Windows application on login
  - Block hotkeys and other key combinations
- Embedded Logon
  - Suppress Windows UI elements displayed during Windows logon and shutdown
  - Suppress Windows UI elements displayed during logon and logoff
- Embedded Boot Experience / Unbranded Screens
  - Custom brand a device by removing and/or replace Windows UI boot elements

**Interoperability across Devices**
Windows 10 enables open device interoperability and communication across a range of devices regardless of connection specifics and OS platform. Creating a complex mesh of connected devices need not be a difficult task. With open device interoperability standards build into Windows 10, you can reduce complexities and simplify connectivity to a mesh of devices as part of your overall IoT solution.

**Microsoft Azure IoT Services**
Windows 10 IoT is designed to work with Microsoft Azure IoT services, so you can monitor assets in the cloud to improve efficiencies, drive operational performance to enable innovation, and leverage advanced data analytics to transform your company.
### Windows 10 IoT

#### Specifications and Versions

**Windows 10 IoT Enterprise**

Windows 10 IoT Enterprise brings the capabilities of Windows 10 Enterprise to a wide range of industry devices across retail, manufacturing, health, finance and other industries. Windows 10 IoT Enterprise devices run powerful line-of-business applications and perform a specialized function in a secure, reliable, and streamlined way to support mission critical industry devices.

Windows 10 IoT Enterprise supports both Universal Windows apps and Classic Windows applications plus a host of innovative capabilities: advanced protection against modern security threats, full flexibility of deployment, updating and support options, and comprehensive infrastructure, device, and app management features. Companies that require manageability, consistency, and predictability choose Windows 10 IoT Enterprise and Windows 10 Enterprise.

- Windows 10 IoT Enterprise
- Window 10 IoT Enterprise for Retail and Thin Client
- Window 10 IoT Enterprise for Tablet
- Window 10 IoT Enterprise for Small Tablet

**Windows 10 IoT Mobile Enterprise**

Windows 10 IoT Mobile Enterprise brings the capabilities of Windows 10 Mobile Enterprise to line-of-business mobile devices that are looking for a natural user experience with enterprise grade security and manageability. Instantaneous application access, native support for barcode scanning and other peripherals, as well as a secure device experience, enhance productivity for a variety of mobile scenarios.

The Mobile Enterprise editions also offer capabilities like multiple user profiles and advanced lockdown to enable mobile line-of-business scenarios across retail, healthcare, manufacturing and other vertical industries.

**Windows 10 IoT Core**

Windows 10 IoT Core is an edition of Windows 10 that is optimized for smaller and lower-cost industry devices. Built to power devices like IoT gateways or micro-kiosks, it’s designed to run a single line-of-business application. Windows 10 IoT Core runs Universal Windows apps and utilizes the same development, configuration and management tools as the other Windows 10 editions making it easy to integrate into IoT scenarios and leverage existing resources.

There is an SKU ‘Windows 10 IoT Core’ available at no royalty cost for all our device makers that enables automatic OS updates via Windows Update when connected to the internet. In addition, we also have an OEM exclusive SKU ‘Windows 10 IoT Core Pro’ which provides an ability to defer and control updates. This SKU can be licensed via distributors. Except for the servicing model difference, the features are the same for the two SKUs, Windows 10 IoT Core and IoT Core Pro.

### Ordering information

- 968TW10LTE  
  Win 10 IOT Ent 2015 LTSB EMB MultiLang ESD OEI EPKEA
- 968TW10LTO  
  Win 10 IOT Ent 2015 LTSB EMB MultiLang ESD OEI
- 968TW10RTE  
  Win 10 IOT Ent 2015 LTSB EMB MultiLang ESD OEI Retail or Thin Clt EPKEA
- 968TW10RTO  
  Win 10 IOT Ent 2015 LTSB EMB MultiLang ESD OEI Retail or Thin Clt
- 968TW10TBE  
  Win 10 IOT Ent 2015 LTSB EMB MultiLang ESD OEI Tablets EPKEA
- 968TW10TBO  
  Win 10 IOT Ent 2015 LTSB EMB MultiLang ESD OEI Tablets
- 968TW10STE  
  Win 10 IOT Ent 2015 LTSB EMB MultiLang ESD OEI Small Tablets EPKEA
- 968TW10STO  
  Win 10 IOT Ent 2015 LTSB EMB MultiLang ESD OEI Small Tablets
- 968TW10CP0  
  Windows 10 IoT Core Pro EMB English ESD OLC

### Features

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<tr>
<th>Features</th>
<th>Windows10 IoT Enterprise</th>
<th>Windows10 IoT Core</th>
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| Main difference           | - Full version Windows w/ advanced lockdown capabilities.  
                           | - Win32 and UAP support | - Target IoT gateway device  
                           |                           | - Single Universal App experience  
                           |                           | - Universal App & Driver support |
| Activation                | - Activation works both online and offline  
                           | - OA3.0  
                           | - 5x5 Single/ Multi Activation key | No Activation Requirement |
| Lockdown Features         | - EWF & Overlays  
                           | - USB filter  
                           | - Dialog and Notice filters  
                           | - Input Filter  
                           | - AppLocker and Layout Control  
                           | - Shell and App Launcher | - USB filter  
                           |                           | - Shell and App  
                           |                           | - Launcher |
| Processor                 | x86                      | x86 and ARM, 400MHz or faster |
| SOC support               | Intel, AMD               | Intel, Qualcomm, Broadcom |
| RAM                       | 1GB for 32-bit processor  
                           | 2GB for 64-bit processors  | 256MB for 32-bit processors  
                           |                           | 512MB for modern UI support |
| Storage                   | 16GB for 32-bit processor  
                           | 20GB for 64-bit processors  | Flash = 2GB (4GB for modern UI support)  
                           | SD card = Optional         | SD card = Optional |
| Display                   | XGA (1024 x 768) or higher with 32 bits of color per pixel  
                           | (1024 x 600 scaling in driver layer)  | None or Frame buffer graphics and 2D optional  
                           |                           | (720p HDMI / 1080p+ HDMI / 3D GPU optional for modern UI support)  
                           |                           | Single Core, 400 MHz |
| Min. CPU power            | Dual Core, 1GHz          | -- |
| Modern Shell              | Yes                      | -- |
| Mobile Voice              | --                      | -- |
| Classic Win Application support | Yes | -- |
| Universal Windows App support | Yes | Yes |
| Target Devices            | - Industrial/Medical/ATM  
                           | - Thin Client  
                           | - Traditional POS  
                           | - Industrial Tablet  
                           | - Digital Signage/Kiosk | - IoT Gateway |