September 2013

Intel vPro:
Enhancing End User Productivity

A J.Gold Associates Research Report

"Many enterprise-class systems ship with vPro enabled chips. We believe that the new version of Intel vPro on 4th generation Core, enhanced by a focus on end user productivity and the addition of business-class Atom support, will significantly increase its acceptance and deployment… Enterprises should evaluate how the new functionality of vPro fits into their requirements and enhances their end-user experience..."

J.Gold Associates

Contents

Introduction

Intel has announced a new version of vPro for 4th generation Core, including limited support for next generation Atom devices. Complimenting the enhanced power and performance of 4th generation Core chips, we expect this version of vPro to be a ground-breaking redirection for the product and brand. Below we offer our assessment of why this is so.

Shifting Centers of Gravity

Our research indicates that approximately two thirds of enterprise mobile solutions are being driven by the line of business (LOB) users, and not by IT. That means IT can no longer expect to fully dictate the device preference, application choice, user policies, and/or security considerations. Clearly IT has an important role to play, but many of the traditional management functions are moving towards end user self-direction. It is therefore imperative that management and security products take this trend into account and shift their focus to a more end-user inclusive philosophy.

> *TREND: In the next 1-2 years, we expect enterprise users to employ 3-5 personal devices and use 8-10 business applications on a regular basis. Further, they will connect to at least 5 different enterprise systems to do their work. (e.g., VPN, email/Exchange, cloud systems, CRM/ERP/SFA). Most organizations will struggle to manage and secure these devices due to lack of consistency of capabilities and tools and increasing end-user driven deployments.*
> *J.Gold Associates LLC.*

What's Changed with so Many User Devices?

Traditional tools used by IT to manage users' devices need to morph into supporting tools that increase convenience and productivity for end users. For the most part, IT will not be as heavily involved or seen as forcing users down a particular path. Further, the tools need to be available across all of the user preferred platforms, including PCs, tablets, smartphones, etc. Finally, many of the best productivity enhancing capabilities need to be integrated at the architecture/chip level in order to both protect and defend user devices from the vast threats still emerging in the expanding world of devices and connectivity options.

Intel's Response to Changing Needs

Intel is responding to this trend by extending vPro to directly enable end user convenience and productivity. This is an important move as it is becoming increasingly clear that many enterprise IT shops have been unable to fully manage and apply sufficient resources for the increasingly complex compute environment. Further, as Intel chips move into more devices types, e.g., Core devices in Two-In-Ones, enterprise tablets using Atom chips, it's clear that a line of IT only tools applied to only a limited number of Intel higher end chips is not an optimum long term position.

J.Gold Associates

From Control to Enhanced Productivity

Intel's challenge is to change the conversation about vPro from an IT-centric tool set, to one that users see as an invaluable tool and that drives them to push their companies to buy vPro enabled devices. Intel needs to establish a "user demand" scenario that gives it market advantage. With all of the assets it has, including McAfee for enhanced security, support for Windows and Android, 4th generation Core for higher end Ultrabooks, 2-in1s, All-In-Ones and small form factor desktops, and business-class Atom for enterprise tablets, Intel can change the impression that vPro is for IT only. Intel can make the vPro brand stand for enhanced productivity and convenience in the end user's mind.

Multiple Form Factors, Multiple Platforms

Clearly, desktop and notebook PCs are no longer the sole deployment platform for the majority of organizations, and management and security solutions must follow this trend. vPro now extends across most enterprise-class mobile devices, including Notebooks, convertibles and detachable 2-in1s, and tablets, and will ultimately include smartphones. Further, it includes the extensibility to support Android (based on OS limitations) as well as Windows 8. And while capabilities on Atom are not yet fully equivalent to Core-based devices, we expect growth of Atom functionality over the next 1-2 years to enable near equivalence (within chip/HW and OS constraints/limitations). We don't expect Android to offer the rich management and security features of Windows in the near term, but there is still much that can be done to enhance its capabilities for companies who are increasingly evaluating Android devices..

Bringing Atom On-Board

The latest Atom business-class SoC (Z3000 series) includes for the first time many of the features that Core users have grown accustomed to, (e.g., Identity Protection Technology with PKI, McAfee DeepSafe, Intel Trusted Platform, WiDi). Intel has now focused on making Atom a full business-ready device. We expect Intel to add more vPro-compatible features over the next 1-2 years, with the expectation that eventually the vPro brand will be extended to targeted Atom devices as it is currently with Core.

Easing BYOD

Most companies must deal with a variety of form factors and user-acquired devices. vPro has the potential to ease the burden of BYOD if enterprises can achieve device diversity while still having the ability to support and secure those devices. We expect enterprises to influence the BYOD selection by their end users to include key business-ready functionality. Intel's extension of vPro makes this a simpler process for companies to enforce and for increased ability for end users to choose the best device to fit their needs. While IT will not be able to dictate which devices users and LOBs acquire, the inclusion of end-user focused features in the new versions of vPro will help make IT-directed selection a smoother process.

J. Gold
Associates

Including Features that Users Will Like

Intel has chosen key capabilities for this version of vPro that will appeal to end users' productivity needs, including:

➢ Intel Pro Wireless Display for Business - wirelessly connect to existing displays/projectors including managing corporate meeting room assets

➢ Intel Location Based Services - Location based tagging built into WiFi for location aware security, management and profiling, including partnering with key players (e.g., Cisco, Aruba, Aeroscout) to cover 95% of corporate access points

➢ Automated encryption with HW assist on Intel Pro 1500 series SSDs, including remote password reset and fast crypto-erase

➢ Password Free VPN - including partnering with key providers (e.g., Cisco) and providing dual factor authentication

Clearly, over time, more functionality and productivity enhancements will be added to the product that will expand its appeal to the end user community.

Developing an Ecosystem

vPro for 4th generation Core includes an SDK that lets third parties connect to and extend the functionality of vPro. This is a significant step forward, as the ability to enhance functionality while adding user and/or IT features will be key to greater acceptance and lead to end user "stickiness". Intel must focus on building out a compelling ecosystem of third party add-ons that solve vexing problems that end users can appreciate. Complementing Intel's own functionality with third party add-ons will significantly expand vPro's capabilities and at a much faster rate than Intel could do on its own. The ecosystem is key to long term growth and expanded deployment.

Balancing the Desires of End Users and IT

Both the requirements of IT for management and security, and functions that enhance end user experience and productivity are necessary for a complete product offering. vPro on 4th generation Core balances both IT and end user desired functions, as indicated in Figure 1 below.

Figure 1: vPro Adds Desirable Features for both IT and End Users

Function	User Desirability	IT Desirerability
• Location Aware Services	• Medium	• High
• ProWiDi/Miracast	• High	• Medium
• Single Sign On for VPN	• High	• High
• Asset Management	• Low	• High
• Quick Sync Video	• Medium	• Medium
• Security	• Medium	• High
• SSD extensions	• High	• High
• Auto Encryption	• Medium	• High
• Geotagging	• High	• Medium
• Enhanced IPT	• Medium	• High
• SDK for 3rd party extensions	• High	• Medium
• Multi-form factor support	• High	• High
• SCCM plugin	• Low	• High
• Extensions for Atom systems	• High	• High

Bottom Line:

We expect Intel's shift to an end user focus to enable vPro to advance beyond its past as an IT-oriented toolset. Further, we expect Intel to create end user understanding of the capabilities it provides, continue to enhance vPro with additional productivity tools, emphasize building a third party ecosystem, and offers additional platform support. As a result, vPro will become an end user demanded product, propelling it from a "nice to have" product for IT into a "must have" product for end users. This will make the vPro label much more meaningful when users look at buying new devices as "Vpro Inside" becomes a brand focus point for Intel moving forward. Enterprises should evaluate how the new functionality of vPro fits into their requirements and enhances their end-user experience.

J.Gold
Associates

About J.Gold Associates

J.Gold Associates provides insightful, meaningful and actionable analysis of trends and opportunities in the computer and technology industries. We offer a broad based knowledge of the technology landscape, and bring that expertise to bear in our work. J.Gold Associates provides strategic consulting, syndicated research and advisory services, and in-context analysis to help its clients make important technology choices and to enable improved product deployment decisions and go to market strategies.