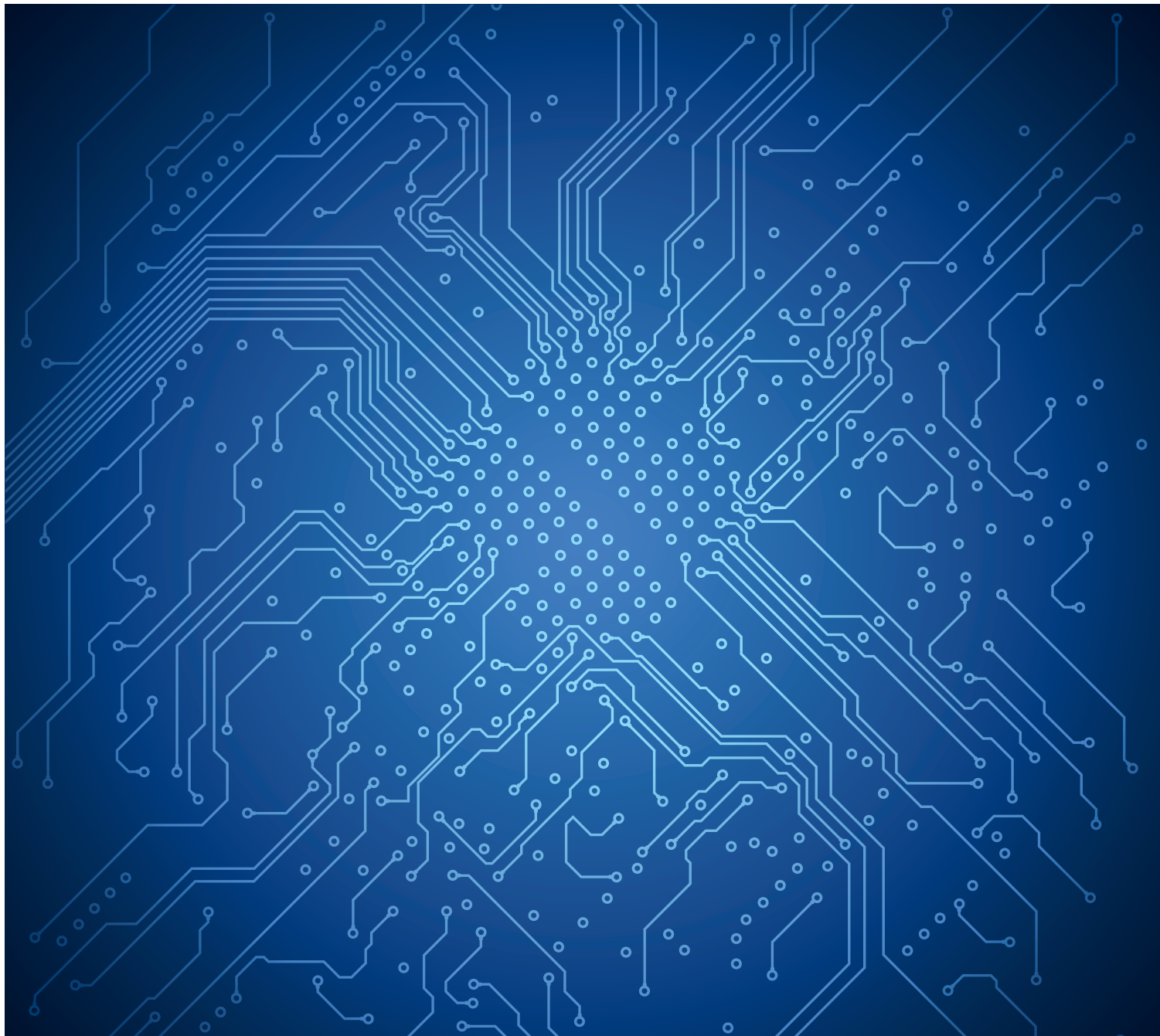# Your Premium Platform Solutions Provider Partner for SDN/NFV Realizations
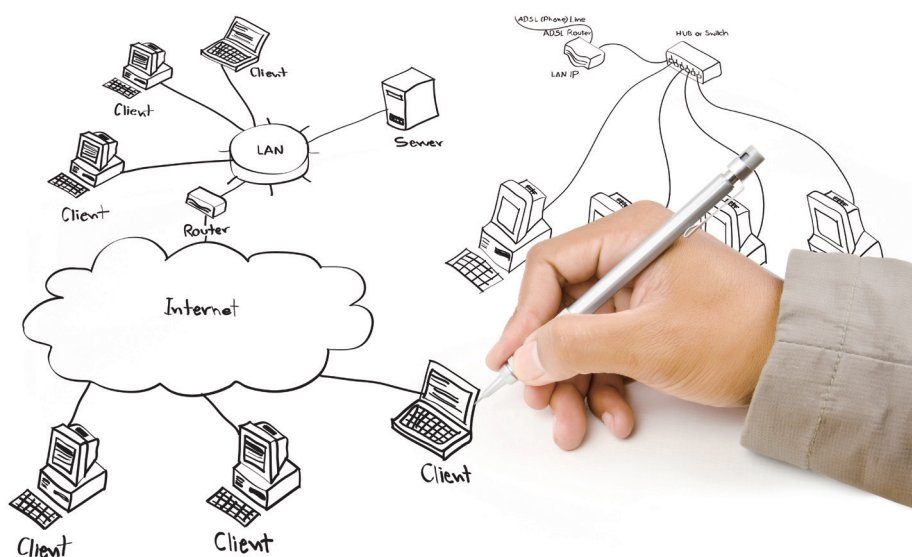
HAWKEYE TECH

About Hawkeye Tech

Founded in 2011 with the design and manufacturing experiences in Telecommunications, Networking and computing equipments, Hawkeye Tech's customized products are used by leading Service Providers and System Integrators deploying SDN/NFV networking solutions as following:

- High-Performance Communication Servers
- Enterprise Networking Appliances
- Telecoms/Networking Connectivity & Integration
    - GbE, PoE, FXO/FXS, E1/T1, PRI

The capability of dealing with different architectures including NXP PowerPC, ARM, Intel x86 and Cavium MIPS64 cores, and other SoC has entitled Hawkeye Tech the Network Communications Specialist, serving the SDN Digital-Hybrid transitions. Hardware and Firmware solutions are customizable to meet different network and performance requirements. High-Availability and High-Reliability designs make Hawkeye Tech the choice partner in deploying Communications solutions.

With stringent quality control mechanism and in-house production facility, the manufacturing output meet every quality goal of Hawkeye's customers.

By working with Hawkeye Tech, our business partners achieve unparalleled reductions in development, integration costs and Time-To-Market.

Networking Communication Realization

Session Border Controller and Unified Communication Server

Hawkeye Tech has the ideal platform solutions for Session Border Controller (SBC) and Unified Communication Server(UCS) suitable for medium business, large enterprise and service providers offering managed services such as SIP trunking and hosted PBX.

Multi services such as Voice, Voice Quality Monitoring, Traffic Management, and Firewall could run simultaneously on Hawkeye Tech's platforms. Hawkeye Tech platform can be deployed in a high-availability redundant configuration with pro-cessing capability for up to 1,000 concurrent calls. It could deliver telephony services, comprehensive security, and simplified management in a reliable secured business-calss voice and data environment. It is also IPv6 services ready.
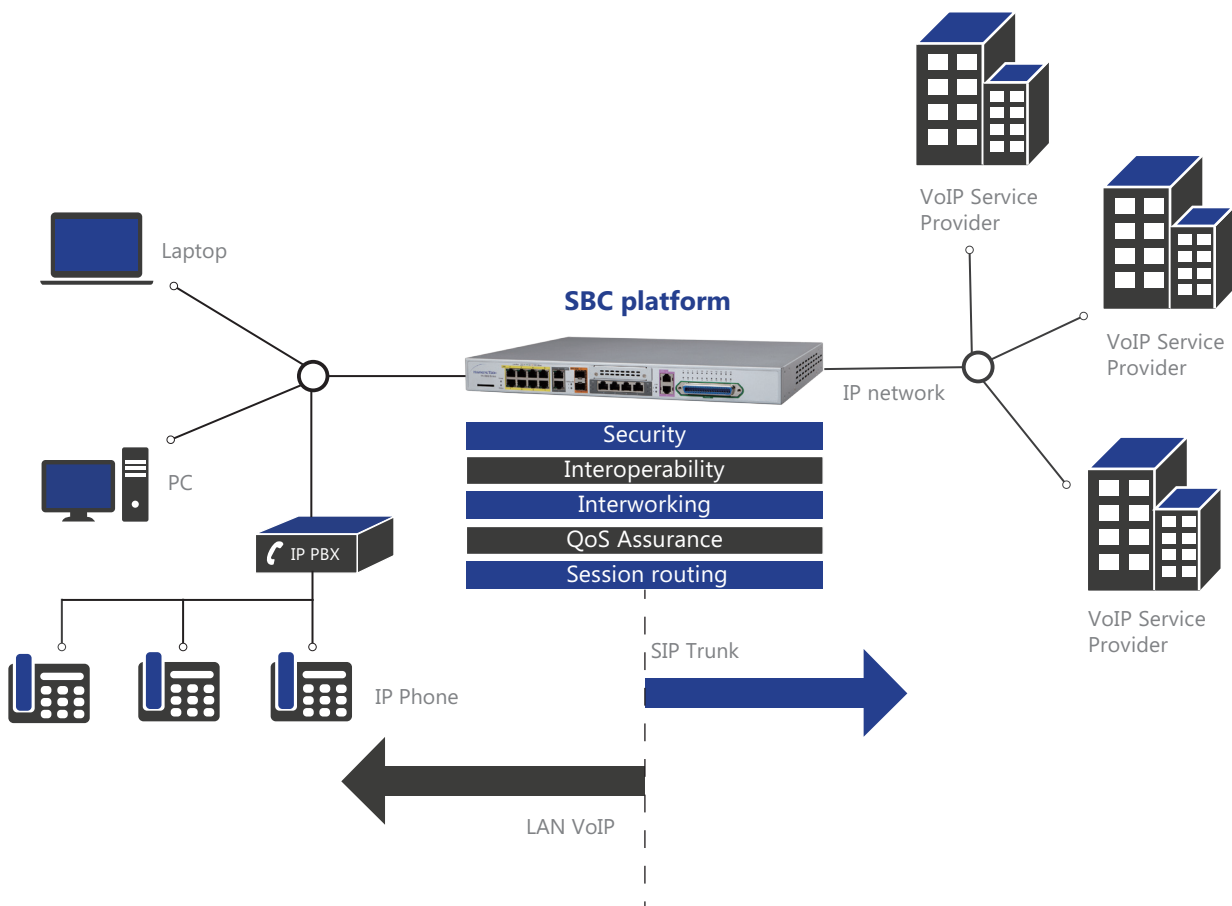
Traffic Shaper

Hawkeye Tech's platforms are also deployed as traffic shaping applications. HK-1111 is a cost-effective traffic shaper solution designed for the management of network data transfer performance.

HK-1111 prioritizes traffic streams by regulating the flow of packets as "bandwidth throttling" and "rate limiting."   It can be deployed on the LAN side or the WAN side of the router. To set up QoS(Quality of Service) on the router, the HK-1111 can be used to prioritize classification rules, in order to optimize bandwidth distribution.

LAN Deployment Scenario

WAN Deployment Scenario
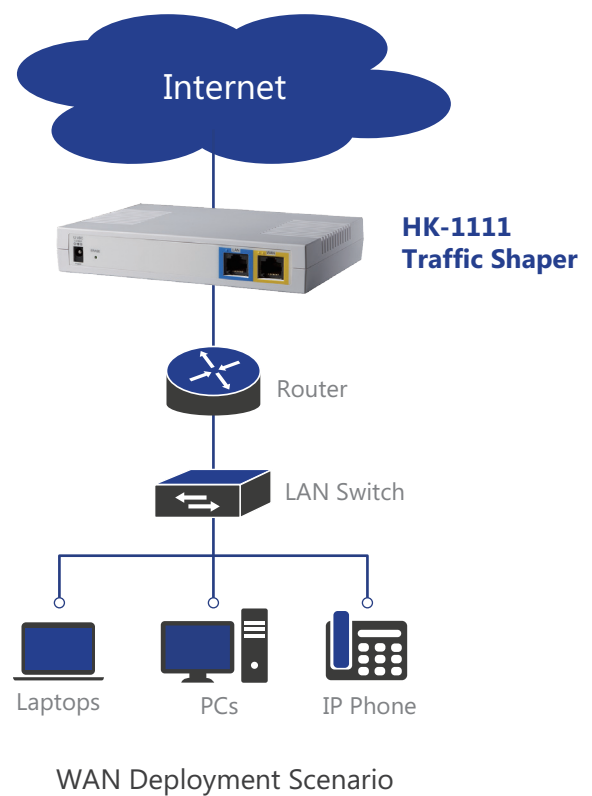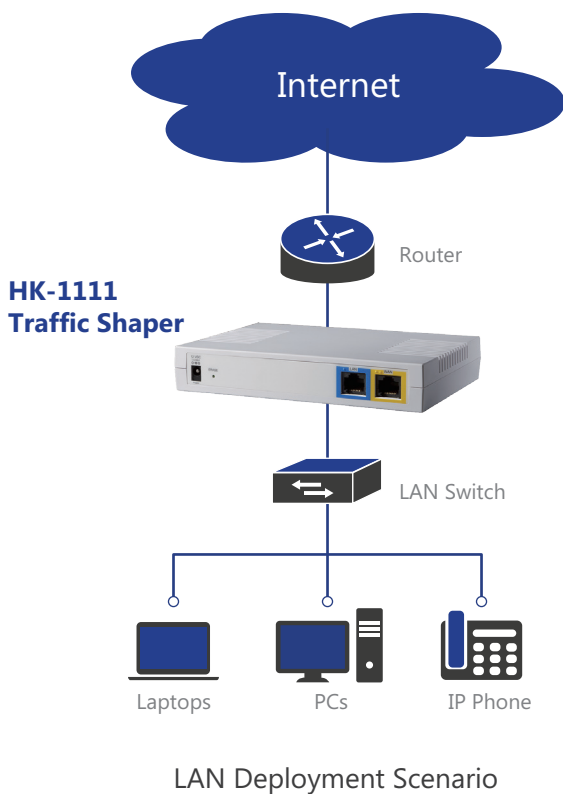
SDN / NFV Realization

vCPE

In a vCPE environment, some of the networking functions of conventional Customer Premises Equipment are virtualized and often relocated.

By deploying Hawkeye Tech's powerful general processing platforms as the Virtualized CPE, the system integrators and service providers can simplify and accelerate service delivery, configure, provision and manage a variety of Network Functions remotely.
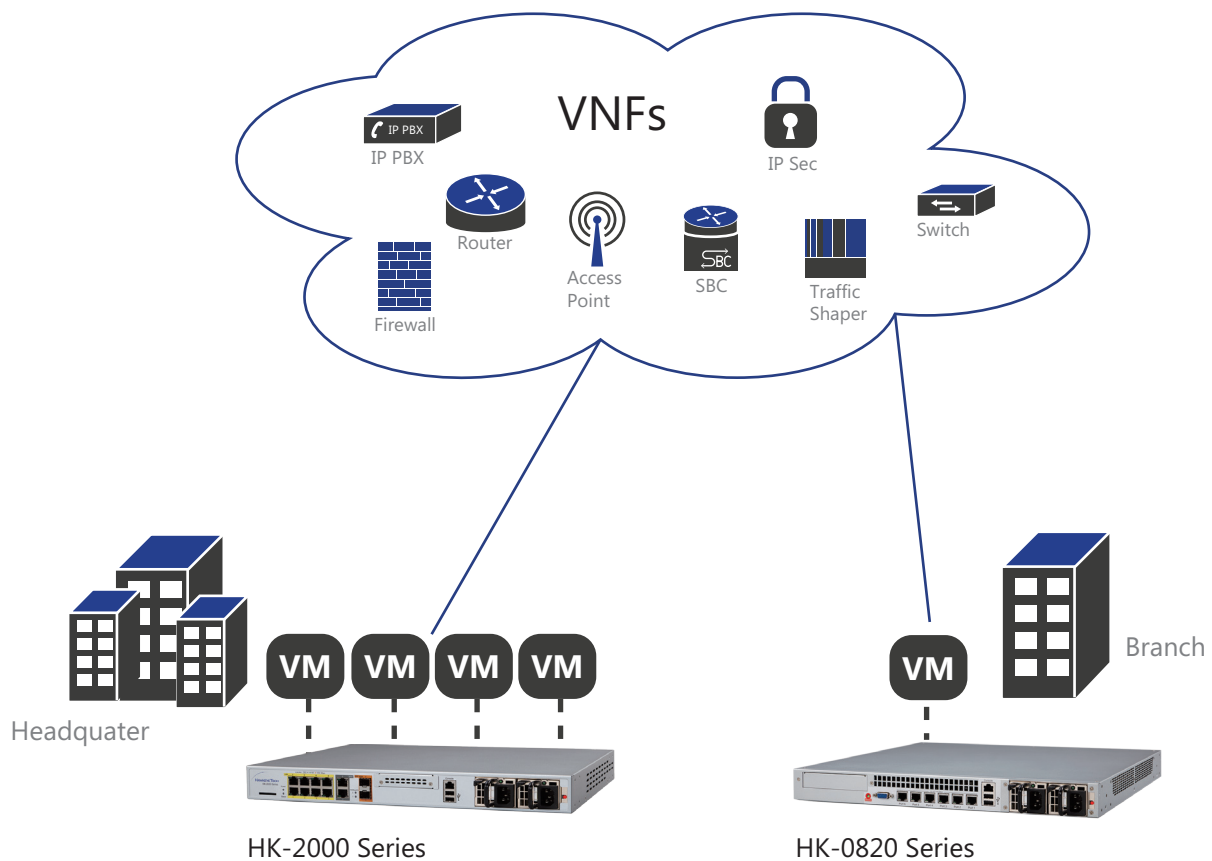
Virtual Customer Premises Equipment Application

Product Specifications

Model/ Series	HK-0112	HK-0121	HK-0511	HK-0530	HK-0610	HK-0820
Processor	PowerQUICC MPC8358E, 400MHz	PowerQUICC MPC8358E, 400MHz	PowerQUICC MPC8360E, 667MHz	PowerQUICC MPC8360E, 667MHz	PowerQUICC MPC8321, 333MHz	Intel Core i7-3770 quad cores; Pentium G850 dual cores; Celeron G1620 dual cores; with Intel H61 chipset
Flash memory	32MB(NOR)	32MB(NOR)	32MB(NOR)	32MB(NOR)	32MB(NOR)	4MB(SPI)
System memory						
Technology	DDR2-266 MT/s	DDR2-266 MT/s	DDR2-333 MT/s	DDR2-333 MT/s	DDR2-266 MT/s	DDR3-1600 MT/s
Capacity	128MB	128MB	128MB	128MB	128MB	2 GB(16GB Maximum)
Socket	-	-	-	-	-	Un-buffered 2x 240 pin DIMM
Storage						
SATA DOM, HDD Bays	-	-	-	-	-	SATA Flash and up to 2x 3.5" SATA HDD
SD/ Micro SD	-	-	-	-	-	-
Networking						
Ethernet LAN	4x RJ-45	4x RJ-45	4x RJ-45	4x RJ-45	4x RJ-45	6x RJ-45
Ethernet WAN	10/100 Mbps (1x RJ-45)	10/100 Mbps (1x RJ-45)	10/100 Mbps (1x RJ-45)	10/100 Mbps (1x RJ-45)	10/100 Mbps (1x RJ-45)	-
Secondary WAN	4x RJ-48 T1/E1	4x RJ-48 T1/E1	4x RJ-48 T1/E1	4x RJ-48 T1/E1	-	-
Switch Controllers/NIC	4x 10/100Mbps switch RTL8306SD, 16-VLAN	4x 10/100Mbps switch RTL8306SD, 16-VLAN	4x 10/100Mbps switch RTL8306SD, 16-VLAN	4x 10/100Mbps switch RTL8306SD, 16-VLAN	4x 10/100Mbps switch RTL8306SD, 16-VLAN	6x 10/100/1000Mbps, Intel 82574L
Analog Channel	-	2x FXO RJ-11 6x FXS RJ-11	2x PRI	2x PRI 2x FXO RJ-11 24x FXS Amphenol Connector	8x FXS RJ-11 / 4x FXO, 4x FXS RJ-11 / 8x FXO RJ-11	-
Remote Management	-	-	-	V92 Modem 1x RJ-11	-	-
IO Interface						
Console	1x DB-9	1x DB-9	1x DB-9	1x DB-9	1x DB-9	1x RJ-45
USB	2x Type A	2x Type A	2x Type A	2x Type A	2x Type A	2x Type A
Erase Button	yes	yes	yes	yes	yes	yes
Expansion						
PCI	Mini-PCI slot	Mini-PCI slot	Mini-PCI slot	Mini-PCI slot	-	-
PCI-E	-	-	-	-	-	PCI-E Slot x8
Dimensions						
Dimensions (Wx Dx H)	241x 165x 43 mm	330x 203x 43 mm	330x 203x 43 mm	432x 330x 43 mm	241x 165x 43 mm	445x 437x 43 mm
Weight	1.00 kg	1.68 kg	1.63 kg	3.76 kg	1.09 kg	5.78 kg
Form factor			1U Rackmount/ Desktop			
Power						
Type/Watts	40W, 12V/3.3A Power Adapter	60W, 12V/5A Power Adapter	40W, 12V/3.3A Power Adapter	80W, 12V/6.7A Power Module	40W, 12V/3.3 A Power Adapter	200W Single 270W RPS
Input			100~240V AC, 50~60 Hz			100~240V AC, 50~60 Hz 47~63 Hz for RPS
Others						
Remarks			• Trancoding and Echo cancellation DSP	• Trancoding and Echo cancellation DSP • V92 modem remote management		• High reliability redundant power supply (option) • Support SDN/ NFV

Model/ Series	HK-0910	HK-0920	HK-1010	HK-1110	HK-3010	HK-4010	HK-2000
Processor	QorIQ T1040, quad cores, 1.2GHz	QorIQ T1040, quad cores, 1.2GHz	QorIQ P1020, dual cores, 800MHz	MT7511 SOC, dual thread MIPS core, 750MHz	Cavium OCTEON III CN7130, quad cores 1.2GHz (up to 1.6GHz)	RTL8685G, dual core, MIPS interAptiv™ 1GHz + DSP RLX5281 500MHz	Intel Atom C3000 / Denverton, 4/ 8 cores, 1.5GHz/ 1.7GHz
Flash memory	64MB(NOR)	64MB(NOR)	64MB(NOR)	128MB(NAND)	256MB(NAND)	128MB(NAND)	16MB(SPI)
System memory							
Technology	DDR3L-1600 MT/s	DDR3L-1600 MT/s	DDR3-667 MT/s	DDR2-800 MT/s	DDR3-1066 MT/s	DDR3-1333 MT/s	DDR4-1866 MT/s DDR4-2133 MT/s
Capacity	2GB(8 GB Maximum)	2GB(8 GB Maximum)	1024MB	128MB	1GB	512MB	64GB/ 128GB
Socket	204 pin SO-DIMM	204 pin SO-DIMM	-	-	-	-	4x 288 pin DIMM
Storage							
SATA DOM, HDD Bays	SATA flash module (option)	SATA flash module (option)	-	-	-	-	2.5" SATA HDD/ SSD or SATA flash
SD/ Micro SD	SD Card Slot	SD Card Slot	SD Card Slot	-	Micro SD Card Slot	-	-
Networking							
Ethernet LAN	8x RJ-45	8x RJ-45	8x RJ-45	1x RJ-45	4x RJ-45	4x RJ-45	8x RJ-45
Ethernet WAN	2x 10/100/1000 Mbps (RJ-45,Fiber SFP Dual Media)	2x 10/100/1000 Mbps (RJ-45,Fiber SFP Dual Media)	2x 10/100/1000 Mbps (RJ-45)	1x 10/100/1000 Mbps (RJ-45)	2x 10/100/1000 Mbps (RJ-45,Fiber SFP Dual Media)	2x 10/100/1000 Mbps (RJ-45,Fiber SFP Dual Media)	2x 10Gb (Fiber SFP+)
Secondary WAN	-	2x RJ-48 T1/E1 (up to 4x T1/E1 with daughter board)	-	-	-	-	-
Switch Controllers/NIC	8x 10/100/1000Mbps T1040 internal switch, 4096-VLAN	8x 10/100/1000Mbps T1040 internal switch, 4096-VLAN	8x 10/100/1000Mbps switch RTL8370M, 4096-VLAN	1x 10/100/1000 Mbps (RJ-45)	4x 10/100/1000Mbps RTL8365MB, 4096-VLAN	4x 10/100/1000Mbps RTL8685G internal switch, 4096-VLAN	1x 10/100/1000 Mbps (RJ-45)
Analog Channel	-	2x PRI 2x FXO RJ-11 22x FXS Amphenol Connector	-	-	2x FXO RJ-11 6x FXS RJ-11 None	4x FXS RJ-11	-
Remote Management	-	V92 Modem 1x RJ-11	-	-	-	-	-
IO Interface							
Console	1x DB-9	1x RJ-45	1x DB-9	1x DB-9	1x RJ-45	USB (option)	1x RJ-45
USB	-	-	-	0	-	-	2x USB 2.0,1x USB 3.0
Erase Button	yes	yes	yes	yes	yes	yes	yes
Expansion							
	-	-	-	-	-	-	-
PCI-E	Mini PCI Express half	Mini PCI Express half	Mini PCI Express half	-	Mini-PCI-E connector	Mini-PCI-E connecto	-
Dimensions							
Dimensions (Wx Dx H)	235x 165x 43 mm	432x 330x 43 mm	235x 165x 43 mm	170x 114x 28 mm	235x 165x 43 mm	251x 170x 43 mm	-
Weight	1.13 kg	6.03 kg	1.13 kg	0.29 kg	1.13 kg	0.79 kg	-
Form factor		1U Rackmount/ Desktop		Desktop	1U Rackmount/ Desktop	Desktop	1U Rackmount
Power							
Type/Watts	40W, 12V/3.3A Power Adapter	100W, 12V/8.3A power Module	40W, 12V/3.3A Power Adapter	20W, 12V/1.66A Power Adapter	36W, 12V/3A Power Adapter	20W, 12V/1.66A Power Adapter	150W ATX Power Supply
Input				100~240V AC, 50~60 Hz			
Others							
Remarks				• Hardware accelerated QoS support with watchdog timered port by-pass function			• Support SDN/NFV

Awarded ISO certification, customers and potential partners can be confident in Hawkeye Tech's position as a world-class product developer and service provider.

Our service includes:

- Electronic Design
- Mechanical Design
- Firmware, Software, and Solution Integration
- Manufacturing
- Quality Assurance Management
- Product Management

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