AAEON SDN/NFV Ready Hardware Solutions

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Market @ Glance

- Software-Defined Networking (SDN) and Network Functions Virtualization (NFV) market is expected to grow $54.41 Billion by 2022, a Compound Annual Growth Rate (CAGR) of 71.4%.

- 70% of CSP's (Communication Service Providers) have conducted Proof Of Concept on SDV/NFV already, 50% will move toward implementation.

- NFV/SDN spending is growing at a 94.3% CAGR from 2016 to 2022, over $168 billions.

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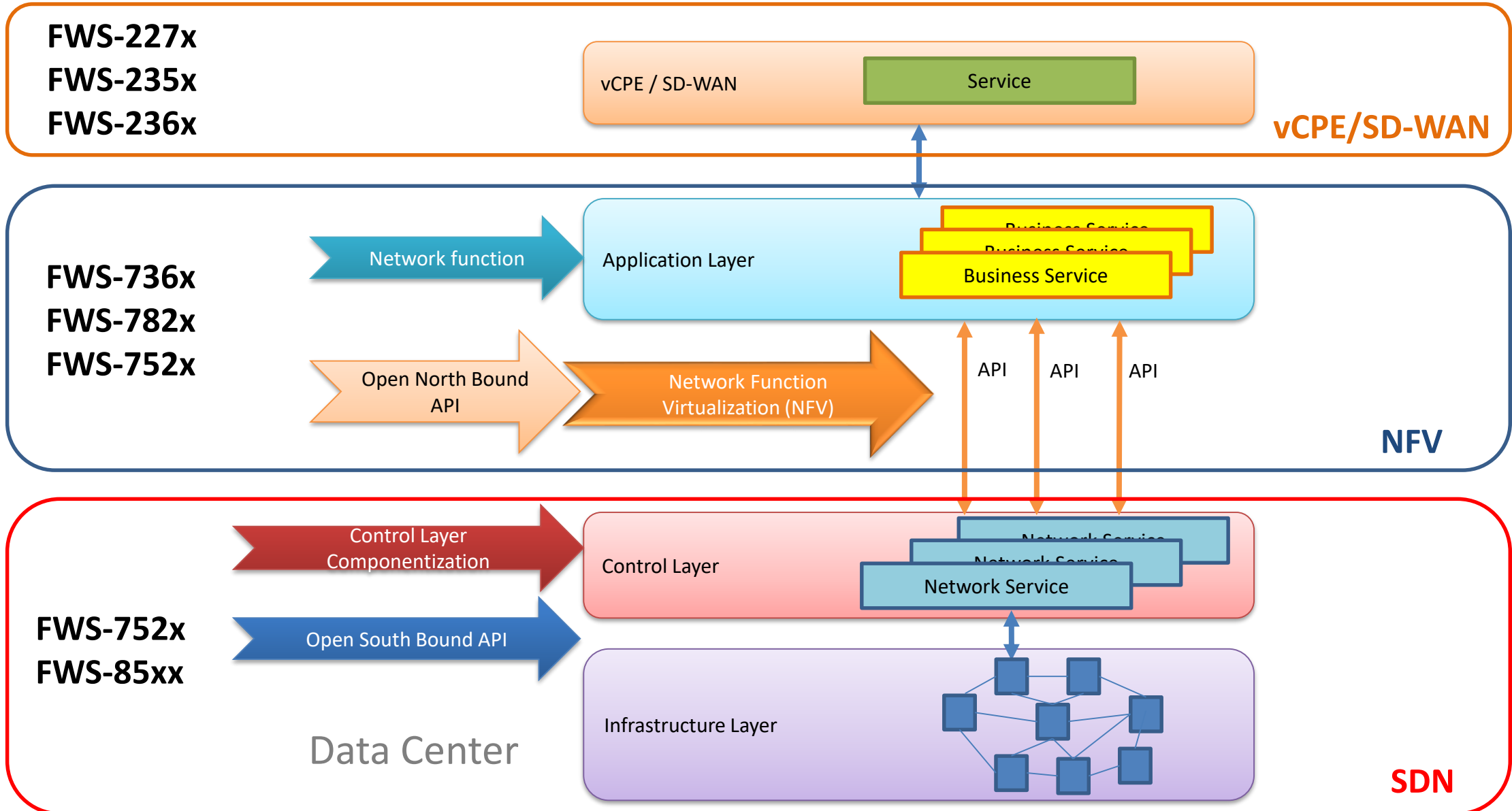
Big Data and Security
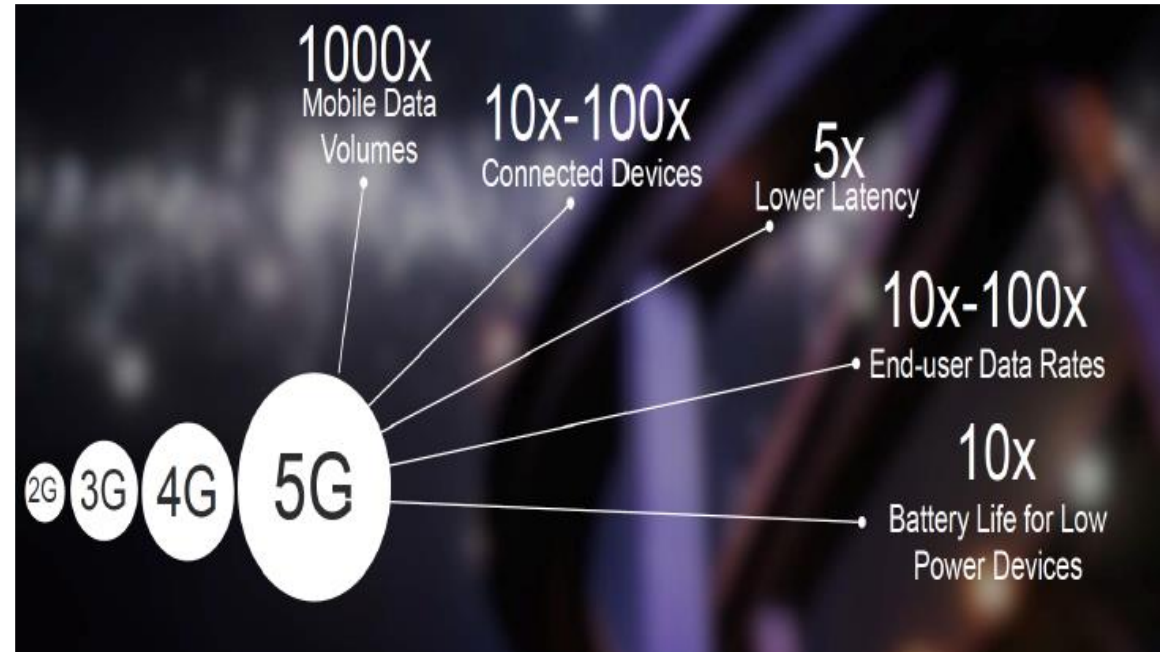
Connectivity, Routing and Security

- 10M+ Routing Rules
- 10,000+ Switches
- 100,000+ Firewall Rules

SLA and Application Visibility

- 300 hours of Video Played/minutes
- 3 – 5M BHCA / BHCS
- 3.5B+ searches / day
- Six Nines Availability

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SDN, NFV and vCPE/SD-WAN Solutions

FWS-227x
FWS-235x
FWS-236x

vCPE / SD-WAN | Service

vCPE/SD-WAN

FWS-736x
FWS-782x
FWS-752x

Network function → Application Layer

Business Service
Business Service
Business Service

Open North Bound API → Network Function Virtualization (NFV)

API API API

NFV

FWS-752x
FWS-85xx

Control Layer Componentization → Control Layer

Network Service
Network Service
Network Service

Open South Bound API →

Infrastructure Layer

Data Center

SDN

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Edge vCPE/SD-WAN Ready

Intel® Xeon-D Series SoC CPU
Intel® C3000 Series SoC CPU

Intel® Ethernet Controller Family *
- Multi-configurable network connectivity **1GbE, 10GbE, 40GbE** Network Interface Module.
- Onboard 1GbE Copper or Fiber

Wireless/Cellular Support Integration

Intel® Quick Assist Technology
- Offloads packet processing Technology

Trusted Platform Module

Intel® Data Plane Development Kit
- Packet processing software create the foundation for SDN/NFV, Virtualization and OVS optimization.

* Desktop version only have onboard Network Interface not Modular solution

Edge vCPE/SD-WAN Ready

FWS-2360

Intel® C3000 Series SoC CPU with QAT Support
6 x 1GbE Copper Ports or 4 x 1GbE Copper + 2 x 1GbE SFP Ports
up to 2 x DDR4 SODIMM
2 x SATA III Ports
2 x Mini-PCIe Socket (1 x SIM support)

FWS-2350

Intel® C2000 Series SoC CPU with QAT Support
6 x 1GbE Copper Ports
2 x DDR3 DIMM non-ECC/ECC
1 x CF Socket + 1 x SATA III Port
1 x Mini-PCIe

FWS-227x

Intel® N3350/N4200/E3900 Series SoC CPU
4 – 6 x 1GbE Copper Ports or 4 x 1GbE Copper + 2 x 1GbE SFP Ports
1 x DDR3L SODIMM
2 x Mini-PCIe Socket with SIM support

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SDN & NFV Ready

Intel® Dual Skylake-EP (Scalable XEON) Series CPU

Configurable Storage Capability
- PCIe 3.0 SSD Cards for extreme throughput or HDD/SSD SATAIII storage.

Intel® Ethernet Controller Family
- Multi-configurable network connectivity **1GbE, 10GbE, 40GbE** Network Interface Module.

Intel® Quick Assist Technology
Offloads packet processing Technology

PER-T428 QAT Card
- Intel Coleto Creek

DPDK
DATA PLANE DEVELOPMENT KIT

Intel® Data Plane Development Kit
- Packet processing software create the foundation for SDN/NFV, Virtualization and OVS optimization.

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SDN & NFV Ready

FWS-8600

Intel® Dual Skylake-EP (Scalable XEON) Series CPU
2 x 1GbE Copper Ports Onboard + Up to 8 x NIM Interfaces
16 x DDR4 RDIMMs
Up to 6 x SATA III Supports
Redundant Power Supply
SDN Switch Integration (project based)

FWS-7520

Intel® Xeon-D Series SoC CPU
1 x 1GbE Copper + 2 x 10GbE SFP+ Ports Onboard
3 x NIM interfaces
4 x DDR4 RDIMMs
2 x SATA III Ports + 1 x CF Socket
Single or Redundant Power Supply

FWS-7821
FWS-7360

Intel® 7th Generation Core-i/Xeon E3 v6 Series CPU
(Intel C3000 version is coming soon)
6 x 1GbE Copper + 2 x 1GbE SFP Ports
1 x NIM Interface
Up to 5 x SATA III Support

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1U/2U Network Interface Modules

NIM-S26B	2 x 40GbE QSFP Ports Intel® XL710 No LAN Bypass PCIe [x8]	- On-Chip QoS and Traffic Management - VMDq - SR-IOV - FPP
NIM-S26C	4 x 10GbE SFP+ Ports Intel® XL710 No LAN Bypass PCIe [x8]	- On-Chip QoS and Traffic Management - VMDq - SR-IOV - FPP
NIM-S13/S13E	4 – 8 1GbE SFP Ports Intel® 82580EB or Intel i350 2 Pairs LAN Bypass or without PCIe [x4 + x4]	With i350: - On-Chip QoS and Traffic Management - VMDq - SR-IOV
NIM-C13/C13D	4 – 8 1GbE RJ45 Ports Intel® 82580EB or Intel i350 2 Pairs LAN Bypass or without PCIe [x4 + x4]	With i350: - On-Chip QoS and Traffic Management - VMDq - SR-IOV

Software and Technologies

LCM Control
- Get LCM Button Key
- LCM LCD On/Off
- Setting String on LCM

Status LED Control
- LED Off
- Bi-color : Red / Green (Solid)
- Red Blinking (Slowly/Quickly)
- Green Blinking (Slowly/Quickly)

Software Program Button
- Get Register while Pin Level High/Low

NIM Recognition
- Network Interface Module Device and Configuration Information's

Advance LAN Bypass
- Power On/Off Bypass Control
- WDT Timeout Mode Control
- BIOS Control and AP Layer Write through BIOS

TPM
- TPM Support
- TPM v1.2 or v2.0 – depends on network appliance model.

IPMI*
- IPMI is essential in mission-critical requirements, enabling for remote monitor, manage and maintenance.

HW Acceleration*
- Intel QAT (Quick Assist Technology)

Intel DPDK
- Support for Intel DPDK

* Not all device support this function/ features, check in detail.

Customization Services

Component Integration
- Test and Integrate 3rd party components.

Chassis and carton design/ID, color and Labelling.

BIOS
- Default Settings
- Adding or removing functions requirements.

DQA, QA and Qualification environment testing

LAN Bypass
- Onboard LAN Bypass removal.

LCM and Front Panel
- LCM can customize cosmetic or function to meet customer need.

Manufacturing Services
- Customer OS/SW Installation
- Customer MAC Address Installation.
- Specific Testing request

Name Plate
- Based on customer Art Work.
- Tailored to meet desire look and feel.

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Any questions or more information, please contact: marlobanganga@aaeon.eu

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