

# THE INTEL VPRO® PLATFORM SELL-UP GUIDE

## THE BEST PLATFORM FOR BUSINESS<sup>1</sup>

Intel Business Client Platforms  
Q3 2019

1. Based on a comparison (as of April 20, 2019) of features in the following categories: manageability, security, stability and processor performance, between vPro™ enabled platforms and other selected x86 architecture based platforms marketed for use in business PCs. Selection of manageability, security, stability and processor performance features are based on a 2018 web-based survey, conducted by Intel of more than 500 IT decision-makers to assess desired features when purchasing PC for business use.

Intel will be marketing the Intel® Core™ vPro™ platforms with the tag line “Productivity Unleashed” in certain jurisdictions, including PRC and Vietnam. Intel will be marketing the Intel® Core™ vPro™ platforms with the tag line “The Intel® vPro™ platform is Intel’s best business platform” in certain jurisdictions, including Argentina, Belarus, Belize, Chile, Egypt, El Salvador, Guatemala, Honduras, Italy, Japan, Panama, Peru, Saudi Arabia, Turkey, Russia, and Ukraine. If you are media or an influencer from these countries, or otherwise communicating directly to residents in these countries (e.g., on local-language social media), please only refer to the tag line Intel will be using in that country in lieu of the claim on this slide/document.



# TABLE OF CONTENTS

1. [SMB IT Environments](#)
2. [Intel vPro® Value for Managed IT](#)
3. [Intel vPro® Platform Overview](#)
4. [Modern Business Devices with Windows® 10](#)
5. [Adjacent Technologies for a Better Experience](#)
6. [Intel vPro® Platform Conversation](#)
7. [Summary and Resources](#)
8. [Backup](#)

# SMB IT ENVIRONMENTS

# SMB IT ENVIRONMENTS ARE RAPIDLY EVOLVING

Rapid evolution is shifting IT priorities and strategies.

Factors include:

## Trends

- Workplace transformation
- Rise of cloud computing
- Increased security threats
- Proliferation of unassigned devices

## Top priorities

- Security
- Data growth
- Cloud
- Voice assistants

## Continual issues

- Reducing costs
- Increasing profitability

2019: Top 5 midmarket issues, priorities, and challenges

Rank	Business Issues	IT Priorities	IT Challenges
1	Reducing operational costs	Cloud	Cloud security
2	Improving workforce productivity	Security solutions	Managing data growth
3	Increasing business growth	Mobility solutions	Budget constraints
4	Increasing profitability	Collaboration	Maintaining current IT infrastructure
5	Improving quality of products and processes	Virtualization/CI/HCI	Data protection/recovery/business continuity

2014: Top 5 midmarket issues, priorities, and challenges

Rank	Business Issues	IT Priorities	IT Challenges
1	Increasing business growth	Cloud computing	Excessive data growth
2	Reducing operational costs	Collaboration	Finding qualified and trained people
3	Improving workforce productivity	Mobility solutions	Mobile device management
4	Creating innovative products	Virtualization	Regulatory compliance
5	Attracting and retaining new customers	Business intelligence/analytics	Data protection/recovery/business continuity

Sources: <https://techaisle.com/cloud-infographics/33-2014-top-10-mid-market-business-issues-it-priorities-it-challenges-infographic>,  
<https://techaisle.com/research-reports/161-2019-top-10-midmarket-business-issues-it-priorities-it-challenges-infographic>.

# SMB BUSINESS ISSUES, CHALLENGES, AND PRIORITIES

Survey of top 10 midmarket business issues and IT priorities and challenges<sup>1</sup>

**#1** Business issue



**REDUCING OPERATIONAL COSTS**

**#2** Business issue



**IMPROVING WORKFORCE PRODUCTIVITY**

**#2** IT priority



**IMPROVING SECURITY SOLUTIONS**

**#5** IT challenge



**DATA PROTECTION, RECOVERY, AND BUSINESS CONTINUITY**

**IT needs computing platforms that proactively address critical pain points**

1. <https://techaisle.com/research-reports/161-2019-top-10-midmarket-business-issues-it-priorities-it-challenges-infographic>.

# BUSINESS COMPUTING CONCERNS

## Today's challenges

### SELECTING THE RIGHT DEVICE FOR THE JOB



People need the tools to collaborate, contribute, and succeed

### DEPLOYING DEVICES YOU CAN TRUST



Need to protect personal data and intellectual property

### MANAGING THE RATE OF TECHNOLOGY CHANGE



Need tools to minimize downtime and reduce risk

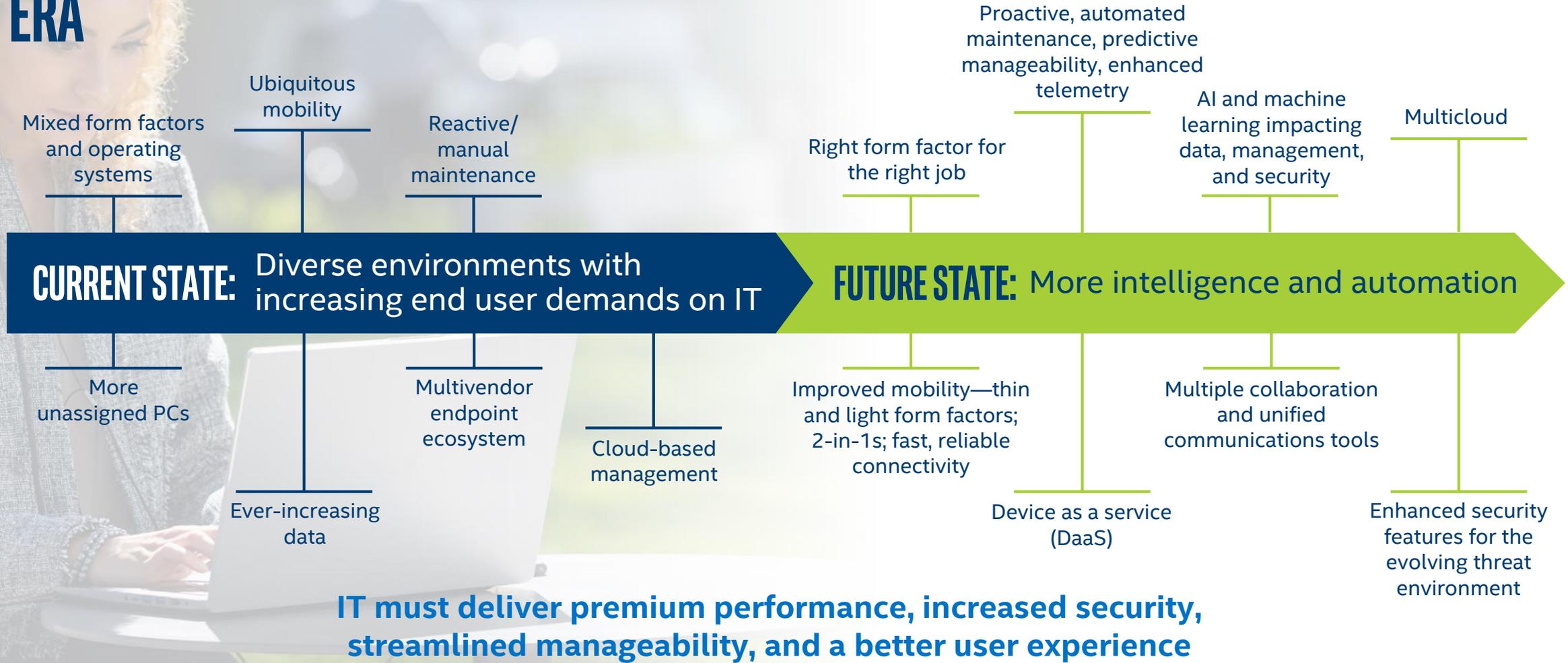
### LOWERING TOTAL COST OF OWNERSHIP



Need to avoid problems or solve them quickly

The Intel vPro<sup>®</sup> platform was designed to address these challenges

# THE BUSINESS PC MUST EVOLVE TO MEET THE DEMANDS OF THE DATA-CENTRIC ERA



# SECURITY IS TOP OF MIND FOR SMALL AND MIDSIZE BUSINESS

Data-centric compute = more vulnerability

87% of CIOs believe their security controls fail to protect their business.<sup>1</sup>

On average, 50% of critical corporate data resides on unprotected desktops and laptops.<sup>2</sup>

Misused, default, or stolen credentials are the leading cause of data breaches.<sup>3</sup>

81% of hacking-related breaches involved stolen and/or weak passwords.<sup>3</sup>

90% of incidents result from exploits in software.<sup>4</sup>

Threats can enter your organization through any computer and spread rapidly.

1. Based on survey of 500 enterprise CIOs in the U.S., U.K., France, and Germany. CIO Study, Venafi 2016, [venafi.com/assets/pdf/wp/Venafi\\_2016CIO\\_SurveyReport.pdf](https://venafi.com/assets/pdf/wp/Venafi_2016CIO_SurveyReport.pdf).

2. SOZO Technologies 2016, [sozo.tech/is-your-company-data-safe/](https://sozo.tech/is-your-company-data-safe/).

3. Data Breach Investigation Report, Verizon 2017.

4. US Department of Homeland Security, [www.csoonline.com/article/2978858/application-security/is-poor-software-development-the-biggest-cyber-threat.html](https://www.csoonline.com/article/2978858/application-security/is-poor-software-development-the-biggest-cyber-threat.html).

# OLDER DEVICES CREATE RISKS



**Time-intensive management** required by modern IT environments—from deskside visits to mixed devices and operating systems

PCs four years or older **cost 1.5x more in repairs**, averaging an additional USD 426 yearly in total maintenance.<sup>1</sup>



**Higher cost of older systems** in repairs, productivity, and service calls, plus, Windows\* 7/Office\* 2010 ending support in 2020

**Productivity is 14% lower** on PCs four years or older.<sup>2</sup>

**80%** of a computer's total cost of ownership (TCO) is **maintenance and tech support**.<sup>3</sup>



**Rampant cybersecurity threats** magnified by mobile workforce

**77%** of businesses surveyed **did not have a cybersecurity incident response plan** applied consistently.<sup>4</sup>

1. Small Business PC Study, Techaisle, 2016.

2. Statistics from a 2018 web-based survey of 1,020 small business owners (in the US, Australia, India, China, and Japan), commissioned by Intel and conducted by J.Gold Associates, LLC, to assess the challenges and costs of using older PCs. [intel.com/content/dam/www/public/us/en/documents/reports/sme-pc-study-report.pdf](https://www.intel.com/content/dam/www/public/us/en/documents/reports/sme-pc-study-report.pdf).

3. Beacon Consulting, 2017.

4. <https://www.ibm.com/account/reg/us-en/signup?formid=urx-37792>.

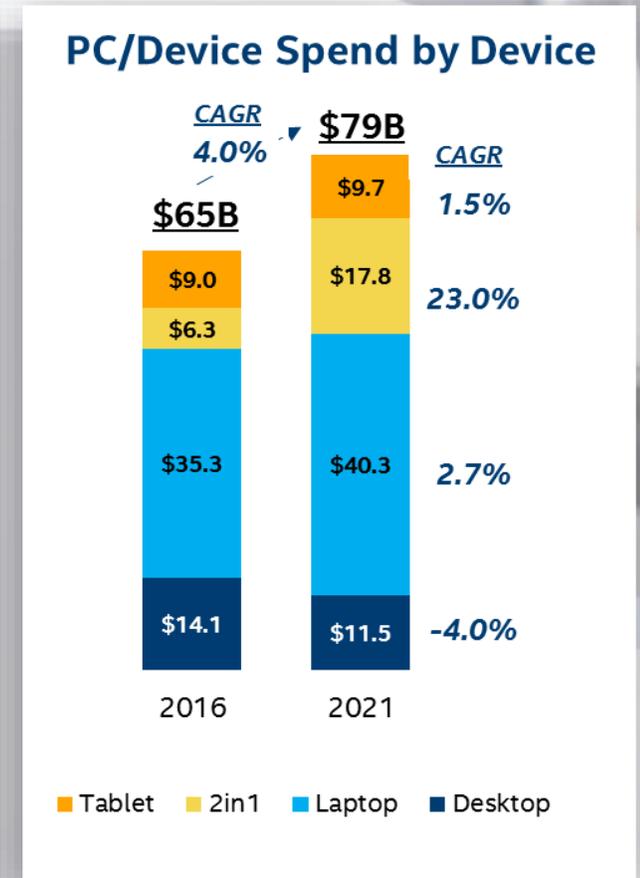
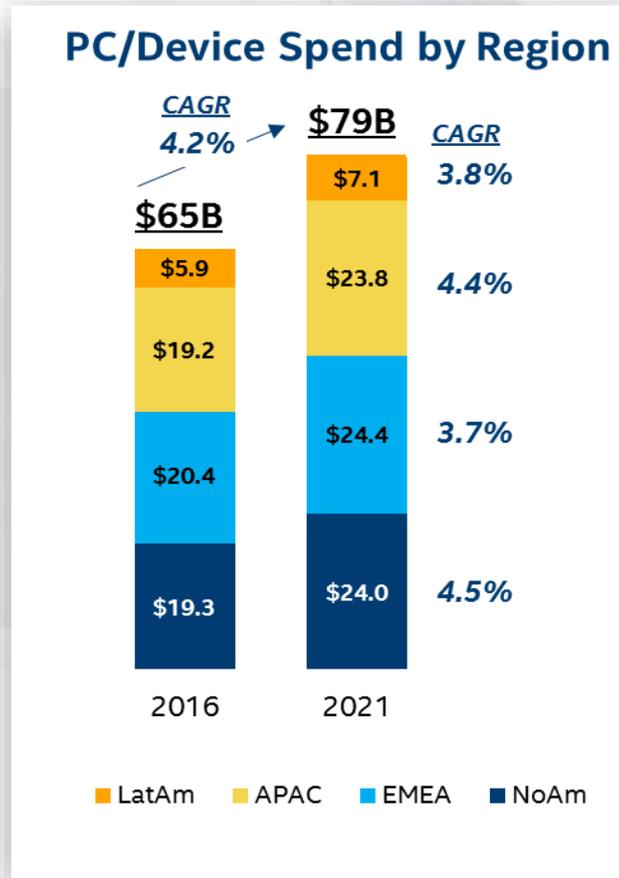
# SMB IT SPENDING IS GROWING — YOUR OPPORTUNITY IS ENORMOUS

More than **USD 100 billion** is the predicted partner services and solutions opportunity for shifting customers to a modern desktop over three years.<sup>1</sup>

More than **50%** of SMB customers run older versions of Windows\* on their PCs.<sup>2</sup>

More than **50%** of SMBs worldwide run Office\* 2010 or older on their PCs.<sup>3</sup>

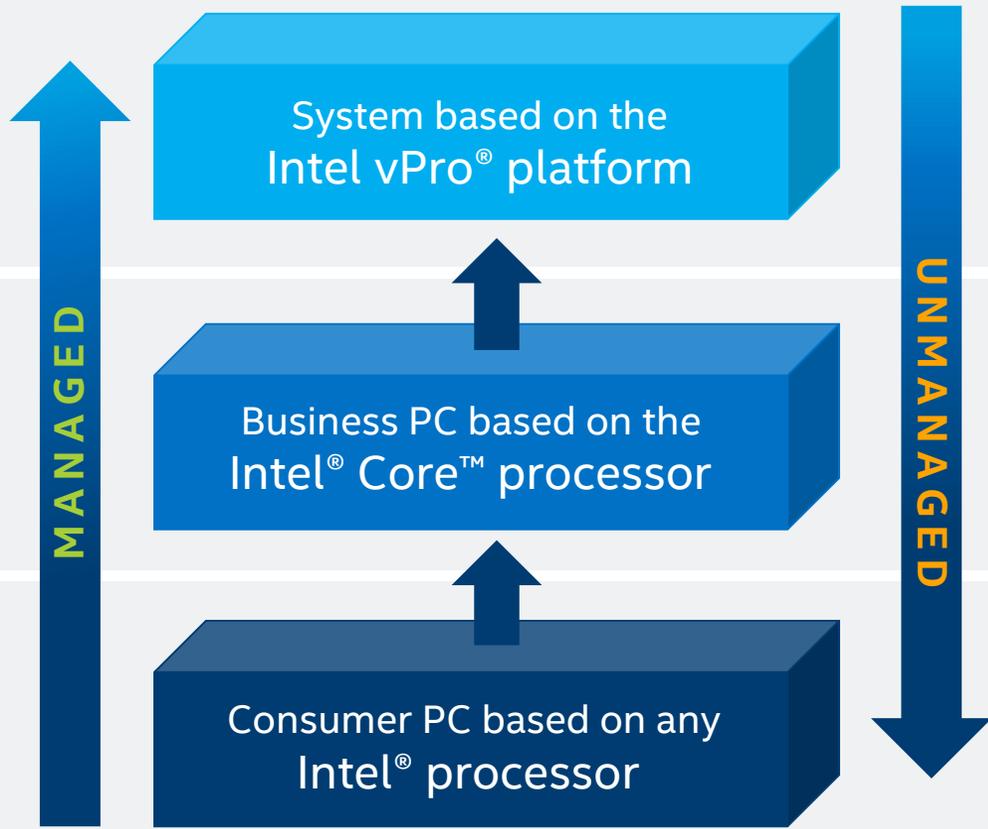
**35%** of SMBs have PCs that are more than four years old.<sup>4</sup>



1. The Partner Opportunity For Creating The Modern Workplace, a commissioned study conducted by Forrester Consulting on behalf of Microsoft, July 2018.  
 2. Microsoft SMB PC Study, Techaisle, July 2018.  
 3. DSST Telemetry data.  
 4. Techaisle; SMB PC Study, 2018.

**INTEL VPRO<sup>®</sup> VALUE FOR MANAGED IT**

# BUSINESS COMPUTING OFFERINGS



↑ PERFORMANCE STABILITY SECURITY MANAGEABILITY



↑ PERFORMANCE STABILITY SECURITY MANAGEABILITY



↑ PERFORMANCE STABILITY SECURITY MANAGEABILITY



# THE INTEL VPRO® PLATFORM: BUILT FOR BUSINESS

The Intel vPro platform delivers a premium business user experience across the areas that matter most to IT and employees: performance, manageability, platform security, and stability.

Intel vPro-based devices bring the best technology to enable **focused productivity and adaptable performance** that help employees get the job done, plus **hardware security features and stable platform** that help IT **more securely protect and easily manage the environment**.

[Watch the keynote with Gregory Bryant >](#)

**Supports the needs of modern business** from mixed-device management to wireless collaboration.

**Offers midsize businesses** the performance, manageability, built-in security features, and stability of Intel® architecture.

**Aligns with a future-proof road map** to help protect investments and scale.

# COST AND TIME SAVINGS WITH THE INTEL VPRO® PLATFORM

A new Forrester study identifies the Intel vPro platform as a foundation for easier management with a substantial total economic impact.<sup>1</sup> [Read the study](#) or [view the infographic](#) >

Annual reduction of **7,680 security support hours** with Intel vPro platform-based devices, resulting in **USD 1.2 million in risk-adjusted savings** over three years as estimated using a composite organization modeled by Forrester Consulting in an Intel-commissioned TEI study. Read the [full study](#).<sup>1</sup>

**832 hours saved with automatic remote patch deployment** through Intel® Active Management Technology, resulting in **risk-adjusted cost savings of USD 81,000** over three years as estimated using a composite organization modeled by Forrester Consulting in an Intel-commissioned TEI study. Read the [full study](#).<sup>1</sup>

**28,160 hours saved in improved employee efficiency** with the Intel vPro platform through better device security and management, resulting in **cost savings of USD 1.3 million** over three years as estimated using a composite organization modeled by Forrester Consulting in an Intel-commissioned TEI study. Read the [full study](#).<sup>1</sup>

*“One-third of our desktops and laptops have the Intel vPro platform so far, but we spend less than 20% of desktop management time working with these devices.”*

—IT manager at a UK financial services firm

*“Intel® AMT is just fantastic. It provides great flexibility and power management. We've found it to be a bit of a game changer, really.”*

—IT manager at a European bioinformatics firm

1. “The Total Economic Impact™ of the Intel vPro® Platform,” a study commissioned by Intel and conducted by Forrester Consulting, December 2018. Savings that other organizations will receive will vary based on a variety of factors, including size and baseline level of security, manageability, and productivity before the business switched to the Intel vPro platform. Consult other sources and use information specific to your organization to determine benefits for your organization. Read the [full study](#).

**INTEL VPRO<sup>®</sup> PLATFORM OVERVIEW:  
FOUR PILLARS THAT DRIVE VALUE FOR MANAGED SMB**

# INTEL VPRO®: THE BEST BUSINESS PLATFORM<sup>1</sup>

Learn more at [intel.com/vpro](https://intel.com/vpro)

The Intel vPro platform is a set of hardware and technologies utilized to build business computing endpoints

## BUILT FOR BUSINESS

Features that enable, accelerate, or complement Windows® 10 Pro/Enterprise

## BROAD MARKET SUPPORT

Historically, over 100 new systems every year from top manufacturers

## VERIFICATION PROGRAM

Formal brand requirements and testing program to verify functionality

## PERFORMANCE



The new 9th Gen Intel® Core™ vPro™ processors are the *highest performing* processors for business.<sup>2</sup>

vPro has a track record of trust with a consistent, reliable cadence of standardized delivery of changes.

## STABILITY



## SECURITY

vPro offers heavyweight protection of valuable corporate assets with strong hardware-enhanced security features.

vPro has built a reputation for world-class remote maintenance and wireless device manageability.



## MANAGEABILITY



vPro® Platform

Designed to address business needs across four pillars

1. Based on a comparison (as of April 20, 2019) of features in the following categories: manageability, security, stability, and processor performance, between vPro®-enabled platforms and other selected x86 architecture-based platforms marketed for use in business PCs. Selection of manageability, security, stability, and processor performance features are based on a 2018 web-based survey, conducted by Intel of more than 500 IT decision-makers to assess desired features when purchasing a PC for business use, as measured by SYSmark\* 2018 and webXPRT\*  
2. As measured by SYSmark\* 2018 and webXPRT\* 3. Processors Compared: 9th Gen Intel® Core™ vPro™ i9-9900, i7-9700, i5-9500, i9-9900T, i7-9700T, i5-9500T, i9-9880H, and i9-9400H; 8th Gen Intel® Core™ vPro™ i7-8665U and i5-8365U; and AMD Ryzen™ 7 PRO 2700X.  
3. . Processors compared: 9th Gen Intel® Core™ vPro® i9-9900, i7-9700, i5-9500, i9-9900T, i7-9700T, i5-9500T, i9-9880H, and i9-9400H; 8th Gen Intel® Core™ vPro® i7-8665U and i5-8365U; and AMD Ryzen® 7 PRO 2700X.

# INTEL VPRO PLATFORM COMPONENTS

Reduce costs, enhance productivity, improve security, and maintain business continuity

<b>PERFORMANCE</b> 	<b>SECURITY</b> 	<b>MANAGEABILITY</b> 	<b>STABILITY</b> 
<ul style="list-style-type: none"><li>8th and 9th Gen Intel® Core™ vPro® processors</li><li>Intel® Xeon® processors [Xeon E, Xeon W, and Xeon Scalable]</li><li>Intel® Wireless-AC or Intel® Wi-Fi 6</li><li>Intel® Ethernet connectors</li><li>Intel® Thunderbolt™ 3</li><li>Intel® Solid State Drives</li><li>Intel® Optane™ memory</li></ul>	<ul style="list-style-type: none"><li>Intel® Hardware Shield</li><li>Intel® Authenticate Technology</li><li>Intel® Threat Detection Technology</li><li>Intel® Transparent Supply Chain</li><li>Intel® SGX   TPM 2.0</li></ul>	<ul style="list-style-type: none"><li>Intel® Active Management Technology</li><li>Intel® Setup and Configuration Software</li><li>Intel® Manageability Commander</li></ul>	<ul style="list-style-type: none"><li>Intel® Stable Image Platform Program</li><li>Platform validation for Windows® 10 releases</li></ul>

^Not available at time to market for 8th or 9th Gen Intel Core vPro processors. Launch planned for 2H 2019.

\*Other names and brands are property of their respective owners.

# THE HEART OF THE PLATFORM

Intel® Core™ vPro® processors enable workers to collaborate, contribute, and succeed

<p>From</p>  <p>Up to</p> 	<p><b>MAINSTREAM MOBILE</b></p> <ul style="list-style-type: none"> <li>The <b>latest 8th Gen Intel Core vPro processors</b> (U-Series) offer <b>quad-core</b> computing at a <b>15W TDP</b></li> <li>Featuring a new <b>platform controller hub</b> with integrated Intel® Wireless-AC</li> </ul>
<p>Intel Core vPro processors are designed for what's next—helping turn data into decisions, securing information in motion, and extending productivity everywhere.</p>	<p><b>HIGH-END MOBILE</b></p> <ul style="list-style-type: none"> <li><b>9th Gen Intel Core vPro processors</b> (H-Series) operate at a <b>45W TDP</b> while providing up to <b>eight</b> multithreaded cores on CPUs with the new i9 designator</li> </ul>
<p>Learn more at <a href="https://intel.com/vpro">intel.com/vpro</a></p>	<p><b>DESKTOP COMPUTING</b></p> <ul style="list-style-type: none"> <li><b>9th Gen Intel Core vPro processors</b> (S-Series) support 11 variations operating at 3 TDP levels (<b>35/65/95W</b>), and providing up to <b>eight</b> multithreaded cores on CPUs with the new i9 designator</li> </ul>
	<p><b>INTEL VPRO PLATFORM</b></p> <ul style="list-style-type: none"> <li><b>All processors<sup>1</sup></b> support the traditional set of Intel vPro platform features as well as new enhancements such as <b>Intel® Hardware Shield</b></li> </ul>

1. Contact system vendors for configuration details.

# NOW IS THE TIME — REFRESH TO A NEW MAINSTREAM MOBILE PC

Modern devices power business advantages, like increased productivity, enhanced security, and lower costs.

## Enable new use cases

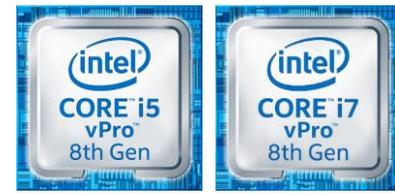
- More parallel workloads and accelerated multitasking; ready for tomorrow’s workflows
- Analyze, visualize, and transform data faster

## Built-in security features

- A more-protected PC foundation out of the box with Intel® Hardware Shield

## Streamline IT

- Help protect identity and enforce log-in policy with Intel® Authenticate Technology
- Trace authenticity of system components with Intel® Transparent Supply Chain



8th Gen Intel® Core™ vPro® processor vs. three-year-old PC



Up to **65% BETTER OVERALL SYSTEM PERFORMANCE**<sup>1</sup>



Up to **1.39X FASTER OFFICE MULTITASKING**<sup>2</sup>



Up to **2X LONGER BATTERY LIFE**<sup>3</sup>



Up to **55% BETTER WEB PERFORMANCE**<sup>4</sup>



Analyze & visualize data up to **1.5X FASTER**<sup>5</sup>

1. As measured by SYSmark\* 2018 Overall on Intel® Core™ i7-8665U vs. Intel® Core™ i7-6600U.  
 2. As measured by Office Productivity and Multitasking Workload on Intel® Core™ i7-8665U vs Intel® Core™ i7-6600U.  
 3. As measured by MobileMark\* 2018 workload on preproduction OEM system with Intel® Core™ i7-8665U vs. OEM system with Intel® Core™ i7-6600U.  
 4. As measured by WebXPRT\* 3 on Intel® Core™ i7-8665U vs. Intel® Core™ i7-6600U.  
 5. As estimated by Microsoft PowerBI\* data source change workload on Intel® Core™ i7-8665U vs. Intel® Core™ i7-6600U. Results have been estimated or simulated using internal Intel analysis or architecture simulation or modeling, and provided to you for informational purposes. Any differences in your system hardware, software, or configuration may affect your actual performance.

# NOW IS THE TIME — REFRESH YOUR HIGH-END MOBILE OR DESKTOP PC

Powerful devices for enhanced productivity on demanding workloads

## MOBILE



Up to **30% BETTER** WEB PERFORMANCE<sup>4</sup>



Up to **19% FASTER** OFFICE MULTITASKING<sup>2</sup>



Compress data up to **42% FASTER**<sup>3</sup>



Up to **27% BETTER** OVERALL SYSTEM PERFORMANCE<sup>1</sup>



Analyze & visualize data up to **27% FASTER**<sup>5</sup>

## DESKTOP



Up to **34% BETTER** OVERALL SYSTEM PERFORMANCE<sup>1</sup>



Up to **36% FASTER** OFFICE MULTITASKING<sup>2</sup>



Compress data up to **87% FASTER**<sup>3</sup>



Up to **43% BETTER** WEB PERFORMANCE<sup>4</sup>



Analyze & visualize data up to **37% FASTER**<sup>5</sup>

1. As measured by SYSmark\* 2018 Overall comparing 9th Gen Intel® Core™ vPro® i7-9850H vs. 6th Gen Intel® Core™ vPro® i7-6920HQ  
 2. As measured by Office Multitasking workload comparing 9th Gen Intel® Core™ vPro® i7-9850H vs. 6th Gen Intel® Core™ vPro® i7-6920HQ  
 3. As measured by 7Zip workload comparing 9th Gen Intel® Core™ vPro® i7-9850H vs. 6th Gen Intel® Core™ vPro® i7-6920HQ  
 4. As measured by WebXPRT\* 3 Overall comparing 9th Gen Intel® Core™ vPro® i7-9850H vs. 6th Gen Intel® Core™ vPro® i7-6920HQ  
 5. As measured by Microsoft PowerBI data source change workload comparing 9th Gen Intel® Core™ vPro® i7-9850H vs. 6th Gen Intel® Core™ vPro® i7-6920HQ  
 6. As measured by SYSmark\* 2018 Overall comparing 9th Gen Intel® Core™ vPro® i5-9500 vs. 6th Gen Intel® Core™ vPro® i5-6500  
 7. As measured by Microsoft Office\* multitasking workload comparing 9th Gen Intel® Core™ vPro® i5-9500 vs. 6th Gen Intel® Core™ vPro® i5-6500  
 8. As measured by 7Zip workload comparing 9th Gen Intel® Core™ vPro® i5-9500 vs. 6th Gen Intel® Core™ vPro® i5-6500  
 9. As measured by WebXPRT\* 3 Overall comparing 9th Gen Intel® Core™ vPro® i5-9500 vs. 6th Gen Intel® Core™ vPro® i5-6500  
 10. As measured by Microsoft PowerBI\* data source change workload comparing 9th Gen Intel® Core™ vPro® i5-9500 vs. 6th Gen Intel® Core™ vPro® i5-6500

# BUILT-IN SECURITY FEATURES

Advancing the Intel vPro® platform to help protect the PCs in your fleet with Intel® Hardware Shield



## INTEL HARDWARE SHIELD

Helps **reduce the attack surface** of the BIOS.  
Now with new **reporting capability providing unique visibility** across the OS and BIOS.

No product or component can be absolutely secure.



# INTEL® AUTHENTICATE TECHNOLOGY

## Hardware-based multifactor authentication

Intel Authenticate Technology helps get in front of identity threats by enabling hardware-enhanced identity protection. It offers customizable multifactor authentication options to fit your IT policies and it is easy to deploy.

### Log-in policy enforcement

- Create and easily deploy customized multifactor authentication policies
- Verify two or more factors for greater security
- Choose from PIN, smartphone proximity, biometrics, network logical location, or smart card

### Protection at the hardware level

- User identity information (i.e., factors) and IT policy are both stored in hardware
- Helps provide better user identity protection with reduced exposure to software-level attacks

### System support

- Intel Authenticate Technology is available on 6th Gen and newer Intel® Core™ vPro® processors
- Systems bearing the Intel vPro brand have been validated for the Intel Authenticate solution

No product or component can be absolutely secure.

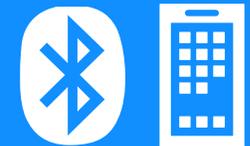
## HARDENED FACTORS



SMARTCARD



PIN



BLUETOOTH\* PROXIMITY



BIOMETRICS



LOCATION



# MORE SECURITY TECHNOLOGIES ON THE BEST BUSINESS PLATFORM

## THREAT DETECTION



### Intel® Threat Detection Technology (Intel® TDT) SDK

- Intel is working to empower security teams with advancements in threat detection so they can more efficiently discover and remediate vulnerabilities
- Intel TDT offers memory scanning for threats more frequently, providing deeper insights for security teams

## SAFEGUARD DATA



### Intel® SGX SDK (for ISVs)

- Intel® Software Guard Extensions offer hardware-based memory encryption that isolates specific application code and data in memory (enclaves)

## RECOVERY



### Intel® Active Management Technology

- The Intel vPro® platform helps maximize system uptime and minimize downtime with automatic patching

# EMPOWERING THE WORKFORCE 24/7

Support workers and help IT with manageability features on the Intel vPro® platform

Modern manageability requires tools that support workers wherever they are.

## The Intel vPro platform

The Intel vPro platform helps businesses achieve modern manageability by evolving continuously in ways that bring value to customers.

## Intel® Active Management Technology (Intel® AMT)

Intel AMT on the Intel vPro platform brings remote manageability where it's needed—even for those working outside the corporate firewall.

# MANAGE YOUR FLEET WITH INTEL® ACTIVE MANAGEMENT TECHNOLOGY (INTEL® AMT)

Intel AMT enables you to better discover, repair, and protect networked computing assets.

## INCREASE CONTROL

- Remotely query, restore, upgrade, and protect devices
- In-band and out-of-band control of any Intel AMT-activated computing endpoint
- Remote control over wired or wireless connections
- Power on systems for remediation or patching

## SAVE TIME AND COSTS

- Avoid problems with proactive maintenance
- Solve problems quickly with out-of-band KVM
- Reduce on-site support costs

## GET MORE FROM THE INTEL VPRO® PLATFORM

- Required for network logical location factor for Intel® Authenticate
- Required for Intel® Remote Secure Erase for Intel® SSD Pro Series
- Preferred management solution for Intel Unite® solution hubs
- Intel® Setup and Configuration Software
- Intel® Manageability Commander
- Wide variety of third-party tools

1. Intel® Active Management Technology is sophisticated and requires setup and activation. Availability of features and results will depend upon the setup and configuration of your hardware, software, and IT environment.  
 2. Cost-reduction scenarios described are intended as examples of how a given Intel-based product, in the specified circumstances and configurations, may affect future costs and provide cost savings. Circumstances will vary. Intel does not guarantee any costs or cost reduction.



# RELIABLE STABILITY: INTEL® STABLE IMAGE PLATFORM PROGRAM (INTEL® SIPP)

Maintain business continuity and manage computing life-cycle complexities with confidence

Provides platform stability for 15 months on key hardware and software components



## Rigorous testing and validation process

Intel partners with OEMs for a full year—every year—conducting thousands of tests and feedback loops to certify that devices in the Intel SIPP are built for business.



## Predictable cadence. Fewer changes.

Upgrading to 2019 Intel vPro® systems based on the new 8th or 9th Gen Intel® Core™ vPro® processors can help keep changes to key platform components and drivers to a minimum for at least 15 months or until the next Intel SIPP platform release.



Windows 10

## Broad Windows® 10 Enterprise support

2019 Intel vPro systems based on 9th Gen Intel Core vPro processors with Intel SIPP support offer IT managed organizations a broad choice of Windows 10 Enterprise OS support options (versions 1709 through at least version 19H1) for smoother transition to the latest hardware platform.

Comprehensive list of Intel® components includes processors, graphics, chipsets, networking, solid state drives, and I/O

**MODERN BUSINESS DEVICES WITH WINDOWS® 10**

# INTEL VPRO® PLATFORM FOR THE MODERN BUSINESS DEVICE MIX



## THIN & LIGHT LAPTOPS

Balanced performance  
plus long battery life



## 2-IN-1s

Form factor flexibility  
with touch



## MINI PCs

Small footprint  
desktop PCs



## WORKSTATION

Enhanced performance  
for demanding workloads



## ALL-IN-ONES

Stylish, ergonomic,  
and immersive

Match your customers to the new Intel® Core™ vPro® platform-based modern form factors they need to keep businesses running smoothly.

# MAKE THE SHIFT TO A MODERN DEVICE



Get the most from Windows® 10 and Office 365\* on modern devices powered by the Intel vPro® platform

## Microsoft innovations

- Key security features: Windows Hello\*, Device Guard\*, Credential Guard\*, BitLocker,\* Windows Trusted Boot\*, Windows Defender\*
- Key manageability features: Windows updates, Windows as a Service, Azure\* Active Directory join

## Intel differentiation

- Robust family of security/manageability features that accelerate, enable, or complement Windows 10 capabilities
- The Intel vPro brand specification ensures support for hardware features Windows 10 needs (e.g., Intel® VT-x, Intel® VT-d, TPM 2.0)<sup>1</sup>



### Productivity

- Pen, touch, voice, and gesture
- Fast connectivity and boot-up time
- Longer battery life



### Security

- Hardware-based security features
- Password-free sign in<sup>2</sup>



### Cost-effective

- Platform transitions with ease
- AutoPilot enabled

<sup>1</sup> Intel® Virtualization Technology for IA-32, Intel® 64, and Intel® Architecture. Intel® Virtualization Technology for Directed I/O. Trusted Platform Module.  
<sup>2</sup> To use Windows Hello\* with biometrics specialized hardware, including fingerprint reader, illuminated IR sensor, or other biometric sensors is required.

**ADJACENT TECHNOLOGIES FOR A BETTER EXPERIENCE**

# INTEL UNITE<sup>®</sup> SOLUTION: SEAMLESS WIRELESS COLLABORATION

Intuitive wireless collaboration solution designed for modern workspaces. **Now available both on premises and as a cloud service**—enabling seamless collaboration for organizations of all sizes.

**Great experience for users. Open, manageable, flexible, more secure platform for IT.**

- Fast meeting start with more ways to join
- Intuitive collaboration tools and touch enabled
- Support multiple devices/BYOD
- Works with diverse environments (huddle spaces, kiosks, digital signage, large conference rooms)
- Deploy in full-screen, digital signage, or desktop mode
- HD video and audio
- Leverage existing infrastructure, tools, and communications ports
- Adapt to available connectivity
- Enhanced enterprise security
- Enable customized deployment (plugins, apps, etc.)
- Remotely manage spaces from Admin Portal

Learn more at [intel.com/unite](https://intel.com/unite)



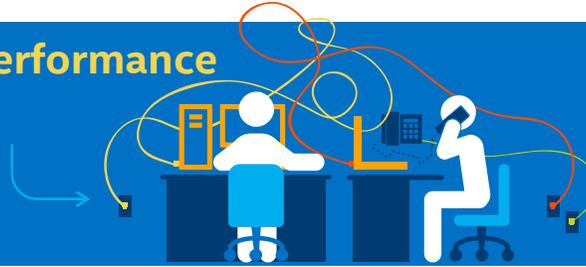
# INTEL® WI-FI 6 (GIG+) FOR ENTERPRISE, MIDSIZE, AND SMALL BUSINESSES

## Improve scalability, reliability, security, and performance

Wireless workplace transformation is growing rapidly

### Wired workplace

Ethernet connections and desk phones have tethered workers to their desks.



### Wireless workplace

Wi-Fi 6, PC software, phones, and collaboration tools free users to work anywhere.



(Gig+) is the best<sup>1</sup> Wi-Fi 6 implementation—with new features and the fastest speeds to help accelerate workplace transformation

## 4X GREATER SCALABILITY<sup>1</sup>

The Wi-Fi 6 OFDMA feature enables managed, reliable, efficient connectivity across more devices. This means plenty of headroom for future growth, or fewer APs required to support existing devices.



## REDUCED INTERFERENCE

The Wi-Fi 6 OBSS feature helps routers and devices identify local traffic and tune out noise from other networks.



## IMPROVED SECURITY<sup>1</sup>

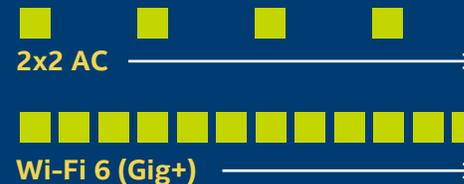
Wi-Fi 6 requires new WPA3 security features, enabling next-generation authentication and military-grade encryption.



Improved protection

## 3X FASTER<sup>1</sup> PERFORMANCE

1024 QAM and support for optional 160 MHz channels enable new PCs and routers with Intel® Wi-Fi 6 (Gig+) technology to deliver best-in-class gigabit speeds for the office or home.



## POTENTIAL WIRELESS COST SAVINGS

### Ethernet-connected user

- Requires Ethernet cabling and hardware (up to USD 200 per user)<sup>1</sup>
- Requires physical phone and cabling (up to USD 100 per user)<sup>1</sup>



### Wi-Fi-only user

- No cabling or wired hardware
- Uses PC as phone

Find out more about how Intel Wi-Fi 6 (Gig+) can transform your workplace at [intel.com/wireless](https://www.intel.com/wireless)

1. For more information about the data presented, visit [intel.com/wifi6disclaimers](https://www.intel.com/wifi6disclaimers).

# THUNDERBOLT™ 3 SAVES TIME AND INCREASES PRODUCTIVITY

Effortlessly connect everything on Intel® mobile business platforms

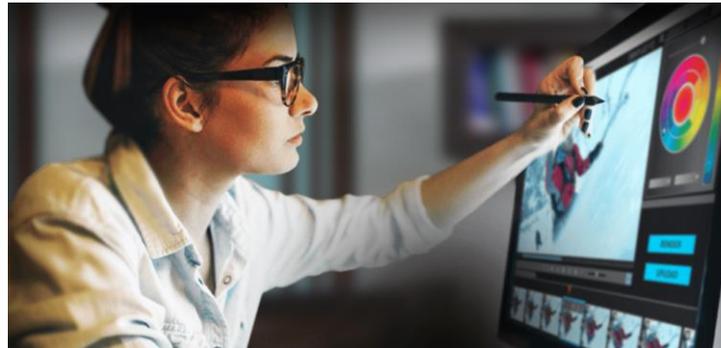
## INCREASED PRODUCTIVITY



### Thunderbolt 3 single cable docking

- Thunderbolt 3 provides the most advanced, efficient, and versatile I/O solution available with up to 40 Gb/s for data and video
- Supports two uncompressed 4K 60 Hz displays
- Moves data at speeds 8x faster than USB 3.0
- Quick notebook charging up to 100W

## SIMPLIFIED CONNECTIVITY



### Delivers worry-free connectivity

- Reduces complexity via fast and easy single-cable connection
- Concentrates the most I/O capability on USB-C along with the widest device compatibility in the industry
- Reversible cables make connecting easy

## FUTURE READY



### Reduce the number of dock variants, support calls, and IT costs

- Thunderbolt 3 docks can intelligently provide more performance and features when connected to a Thunderbolt 3 computer port and basic compatibility when connected to a USB-C computer port
- Deliver the performance and capability headroom to keep pace with the evolving workforce



Look for the Thunderbolt icon for increased productivity and simplified connectivity and keep pace with the evolving workforce

For more complete information about performance and benchmark results, visit [intel.com/benchmarks](https://www.intel.com/benchmarks).

# INTEL® OPTANE™ MEMORY H10 FOR BUSINESS

Empower your workforce to do more

Each day, IT managers juggle:

Intel Optane memory H10 delivers:



**PRODUCTIVITY  
(PERFORMANCE)**

## Performance where it matters most

- Superior performance at low QD and mixed R/W workloads
- Frequently used files and programs are cached in Intel Optane memory



**SECURITY**

## Peace of mind

- Encryption support: compatible with Microsoft BitLocker\*
- Data sanitization with industry-standard secure erase



**MANAGEABILITY**

## Easy configuration and management

- IT utilities and user see only one storage volume
- OS reimaging with the same tools you use today



**COST EFFICIENCY**

## Cost-effective investment in PC responsiveness

- Alternative to adding expensive DRAM
- Cost-effective refresh—from BOM throughout client life cycle

Launch documents



up to  
**2.6X<sup>1</sup>**

faster

Load workbooks



up to  
**2.2X<sup>2</sup>**

faster

Launch presentations



up to  
**72%<sup>3</sup>**

faster

With background activity (local file copy). Compared to a system with a TLC SSD.

Notebook measurements on Intel® Core™ U-Series Processor

<sup>1,2,3</sup>See Appendix I for configuration and workload details.  
All testing done internally by Intel

# INTEL VPRO<sup>®</sup> PLATFORM CONVERSATION

# HAVE THE PC REFRESH CONVERSATION

Intel vPro® platform-powered modern devices

	Customer priorities	Qualifying questions
	<b>Safeguarding business assets, identities, and IP</b>	How are you preparing to deal with the financial, reputation, and operational risks of an endpoint security breach?
	<b>Controlling technology and infrastructure costs</b>	How are you accounting for costs of maintaining hardware, new hardware infrastructure, and software upgrades?
	<b>Improving employee productivity and IT efficiency</b>	How are you measuring productivity and what types of productivity initiatives or solutions are you considering?
	<b>Increasing platform stability</b>	How will you protect your investments and limit any negative impact of change?

# SUCCESS STORIES



## Intel vPro® Platform Helps Law Firm Keep Data Secure

Intel® Core™ vPro® processor-based laptops help employees at the law firm Lancaster, Brooks & Welch LLP to be mobile, efficient, and productive, delivering exceptional customer service.

[More information](#) ▶



## Intel vPro Platform Helps Lightbridge Academy Focus on the Future

Intel Core vPro processor-based PCs help the Lightbridge Academy stay productive while helping to develop the leaders of tomorrow.

[More information](#) ▶



# **SUMMARY AND RESOURCES**

# SUMMARY

The Intel vPro® platform addresses SMB IT issues and empowers businesses to succeed.

**PERFORMANCE**



Drive productivity

Minimize downtime

**STABILITY**



**SECURITY**

Improve data security

Efficient asset control



**MANAGEABILITY**



# MOVE MIDSIZE BUSINESSES FORWARD

1. Educate your customers on the business advantages of technology refresh
2. [Learn more about Intel® AMT activation](#)
3. Take advantage of 8th Gen Intel® Core™ vPro® platform ITP points promotions
4. Use technology refresh marketing content from Intel to stay informed and help move customers to purchase

# DRIVE PC REFRESH: LEARN MORE

Partner Marketing Studio  
[marketingstudio.intel.com](http://marketingstudio.intel.com)

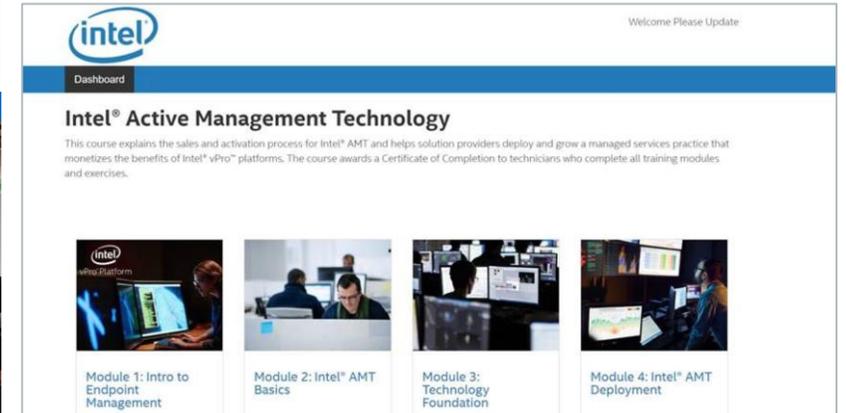
Step-by-step instruction on how to discover, provision, and manage Intel vPro® platform-based PCs  
[msp.intel.com/vProNavigator](http://msp.intel.com/vProNavigator)

intel.com  
[intel.com/vpro](http://intel.com/vpro)  
[intel.com/smallbusiness](http://intel.com/smallbusiness)

Intel vPro platform TCO estimator  
[estimator.intel.com/vpro/](http://estimator.intel.com/vpro/)

ITP resources  
[goto.intel.com/smbchannel](http://goto.intel.com/smbchannel)  
[marketingstudio.intel.com](http://marketingstudio.intel.com)

Intel® Active Management Technology (Intel® AMT) implementation  
<http://channeltraining.intel.com/diweb/catalog/launch/generic/eid/2436472>



# LEGAL NOTICES AND DISCLAIMERS

Software and workloads used in performance tests may have been optimized for performance only on Intel® microprocessors. Performance tests, such as SYSmark\* and MobileMark\*, are measured using specific computer systems, components, software, operations, and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more complete information visit [intel.com/benchmarks](https://intel.com/benchmarks).

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Cost-reduction scenarios described are intended as examples of how a given Intel-based product, in the specified circumstances and configurations, may affect future costs and provide cost savings. Circumstances will vary. Intel does not guarantee any costs or cost reduction.

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**BACKUP**

# 2019 ITP POINTS PROMOTIONS

## 8th Gen Intel® Core™ vPro® platform + Intel® Optane™ ITP points promotions

(Branded and components) are available



### Maximize your Q1 sales.

This offer sheet outlines some of the Points benefits available exclusively for registered Intel® Technology Provider members.



**Latitude™ 3390**

Earn up to 51 total Points.

Earn up to 70 total Points.



**Latitude™ 7390**

Earn up to 51 total Points.

Earn up to 70 total Points.



**XPS™ 13 (9370)/15 (9570)**

Earn up to 51 total Points.

Earn up to 70 total Points.

**Limited time only!**  
Promotion runs from January 1–March 31, 2019.

\*Points will vary depending on SKU purchased. Points only awarded for qualifying purchases. Visit the [Points site](#) for full Ts&Cs.

**Not a member?** Join Intel Technology Provider, which in addition to rewarding you with valuable points, can provide everything from marketing solutions to sales-boosting tools and exclusive trainings. Sign up today at [techpartner.intel.com/msp](http://techpartner.intel.com/msp)

Get up to  
**70 Points\***

10 Points = \$1

### Maximize your Q1 sales with HP and Intel



**HP ProBook® x360 440 G1**

Up to 51 Points\*

Up to 70 Points\*



**HP EliteBook® x360 1013 G3**

Up to 70 Points\*



**HP EliteBook® 840 G5**

Up to 51 Points\*

Up to 70 Points\*

This offer sheet outlines some of the Points benefits available exclusively for registered Intel® Technology Provider members.

**Promotion runs from January 1–March 31, 2019.**

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Get up to  
**70 Points\***

10 Points = \$1

### Maximize Your Q1 Sales

This offer sheet outlines some of the Points benefits available exclusively for registered Intel® Technology Provider members.





**ThinkPad® X1 Carbon**

Up to 51 Points

Up to 58 Points



**ThinkPad® X1 Yoga™**

Up to 51 Points

Up to 70 Points



**ThinkPad® L380**

Up to 51 Points

Up to 70 Points



**ThinkPad® T480s**

Up to 51 Points

Up to 70 Points

**Limited time only!**  
Promotion runs from January 1–March 31, 2019.

\*Points will vary depending on SKU purchased. Points only awarded for qualifying purchases. Visit the [Points site](#) for full Ts&Cs.

Get up to  
**70 Points\***

10 Points = \$1