

# Processors for Network Infrastructure Market Tracker

## Part of the Semiconductor Components Service Area Package

Semi-annual service tracking processors and coprocessors used for the control and data planes in network appliances

“ Due to the tremendous parallel processing demand of network appliances, a majority of revenue is actually in integrated logic and coprocessing solutions for the processor complex. Tapping this is critical for growth. ”

**Kelson Astley**

Senior Research Analyst

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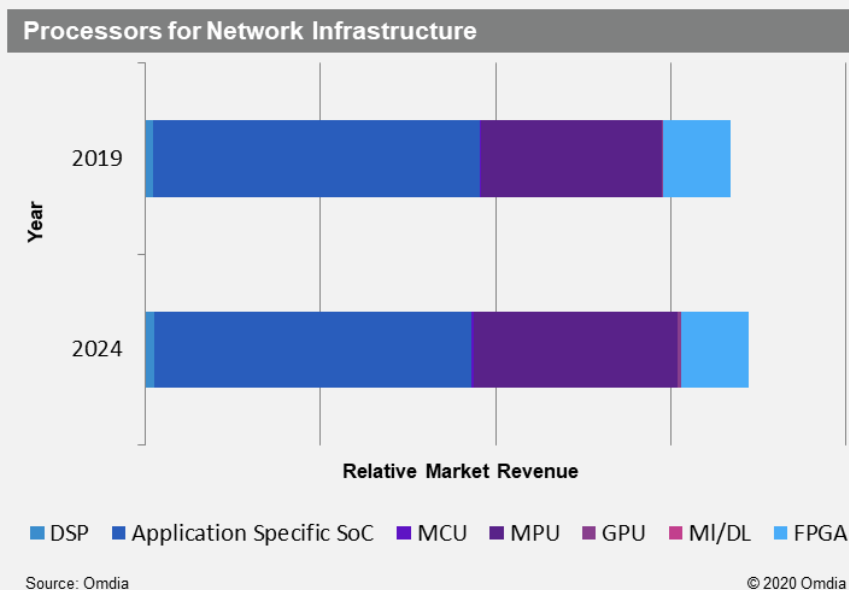
## HOW OMDIA HELPS YOU

- Understand the global processors market and your positioning within it
- Implement your short- to medium-term business planning
- Navigate the transformative technologies affecting the overall processing market
- Understand your competitive landscape better

## KEY QUESTIONS ADDRESSED

- Who are the leading suppliers of network infrastructure processors?
- What is the market size and forecast for various types of processors and coprocessors?
- How is increasing bandwidth driving a processor evolution without major increases in network equipment Capex?
- What is NFV and how is it affecting processors in network infrastructure?
- What are uCPE appliances and why are they important?
- How will media consumption, the Internet of Things and 5G traffic cause network appliances to evolve?
- How are emerging channels such as Cloud and Enterprise comparing to the Service Provider Markets
- Will the network of the future include artificial intelligence?

Processors for Network Infrastructure



# Semiconductor Components: Our Expert Analysts



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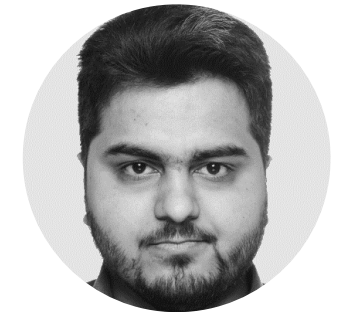
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Research Analyst

# Market Tracker

## Processors for Network Infrastructure Market Tracker

Omdia leverages our robust coverage of the semiconductor market with the recognized industry leading Enterprise Division Research understanding of communications equipment to bring you unprecedented coverage of high-performance processors in network infrastructure.

### DETAILS

#### Frequency

- 5-year annual forecast (2020 – 2024)
- Base historic years (2016 – 2019)

#### Measurements

- Revenues, Units, ASP and Growth Rates
- Supplier Market Shares (H1)

#### Global

- Global coverage

### COVERAGE

#### Processors Classes

- Microprocessor (MPU)
  - MPU General Purpose 32 vs. 64-bit
  - MPU Network Specific 32 vs. 64-bit
- Logic Processor & Application-specific core (ASIC/ASSP) & Network Processing Units (NPU) (no accessible core)
  - AP by ASSP, ASIC, & NPU
  - AP by 32 vs. 64-bit
- System-on-chip (SoC) & Field Programmable Gate Array (FPGA)
- SoC 32/64-bit
- FPGA Soft Core vs. No Core
- General Purpose Graphics Processing Units (GPU)
- Machine Learning/Deep Learning Processor (ML/DL)
- Microcontroller (MCU)
  - MCU by 32 vs. 64-bit

- Digital Signal Processor (DSP)
  - DSP General Purpose
  - DSP ASSP vs ASIC

#### Application Markets

- Routers (3 classes)
- Switches (3 classes)
- Network Security (6 classes)
- Optical Transport
- Wired Access (7 classes)
- Wireless Access (8 classes)
- Wireless Service Core (7 classes)
- Wireless Backhaul
- Other Network Appliances (3 classes)

#### Shares Covered

- Processor Supplier Leaders
- Core Architecture Ecosystem Shares

### APPLICABLE TO

- Network processor suppliers
- Foundry services
- IP providers
- Network operating system vendors
- Network software developers
- Related component suppliers: memory, transceiver, etc.
- IoT, edge and other network solutions specialists
- Network appliance and server OEMs
- Network security specialists

# Content Summary & Table of Contents

## Database Content Summary

### Processor Overall Summary

#### Class Summary

- Rev, Growth & Share
- Rev, Units & ASP

#### Application Market Summary

- Rev, Growth & Share
- Rev, Units & ASP

#### Market Application Channel Tables

- Communications service provider
  - Rev, Growth & Share
  - Rev, Units & ASP
- Enterprise and government provider
  - Rev, Growth & Share
  - Rev, Units & ASP
- Cloud service provider
  - Rev, Growth & Share
  - Rev, Units & ASP

### Supplier Market Share

- Overall Summary
- Wired Summary
- Wireless Summary
- GP vs. AP
  - Wired
  - Wireless
- AP ASSP vs. AP ASIC
  - Wired
  - Wireless
- Detailed supplier shares for all 9 application markets
- Estimated processor core architecture ecosystem influence
- Definitions of Components
- Definitions of Applications

## Report Table of Contents

### Executive Summary

#### Scope

- Processor class summary
- Other processor definitions
- Equipment Market list
  - Wired
  - Wireless
- Market definitions
- Additional scope considerations
- Companion deliverable
- Historical Adjustments
- Forecast Adjustments

### Processor Technology Highlights

- Processor design trends
- Special purpose and coprocessor trends

### Processor Market Qualitative Highlights

- Assumptions and Trends
  - Security Market
  - Router Market
  - Switch Market
  - Optical Transport Market
  - Wired Access Market

- Other Network Appliance Market
- Wireless Core Market
- Wireless Access Market
- Wireless Backhaul Market

The Processors for Network Infrastructure Market Tracker Report is presented in presentation layout style with qualitative highlights of the data presented in the associated database. It includes graphs and key topical discussions of each market dynamic.

# Related Content: Semiconductor Components Service Area Coverage



## Service Area Package: **Semiconductor Components**

LED  
Intelligence Service

MEMS & Sensors  
Intelligence Service

Microcontroller  
Market Tracker

Power Semiconductor  
Intelligence Service

Processors for Network  
Infrastructure Market Tracker

MEMS & Sensors for Consumer &  
Mobile Intelligence Service

Optoelectronic Components  
Report

Processors for Graphics &  
Artificial Intelligence Market Tracker

System-on-Chip (SoC)  
Market Tracker

Processors Spotlight Service

## About Omdia's Semiconductor Components Research

Omdia's leading semiconductor components research is provided by a highly experienced team of analysts. Many are industry veterans with deep technical background as well as hands-on market and product experience in their coverage area. The key component areas of processors and microcontrollers, MEMS and sensors, power discretes and modules, power ICs, LED and optical components are covered across numerous device categories and applications.

Their expertise is augmented and supported by the wide array of end equipment application and demand reporting, semiconductor manufacturing tracking and forecasting and spotlight services such as the semiconductor competitive landscape tool, the application market forecast tracker, the China semiconductor intelligence service and others.

# Related Content: Semiconductor Service Area Coverage

SERVICE AREA PACKAGE			
Memory & Storage	Semiconductor Components	Semiconductor Manufacturing	Semiconductor Market
<ul style="list-style-type: none"> <li>• DRAM Memory Intelligence Service</li> <li>• Mobile &amp; Embedded Memory Intelligence Service</li> <li>• NAND Memory Intelligence Service</li> <li>• SSD &amp; HDD Storage Memory Intelligence Service</li> </ul>	<ul style="list-style-type: none"> <li>• Key Mobile Component Price Intelligence Service</li> <li>• LED Intelligence Service</li> <li>• Magnetic Sensors Report - 2019</li> <li>• MEMS &amp; Sensors for Consumer &amp; Mobile Intelligence Service</li> <li>• MEMS &amp; Sensors Intelligence Service</li> <li>• Microcontroller Market Tracker</li> <li>• Optoelectronic Components Report - 2020</li> <li>• Power Semiconductor Intelligence Service</li> <li>• Processors for Graphics &amp; Artificial Intelligence Market Tracker</li> <li>• Processors for Network Infrastructure Market Tracker</li> <li>• Processors Spotlight Service</li> <li>• System-on-Chip (SoC) Market Tracker</li> </ul>	<ul style="list-style-type: none"> <li>• Global Semiconductor Manufacturing Market Tracker</li> <li>• Pure Play Foundry Market Tracker</li> <li>• Semiconductor Silicon Demand Forecast Tool</li> </ul>	<ul style="list-style-type: none"> <li>• China Semiconductor Intelligence Service</li> <li>• Design Activity Tool</li> <li>• Industrial Semiconductor Intelligence Service</li> <li>• OEM Semiconductor Spend Tracker</li> <li>• OEM Semiconductor Spending &amp; Design Activity Intelligence Service</li> <li>• Semiconductor Application Forecast AMFT Spotlight Service</li> <li>• Semiconductor Competitive Landscape CLT Spotlight Service</li> <li>• Semiconductor Forecast Scenario Tool</li> </ul>

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Whether you need guidance to navigate the service, information regarding our methodologies or you want to better understand a data trend, Omdia’s support team is here to help.

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### ABOUT OMDIA

Omdia is a global technology research powerhouse, established following the merger of the research division of Informa Tech (Ovum, Heavy Reading, and Tractica) and the acquired Omdia technology research portfolio\*. We combine the expertise of more than 400 analysts across the entire technology spectrum, covering 150 markets. We publish over 3,000 research reports annually, reaching more than 14,000 subscribers, and cover thousands of technology, media, and telecommunications companies.

Our exhaustive intelligence and deep technology expertise enable us to uncover actionable insights that help our customers connect the dots in today's constantly evolving technology environment and empower them to improve their businesses—today and tomorrow.

\* The majority of Omdia technology research products and solutions were acquired by Informa in August 2019 and are now part of Omdia.