Semiconductors in the Internet of Things – 2017

Lee Ratliff, Sr. Principal Analyst, Robbie Galoso, Principal Analyst, Tom Hackenberg, Principal Analyst, and Bryan O’Rourke, Sr. Principal Analyst

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
Table of Contents

Chapter 1
– 1.0 Introduction, scope, method
– 1.1 Scope
– 1.2 Methodology

Chapter 2
– 2.0 Key Drivers of IoT and Semiconder Market Trends
– 2.1 IoT Device Market Size and Key Drivers
– 2.2 Connectivity Market Trends
– 2.3 Processor Trends
– 2.4 Sensor Market Trends

Chapter 3
– 3.0 Key Trends by Market Sector
– 3.1 Automotive
– 3.2 Communications
– 3.3 Computers
– 3.4 Consumer
– 3.5 Industrial
– 3.6 Medical
– 3.7 Military/Aerospace

Chapter 4
– 4.0 Global Overview and Extended Forecast

Tables

Total Markets
– IoT Device Shipments
– IoT Semiconductors Shipments by Type
– IoT Semiconductors Revenues by Type
– IoT Semiconductors Shipments by Industry
– IoT Semiconductors Revenues by Industry
– IoT Semiconductors Shipments by Industry & Type
– IoT Semiconductors Revenues by Industry & Type

Markets by Product Type
– IoT Connectivity IC Shipments by Industry & Type
– IoT Connectivity IC Revenues by Industry & Type
– IoT Sensor IC Shipments by Industry & Type
– IoT Sensors IC Revenues by Industry & Type
– IoT Processor IC Shipments by Industry & Type
– IoT Processor IC Revenues by Industry & Type

Total Market Pivots
– Application Pivot Table
– Product Type Pivot Table