New Applications Fuel Semiconductor Growth in the IoT

The Internet of Things has long been perceived as an area of growth for the semiconductor industry, but until now, the opportunity has never been adequately quantified. What will be the impact of the IoT on the semiconductor industry? What types of semiconductors will benefit the most? What applications hold the most opportunity for each type of semiconductor? In this first edition report, IHS brings together broad electronic device coverage with deep expertise in semiconductor markets to thoroughly answer these questions for the first time.

*Semiconductors in the Internet of Things* will present historical data (2014 and 2015), a five-year annual forecast (2016 to 2020), and an extended ten year snapshot for 2025. The forecasts will include device unit shipments, semiconductor unit shipments, and semiconductor revenue for three major categories of semiconductors – connectivity, processors, and sensors. Each semiconductor category will be further divided into segments that are relevant to that semiconductor type. All device and semiconductor data will also be segmented by major markets – automotive, communications, computers, consumer, industrial, medical, and military & aerospace.

In addition to detailed forecast data, the report will also carefully examine each market and provide commentary and analysis on the trends, obstacles, and opportunities that are unique to each.

**Key Issues Addressed**
- IoT semiconductor market size through 2025
- Key application markets by semiconductor
- Verticals with the greatest opportunity for semiconductor growth
- An examination of key challenges and opportunities driving inflection points for each market
- Market penetration

**Applicable To**
- Semiconductor manufacturers
- Semiconductor equipment makers
- Device OEMs
- IoT platform & service providers
- Foundries & contract manufacturers
- Investment banks, consultants, and hedge funds
- Middleware & application developers
- Connectivity IP developers

**Actuals and Forecast**

**Frequency, Time Period**
- 2014 & 2015 base data
- 5-yr annual forecast (2016 - 2020)
- Extended 10-yr snapshot (2025)

**Measures**
- Device unit shipments (millions)
- Semiconductor unit shipments (millions)
- Semiconductor revenue ($ millions)

**Semiconductor Types**
- Connectivity
  - Wired, WPAN, WLAN, WWAN, WMesh
- Processors
  - MPU, MCU, Application and Configurable Processors
- Sensors
  - Pressure/Flow, Environment/Health, Presence/Motion, Inertial/Vibration, Imaging, Others

**Markets**
- Automotive
- Communications
- Computers
- Consumer
- Industrial
- Medical
- Military & Aerospace
Report Content

I. INTRO, SCOPE AND METHODOLOGY
Chapter 1 will present the detailed scope of this report. It will define the various types of IOT devices and semiconductor components. It will also define the vertical sector and sub-sector segmentation. In addition, this chapter will present and explain how the data has been collected. It will also clarify any terms used to ensure a clear understanding of the technologies which are included.

II. SEMICONDUCTORS IN IOT TECHNOLOGY OVERVIEW
Chapter 2 will provide an overview of the semiconductor components which are included in the scope of this report. This chapter will also discuss the broader trends which are driving the Internet of Things market and influence the market forecasts.

III. MARKET SECTOR ANALYSES
Chapter 3 will provide an overview for each of the 7 IOT market sectors. This overview will present how we define each market sector for the purposes of this report, as well as provide a list of all of the device types that are considered in the forecast model. Finally, there will be a brief discussion on the drivers and inhibitors which are shaping the trends for IOT specific to each market segment.

IV. GLOBAL OVERVIEW AND EXTENDED FORECASTS
Chapter 4 will provide the global forecasts for the semiconductors in IOT market in terms of units and revenues. This will include the forecasts for IOT device shipments to provide context.