Intel Software Media Day

M2M: The Next Big Embedded Opportunity

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Embedded and Software

- Embedded projected growth is 25 billion embedded devices by 2020.

- Fundamental capabilities of all these embedded systems is Connectivity, Security and Manageability.

- This is equivalent to having a horizontal "Machine-2-Machine" capability in all embedded devices.

- Designing and implementing embedded systems effectively at scale with M2M solutions is challenging for businesses.

- To reach its growth potential, it must become easier to design M2M devices and enable M2M-based solutions and services.

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Today's Session

- Embedded software in Intel
- Connectivity, Security, and Manageability in Embedded Devices
- What is M2M? Why do people care?
- What is the growth opportunity of M2M?
- Current M2M applications and future trends
- Core requirements in making M2M a reality

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EMBEDDED
Is All Around Us

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M2M Means 'Smart'

> "…in the future everything that will benefit from being connected will be connected."
>
> — Hans Vestberg, CEO Ericsson

> "The consumer and embedded sectors are moving toward billions of connected devices enabled by new and richer classes of service …"
>
> — *Ton Steenman, VP/GM ECG , Intel*

Smart Services

Smart Connectivity

Smart Buildings	Smart Vending	Smart Security	Smart Advertising
Smart Transportation	Smart Retail	Smart Factories	Smart Homes	Smart Medical

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Smart Device Connectivity Categories

"Normal" Connected Devices

- Cell phone, PC, set-top box, iPad, gaming platform, etc.

"Legacy" Connected Devices

- Industrial, telematics, telemetry, SCADA, etc.

"Emerging" Connected Devices

- >25% of the next 5B connected devices
- Towards 50+% of annual connected devices

Smart Band-Aid

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Why Everyone Cares About M2M

Situational Awareness

- Understand your operating environments
- Go deeper, sooner, and more accurately
- Make smart systems smarter

Time-to-Market and Development Efficiency

- Integrated optimized solution vs. hand crafted
- Cost and availability of engineering resources
- Software productivity and engineering tools

Enhanced Productivity

- Make smarter decisions faster
- Improve safety, security, processes, workflows
- Reduce costs
- Improve service delivery

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M2M Software Capabilities

Upper Layers

Foundation Level

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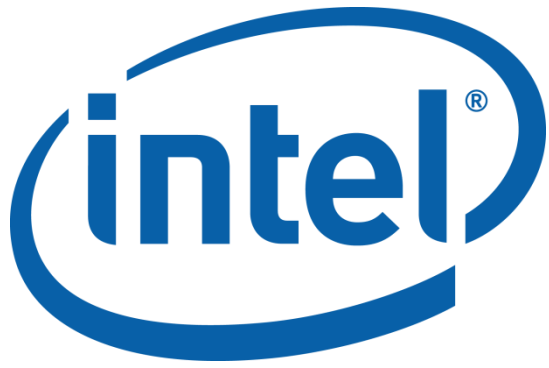intel

What Happens When A Device Gets Connected?

- Seems so simple, but…Connectivity leads to:
  - Protocols
  - Security
  - Manageability
  - Software/firmware updates
  - Discovery
  - Performance
  - Cloud interface
  - Etc.

- As we connect the billions of new M2M devices, each will need a basic kit of functionality in this area at a minimum

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Wide Range of Devices, Common Software Requirements Base

1. Secure, reliable, performance
2. Connectivity
3. Manageable
4. Scale
5. Simplify M2M experience
6. Flexible
7. Mobile
8. Location determination
9. Smart
10. Standards

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Q&A

Thank You!