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Processor for Network Infrastructure Market Tracker – 2018

Tom Hackenberg, Principal Analyst

Processors and Coprocessors for Control and Data Planes

Outside of data processing compute platforms, network infrastructure represents one of the markets with the greatest demand for high performance processors. While the markets for PCs appears to have stagnated, the demand for network infrastructure devices is expected to show no sign of slowing. While the market for computers is not likely to diminish anytime soon, companies invested in providing high performance processors are turning to markets like network infrastructure as a strategy to sustain growth. Traditional microprocessor vendors are not the only ones eyeing this market for growth, the applications processor and system-on-chip suppliers are similarly looking for strategies to sustain growth as the smartphone and tablet markets begin to plateau.

Network infrastructure continues to evolve to meet new and growing demands from digital telecommunications, internet-of-things (IoT) applications, cloud computing, content streaming, smart home, smart city, connected car, Industry 4.0, and even emerging emersive technologies. Supporting these applications involves challenges to increase network bandwidth, integrity and security. Many players in this market understand the traditional serviceable market of core network devices, but supporting only traditional designs can be limiting with respect to the broader optimization and efficiency strategies for today's robust network. 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.

High Performance Processors In Network Infrastructure

Relative Market Revenue

■ MCU ■ DSP ■ MPU ■ PLDs & FPGAs ■ Application Specific, SoC

Source: IHS Markit © 2016 IHS Markit
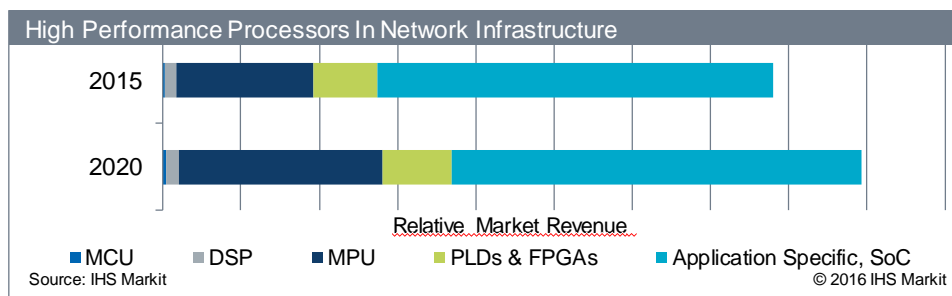
Key Issues Addressed
- What is the total available market? By each class of processor? Enterprise vs. service provider? Wired vs. wireless?
- Which applications represent size or growth opportunities?
- Who are the leading suppliers?
- What is the serviced market share based on core architecture?
- What are the technology drivers?
- Will software defined networks have an impact?

Applicable To
- Processor Suppliers
  - Sales
  - Marketing
  - Product management
- Architecture and IP developers
- OS and network software developers
- Telecommunications service providers
- Cloud service providers
- IT and IS services providers
- Data security services
- OEMs and System Integrators
- Investors

LEAD ANALYST

Tom Hackenberg, Principal Analyst

Tom Hackenberg is the principal analyst for embedded processor markets at IHS Markit. His broad scope of processor coverage includes microcontrollers (MCU), microprocessors (MPU), signal processors (DSP) and logic component markets. In addition to component coverage, Tom provides a breadth of knowledge related to deeply embedded systems in markets such as automotive, industrial and telecommunications equipment. His analysis extends to processor technology trends such as embedded vision, machine to machine (M2M) communications, internet-of-things (IoT), sensor fusion, smart devices and embedded security.

As part of his research scope, Tom authors a detailed tracking service for MCUs as well as custom reports on processors in automotive, telecommunications and industrial markets. He supports IHS Markit core services such as the Competitive Landscape Tool and Application Market Forecast Tool.

Tom is well versed in all processor components including CPUs, GPUs, MPUs, MCUs, ASICs & ASSPs, FPGAs and configurable processors. Tom has been providing embedded processing market analysis since 2006. He holds a Bachelor of Science in Electrical Engineering from the University of Texas at Austin specializing in processors and FPGAs

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