

## Solution Brief

### IBASE FWA8600 Verified as Intel® Select Solutions for uCPE with Ubuntu

#### Overview

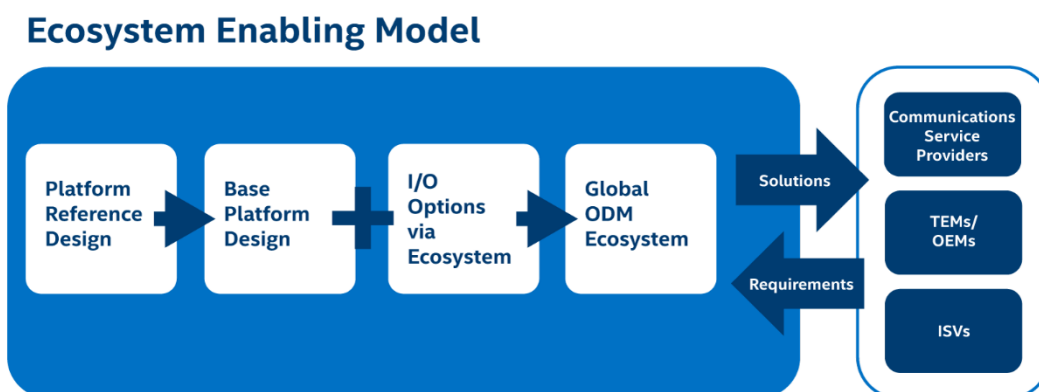
Traditional communication service providers (CoSP) often utilize multiple carrier networks to provide services and deliver applications as a communication framework to a number of distributed sites, such as central and branch offices, and over large geographic areas. Using conventional enterprise WANs across various network locations not only can compromise the quality of communication and performance, but also increase operational costs. It is becoming more costly and complex to keep networks running at peak performance and to support real-time big data delivery and latency-sensitive services like VoIP phones or video streaming.

In response to the growing enterprise IT demands, more companies using traditional WANs have turned to emerging new technologies like software-defined wide-area networks (SD-WANs) and universal customer premises equipment (uCPE) that offer notable flexibility, improved application performance, and cost savings that benefit both service providers and end users.

#### Standardizing uCPE for Reliability and Reduced Costs

More and more vendors are pushing the standardized versions of their uCPE into the market and turning network solution providers to these standardized solutions with the goal of keeping costs down and delivering flexibility.

IBASE has developed a solution that is verified for Intel® Select Solutions for uCPE. These designs, which utilize the high-end performance and efficiency of the Intel® Xeon® D-2100 processor product family, can be used by the ecosystem to help enable CoSPs, telecom equipment manufacturers (TEMs), and internet service providers to power mission-critical enterprise workloads for SD-WAN deployments.



Intel® Select Solutions for uCPE provide scalable platform reference designs to accelerate SD-WAN adoption.

(Source: Intel® Corp.)

## IBASE FWA8600 for Enterprise Edge Solutions

IBASE is one of the first to release a verified offering for the Intel Select Solutions for uCPE, integrating an 8-core, 16-thread Intel Xeon D processor, with integrated Intel® QuickAssist Technology (Intel® QAT), and extensive I/O features to manage SD-WAN services to enterprise edge sites - all in a 1U form factor.

### 1U Rackmount Network Computing Appliance with 25 GbE Ports

New Enterprise Network Security Solution based on Intel Xeon Processor D-2100

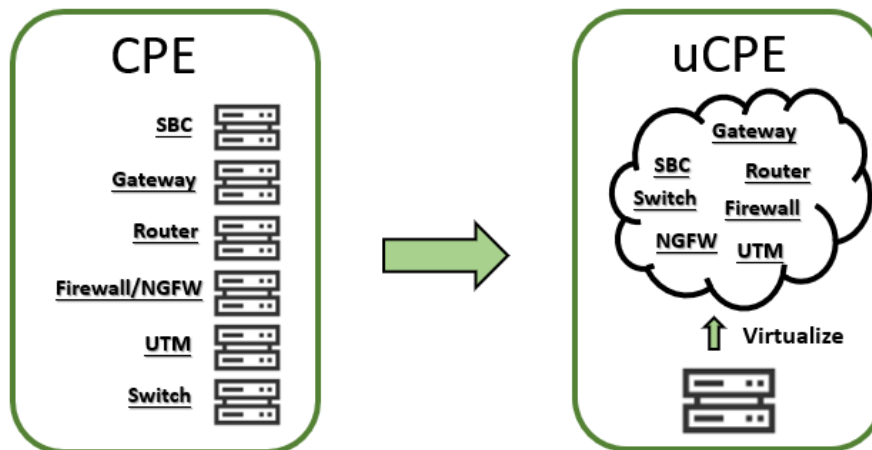


- Verification of Intel® Select Solutions for uCPE with Ubuntu
- Intel® Xeon® Processor D-2100 Series
- 4x DDR4 RDIMMs; Max. 128 GB
- 1x Intel® I210-AT GbE
- 4x NIC modules; Max. 24 GbE ports
- Optional IPMI module
- 1 x M.2 slot & optional PCI-E x8 expansion slot (4-lane)

## General-Purpose Network Function Virtualization (NFV)

IBASE uCPE consists of a hardware platform and software technologies that virtualize enterprise network services and bring data center/cloud capabilities to the network edge. IBASE 1U rack-mounted uCPE hardware platforms are designed for enterprise offices and features:

- Flexibility to run multiple VNFs based on end-user demands
- Performance to meet real-world needs
- Rapid deployment in multi-branch offices and customer sites



For enterprise networking, uCPE represent a new of network paradigm for low latency, high bandwidth data transfer between locations. For CoSPs, general-purpose uCPE platforms reduce the cost and complexity of managing remote branch connectivity.

## Enhanced Feature

### - Flexible Multi-NIC Slot Design

To meet diverse applications requirements, IBASE has developed a range of Ethernet NICs for uCPE that offer enhanced network performance, increased flexibility and agility.

<u>Model Name</u>	<u>Description</u>
<b><u>1GbE Solution without Bypass</u></b>	
<b>IBN-R420BN</b>	NIC, Intel I350-AM4, 4-port GbE RJ45, No Bypass
<b>IBN-R840N</b>	NIC, Intel I350-AM4 x2, 8-port GbE RJ45, No Bypass
<b>IBN-S200</b>	NIC, Intel I350-AM2, 2-port GbE SFP, No Bypass
<b>IBN-S400</b>	NIC, Intel I350-AM4, 4-port GbE SFP, No Bypass
<b>IBN-S800</b>	NIC, Intel I350-AM4 x2, 8-port GbE SFP, No Bypass
<b><u>1GbE Solution with Bypass</u></b>	
<b>IBN-R420B</b>	NIC, Intel I350-AM4, 4-port GbE RJ45, 2 Segment Bypass
<b>IBN-R840</b>	NIC, Intel I350-AM4 x2, 8-port GbE RJ45, 4 Segment Bypass
<b><u>10GbE Solution without Bypass</u></b>	
<b>IBN-P400D</b>	NIC, Intel X710-BM2 x1, 2-port 10GbE SFP+, No Bypass
<b>IBN-P400Q</b>	NIC, Intel XL710-BM1 x1, 4-port 10GbE SFP+, No Bypass
<b>IBN-P401Q</b>	NIC, Inphi CS4223, 4-port 10GbE SFP+, No Bypass
<b><u>25GbE Solution without Bypass</u></b>	
<b>IBN-F200</b>	NIC, Intel XXV710-AM2 x1, 2-port 25GbE SFP28, 0 Bypass

### - Remote Intelligent Platform Control/Remote BMC & BIOS Upgrade

IBASE uCPE systems are designed with remote intelligent platform control and BMC & BIOS upgradeability that can be implemented remotely to reduce the management and maintenance costs.

## Learn More

For more information on the IBASE FWA8600 verified Intel Select Solutions for uCPE, please visit: <http://www.ibase.com.tw/english/ProductDetail/NetworkAppliance/FWA8600>

Intel Select Solutions web page: <https://builders.intel.com/intelselectsolutions>

Intel Xeon D processor family: <http://www.intel.com/xeond>

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