

Inspur inMerge HCI System

Best Recipe

V 1.7

Revision Table

Date	Modified	Remarks
Mar 31, 2021	Official Version Release	V 1.0
April 12, 2021	Update platform FW version and add new HDD capacity(3.5" SAS 12TB)	V 1.1
Sep 1 , 2021	Update platform FW version; Add new SSD capacity(2.5" SATA 3.84TB) and capacity(2.5" SATA 1.92TB) ; Add new nic (1G Quad RJ45) and (10G Dual LC) ; Add FW version of Storage Controller and Raid card ; And new GPU type	V 1.2
Sep 29 , 2021	Add new SSD capacity(2.5" SAS 7.68TB)	V1.3
Nov 19 , 2021	Update platform M5 BIOS version; Add new nic(10G) in platform M5; Add platform M6 info;	V1.4
Jan 26, 2022	Update FW version of Storage Controller on platform M5; Add new SSD model (2.5" SAS/SATA 1.92TB, 3.84TB) on platform M5; Add new HDD capacity(3.5" SAS 14TB, 16TB) on platform M5; Add new nic (25G Dual NIC) on platform M5; Update the version of BMC and BIOS on platform M6;	V1.5
Feb 24, 2022	Add new SSD model (2.5" SAS/SATA 1.92TB, 3.84TB) on platform M6; Add new HDD capacity(3.5" SAS 12TB, 14TB,16TB) on platform M6; Add new nic (10G,25G NIC) on platform M6;	V1.6
Mar 24,2022	Add new cpu category on platform M6; Update FW version of Storage Controller on platform M6; Add boot drive on platform M5 and M6;	V1.7

<i>INSPUR inMerge System Configuration</i>	5
inMerge1000M5L & inMerge1000M5L-Core Configuration	5
Table 1: Server Model	5
Table 2: CPU and Memory	6
Table 3: Storage	7
Table 4: Networking	9
inMerge1000M6L & inMerge1000M6L-Core Configuration	10
Table 1: Server Model	10
Table 2: CPU and Memory	10
Table 3: Storage	11
Table 4: Networking	12
inMerge1000M5G & inMerge1000M5G-Core Configuration	12
Table 1: Server Model	12
Table 2: CPU and Memory	14
Table 3: Storage	15
Table 4: Networking	17
Table 5: GPU	17
inMerge1000M6G & inMerge1000M6G-Core Configuration	18
Table 1: Server Model	18
Table 2: CPU and Memory	18
Table 3: Storage	19
Table 4: Networking	20
Table 5: GPU	20
inMerge1000M5S & inMerge1000M5S-Core Configuration	21
Table 1: Server Model	21
Table 2: CPU and Memory	22
Table 3: Storage	23
Table 4: Networking	24
inMerge900M5S&inMerge900M5S-Core Configuration	26
Table 1: Server Model	26
Table 2: CPU and Memory	27
Table 3: Storage	29
Table 4: Networking	30
inMerge600M5S & inMerge600M5S-Core Configuration	30
Table 1: Server Model	30
Table 2: CPU and Memory	31
Table 3: Storage	31

Table 4: Networking	32
<i>Software Compatibility Overview</i>	33
For platform M5	33
For platform M6	33

INSPUR inMerge System Configuration

This document specifies the hardware, software, and firmware that the Nutanix platform requires to run on Inspur inMerge HCI Systems.

inMerge1000M5L & inMerge1000M5L-Core Configuration

Qualification date: November 2018

Use cases:

- Analytics and Big Data
- Backup and Disaster Recovery
- Files and Objects
- Private Cloud
- Test and Development
- End-User Computing/Virtual Desktop Infrastructure

Note: Only Legacy BIOS is supported.

Table 1: Server Model

Component	Description
Server Model	NF5280M5 12x 3.5inch, Redundant PS, BMC +KVM, Rails, Rackmount ARM 2U Nodes per chassis: 1
	BIOS: 4.1.18
	BMC: 4.26.5
	Expander: 501
Boot Drive	Boot drive or RAID card
	240GB/480GB Intel S4510 M.2 SSD or 240GB/480GB Samsung PM883a M.2 SSD Qty: 1-2
	SND 9230 M.2 Raid card; Firmware: 2.3.24.1008 Qty: 1
Power Supply	800W/1300W/1600W 1U PSU Qty: 2

Table 2: CPU and Memory

CPU configuration	Memory configuration
Intel Skylake Various CPU <ul style="list-style-type: none"> • Silver, Gold or Platinum CPU • 8 or more cores per CPU Qty: 2	DDR4-2666, 1.2V, 16 GB, RDIMM 12 x 16 GB = 192 GB 24 x 16 GB = 384 GB
	DDR4-2666, 1.2V, 32 GB, RDIMM 8 x 32 GB = 256 GB 12 x 32 GB = 384 GB 16 x 32 GB = 512 GB 24 x 32 GB = 768 GB
	DDR4-2666, 1.2V, 64 GB, RDIMM 12 x 64 GB = 768 GB 16 x 64 GB = 1 TB 24 x 64 GB = 1.5 TB
Intel Cascade Lake or Cascade Lake Refresh Various CPU <ul style="list-style-type: none"> • Silver, Gold, or Platinum CPU • 8 or more cores per CPU Qty: 2	DDR4-2666, 1.2V, 16 GB, RDIMM 12 x 16 GB = 192 GB 24 x 16 GB = 384 GB
	DDR4-2933 1.2V, 16 GB, RDIMM 12 x 16 GB = 192 GB 24 x 16 GB = 384 GB
	DDR4-2666, 1.2V, 32 GB, RDIMM 8 x 32 GB = 256 GB 12 x 32 GB = 384 GB 16 x 32 GB = 512 GB 24 x 32 GB = 768 GB
	DDR4-2933, 1.2V, 32 GB, RDIMM 8 x 32 GB = 256 GB 12 x 32 GB = 384 GB 16 x 32 GB = 512 GB 24 x 32 GB = 768 GB
	DDR4-2666, 1.2V, 64 GB, RDIMM 12 x 64 GB = 768 GB 16 x 64 GB = 1 TB 24 x 64 GB = 1.5 TB
DDR4-2933, 1.2V, 64 GB, RDIMM 12 x 64 GB = 768 GB	

	16 x 64 GB = 1 TB 24 x 64 GB = 1.5 TB
	DDR4-2666, 1.2V, 64 GB, LRDIMM 12 x 64 GB = 768 GB 16 x 64 GB = 1 TB 24 x 64 GB = 1.5 TB

Table 3: Storage

Component	Description	
Storage Controller	Inspur SAS3008IT Card ; Firmware: 16.00.13.00	
Storage: All-Flash	Only SATA/SAS SSDs	
	4, 5, 6, 7, 8, 9, 10, 11, or 12 x 2.5" SATA/SAS SSDs	
	960GB	Intel S4610 or Samsung SM883 SATA SSD;
	1.92TB	Intel S4610, S4510 or Samsung SM883, PM883 SATA SSD; Samsung PM1643 SAS SSD;
	3.84TB	Intel S4510,S4610 or Samsung SM883, PM883 SATA SSD; Samsung PM1643 SAS SSD;
	7.68TB	Samsung PM1643a SAS SSD
Storage: Hybrid	Mix of SATA/SAS SSDs and SAS HDDs	
	2, 3, or 4 x 2.5" SATA/SAS SSDs	
	480GB	Intel S4610 SATA SSD
	960GB	Intel S4610 or Samsung SM883 SATA SSD
	1.92TB	Intel S4610, S4510 or Samsung SM883, PM883 SATA SSD; Samsung PM1643 SAS SSD;
	3.84TB	Intel S4510, S4610 or Samsung SM883, PM883 SATA SSD; Samsung PM1643 SAS SSD;
	7.68TB	Samsung PM1643a SAS SSD
	4, 5, 6, 7, 8, 9, or 10 x 2.5"/3.5" SAS HDDs	
	Note:	
<ul style="list-style-type: none"> • The HDDs need to be twice or more the number of SSDs. • A maximum of 160 TB storage per node is supported. 		

	2.5" SAS	1.2TB, 1.8TB, 2.4TB 10K RPM SAS HDDs
	3.5" SAS	2TB, 4TB, 6TB, 8TB, 10TB, 12TB, 14TB,16TB 7.2K RPM SAS HDDs

Table 4: Networking

Component	Description	Firmware
PCIe Card	Supported up to 2 Cards	
	1 x Intel I350-T4V2 NIC	0x80001001
	Intel 82599ES 10G Dual NIC	0093.ffff
	Intel X540 10G Dual NIC	4.05.0
	Intel X710 10G Quad NIC	8.15
	Mellanox 25G_MCX4121A-ACAT NIC	14.25.1020
	Inspur E810 25G Dual LC NIC	2.30
	Intel E810 25G Dual LC NIC	2.30
	Inspur 82599ES 10G Dual LC NIC	4022.4022
	Inspur X710 10G Dual LC NIC	8.15
	Inspur X540 10G Dual RJ45 NIC	4.05.0
	Inspur I350-AM4 1G Quad RJ45 NIC	1.63
	Inspur I350-AM2 1G Dual RJ45 NIC	1.63
FLOM Adapter	Supported up to 1 Card	
	OCP 25G Mellanox CX4LX NIC	14.25.1020
	OCP 25G_MCX4421ACQN NIC	14.25.1020
	OCP 25G Mellanox CX5 NIC	16.29.2002
	OCP 10G_X520DA2OCP NIC	4030.003
	OCP 10G_X710_Dual_LC NIC	7.10
	OCP 10G_82599_LC NIC	4040.404
Dual NIC Configuration	By default the system supports up to two NICs. In case additional NICs are required please contact Inspur for more details.	

inMerge1000M6L & inMerge1000M6L-Core Configuration

Qualification date: November 2021

Use cases:

- Analytics and Big Data
- Backup and Disaster Recovery
- Files and Objects
- Private Cloud
- Test and Development
- End-User Computing/Virtual Desktop Infrastructure

Note: Only UEFI BIOS is supported

Table 1: Server Model

Component	Description
Server Model	NF5280M6 12x 3.5inch, Redundant PS, BMC +KVM, Rails, Rackmount ARM 2U Nodes per chassis: 1
	BIOS: 6.00.01
	BMC: 4.14.02
Boot Drive	Boot drive or RAID card
	480GB/960GB Intel S4510 M.2 SSD or 240GB/480GB Samsung PM883a M.2 SSD Qty: 1-2
	SND 9230 M.2 Raid card; Firmware: 2.3.24.1008 Qty: 1
Power Supply	800W/1300W/1600W 1U PSU Qty: 2

Table 2: CPU and Memory

CPU configuration	Memory configuration
Intel Ice Lake Various CPU	DDR4 2933MHz~3200 MHz, 1.2V, 16 GB, RDIMM
<ul style="list-style-type: none"> • Silver,Gold or Platinum CPU 	8 x 16 GB = 128GB
<ul style="list-style-type: none"> • 8 or more cores per CPU 	12 x 16 GB = 192GB

Qty: 2	16 x 16 GB = 256GB 24 x 16 GB = 384GB 32 x 16 GB = 512GB
	DDR4 2933MHz~3200 MHz ,1.2V, 32 GB, RDIMM 8 x 32 GB = 256GB 12 x 32 GB = 384GB 16 x 32 GB = 512GB 24 x 32 GB = 768GB 32 x 32 GB = 1024GB
	DDR4 2933MHz~3200 MHz ,1.2V, 64 GB, RDIMM 8 x 64 GB = 512GB 12 x 64 GB = 768GB 16 x 64 GB = 1024GB 24 x 64 GB = 1536GB 32 x 64 GB = 2048GB

Table 3: Storage

Component	Description	
Storage Controller	Inspur SAS Card PM8222 ; Firmware: 4.11	
Storage: All-Flash	Only SATA/SAS SSDs	
	4, 5, 6, 7, 8, 9, 10, 11, or 12 x 2.5" SATA/SAS SSDs	
	960GB	Intel S4610 SATA SSD
	1.92TB	Intel S4610 or Samsung PM883, SM883 SATA SSD
	3.84TB	Intel S4510,S4610 SATA SSD
Storage: Hybrid	Mix of SATA/SAS SSDs and SAS HDDs	
	2, 3, or 4 x 2.5" SATA/SAS SSDs	
	960GB	Intel S4610 SATA SSD
	1.92TB	Intel S4610 or Samsung PM883, SM883 SATA SSD
	3.84TB	Intel S4510,S4610 SATA SSD
	4, 5, 6, 7, 8, 9, or 10 x 2.5"/3.5" SAS HDDs	
	Note:	<ul style="list-style-type: none"> • The HDDs need to be twice or more the number of SSDs. • A maximum of 160 TB storage per node is supported.
	2.5" SAS	2.4TB 10K RPM SAS HDDs

	3.5" SAS	12TB, 14TB,16TB 7.2K RPM SAS HDDs
--	----------	-----------------------------------

Table 4: Networking

Component	Description	Firmware
PCIe Card Interface	Supported up to 2 Cards	
	Inspur X710 10G Dual LC NIC	8.15
	Intel X710 10G Dual LC NIC	8.15
	Intel X710 10G Quad NIC	8.15
	Inspur E810 25G Dual LC NIC	2.3
	Intel E810 25G Dual LC NIC	2.30
	SND I350-AM2 1G Dual RJ45 NIC	1.63
FLOM Adapter	Supported up to 1 Card	
	OCP 10G Inspur X710_Dual_LC NIC	8.15
	OCP 25G Mellanox CX5 NIC	16.28.2006
Dual NIC Configuration	By default the system supports up to two NICs. In case additional NICs are required please contact Inspur for more details.	

inMerge1000M5G & inMerge1000M5G-Core Configuration

Qualification date: April 2020

Use cases:

- End-User Computing/Virtual Desktop Infrastructure

Note: Only Legacy BIOS is supported.

Table 1: Server Model

Component	Description
Server Model	NF5280 M5 8x 3.5inch, Redundant PS, BMC +KVM, Rails, Rackmount ARM 2U Nodes per chassis: 1
	BIOS: 4.1.18
	BMC: 4.26.5
Boot Drive	Boot drive or RAID card
	240GB/480GB Intel S4510 M.2 SSD or

	240GB/480GB Samsung PM883a M.2 SSD Qty: 1-2
	SND 9230 M.2 Raid card; Firmware: 2.3.24.1008 Qty: 1
Power Supply	800W/1300W/1600W 1U PSU Qty: 2

Table 2: CPU and Memory

CPU configuration	Memory configuration
<p>Intel Skylake Various CPU</p> <ul style="list-style-type: none"> • Silver, Gold or Platinum CPU • 8 or more cores per CPU <p>Qty: 2</p>	<p>DDR4-2666, 1.2V, 16 GB, RDIMM</p> <p>12 x 16 GB = 192 GB</p> <p>24 x 16 GB = 384 GB</p>
	<p>DDR4-2666, 1.2V, 32 GB, RDIMM</p> <p>8 x 32 GB = 256 GB</p> <p>12 x 32 GB = 384 GB</p> <p>16 x 32 GB = 512 GB</p> <p>24 x 32 GB = 768 GB</p>
	<p>DDR4-2666, 1.2V, 64 GB, RDIMM</p> <p>12 x 64 GB = 768 GB</p> <p>16 x 64 GB = 1 TB</p> <p>24 x 64 GB = 1.5 TB</p>
<p>Intel Cascade Lake or Cascade Lake Refresh Various CPU</p> <ul style="list-style-type: none"> • Silver, Gold, or Platinum • 8 or more cores per CPU <p>Qty: 2</p>	<p>DDR4-2666, 1.2V, 16 GB, RDIMM</p> <p>12 x 16 GB = 192 GB</p> <p>24 x 16 GB = 384 GB</p>
	<p>DDR4-2933 1.2V, 16 GB, RDIMM</p> <p>12 x 16 GB = 192 GB</p> <p>24 x 16 GB = 384 GB</p>
	<p>DDR4-2666, 1.2V, 32 GB, RDIMM</p> <p>8 x 32 GB = 256 GB</p> <p>12 x 32 GB = 384 GB</p> <p>16 x 32 GB = 512 GB</p> <p>24 x 32 GB = 768 GB</p>
	<p>DDR4-2933, 1.2V, 32 GB, RDIMM</p> <p>8 x 32 GB = 256 GB</p> <p>12 x 32 GB = 384 GB</p> <p>16 x 32 GB = 512 GB</p> <p>24 x 32 GB = 768 GB</p>
	<p>DDR4-2666, 1.2V, 64 GB, RDIMM</p> <p>12 x 64 GB = 768 GB</p> <p>16 x 64 GB = 1 TB</p> <p>24 x 64 GB = 1.5 TB</p>
	<p>DDR4-2933, 1.2V, 64 GB, RDIMM</p> <p>12 x 64 GB = 768 GB</p>

	16 x 64 GB = 1 TB 24 x 64 GB = 1.5 TB
	DDR4-2666, 1.2V, 64 GB, LRDIMM 12 x 64 GB = 768 GB 16 x 64 GB = 1 TB 24 x 64 GB = 1.5 TB

Table 3: Storage

Component	Description	
Storage Controller	Inspur SAS3008IT Card ; Firmware: 16.00.13.00	
Storage: All-Flash	Only SATA/SAS SSDs	
	2, 3, 4, 5, 6, 7, or 8 x 2.5" SATA/SAS SSDs	
	960GB	Intel S4610 or Samsung SM883 SATA SSD;
	1.92TB	Intel S4610, S4510 or Samsung SM883, PM883 SATA SSD; Samsung PM1643 SAS SSD;
	3.84TB	Intel S4510,S4610 or Samsung SM883, PM883 SATA SSD ; Samsung PM1643 SAS SSD;
	7.68TB	Samsung PM1643a SAS SSD
Storage: Hybrid	Mix of SATA/SAS SSDs and SAS HDDs	
	2 x 2.5" SATA/SAS SSDs	
	960GB	Intel S4610 or Samsung SM883 SATA SSD
	1.92TB	Intel S4610, S4510 or Samsung SM883, PM883 SATA SSD; Samsung PM1643 SAS SSD;
	3.84TB	Intel S4610, S4510 or Samsung SM883, PM883 SATA SSD; Samsung PM1643 SAS SSD;
	7.68TB	Samsung SAS SSD PM1643a
	4, 5, or 6 x 2.5"/3.5" SAS HDDs	
	Note:	
	<ul style="list-style-type: none"> • The HDDs need to be twice or more the number of SSDs. • A maximum of 160 TB storage per node is supported. 	
	2.5" SAS	1.2TB, 1.8TB, 2.4TB 10K RPM SAS HDDs

	3.5" SAS	2TB, 4TB, 6TB, 8TB, 10TB, 12TB, 14TB,16TB 7.2K RPM SAS HDDs
--	----------	--

Table 4: Networking

Component	Description	Firmware
PCIe Card Interface	Supported up to 2 Cards	
	1 x Intel I350-T4V2 NIC	0x80001001
	Intel 82599ES 10G Dual NIC	0093.ffff
	Intel X540 10G Dual NIC	4.05.0
	Intel X710 10G Quad NIC	8.15
	Mellanox 25G_MCX4121A-ACAT NIC	14.25.1020
	Inspur E810 25G Dual LC NIC	2.30
	Intel E810 25G Dual LC NIC	2.30
	Inspur 82599ES 10G Dual LC NIC	4022.4022
	Inspur X710 10G Dual LC NIC	8.15
	Inspur X540 10G Dual RJ45 NIC	4.05.0
	Inspur I350-AM4 1G Quad RJ45 NIC	1.63
	Inspur I350-AM2 1G Dual RJ45 NIC	1.63
FLOM Adapter	Supported up to 1 Card	
	OCP 25G_CX4LX NIC	14.25.1020
	OCP 25G_MCX4421ACQN NIC	14.25.1020
	OCP 25G Mellanox CX5 NIC	16.29.2002
	OCP 10G_X520DA2OCP NIC	4030.003
	OCP 10G_82599_LC NIC	4040.404
	OCP 10G_X710_Dual_LC NIC	7.10
Dual NIC Configuration	By default the system supports up to two NICs. In case additional NICs are required please contact Inspur for more details.	

Table 5: GPU

Component	Description
Computation and Graphics Accelerators	1, 2, or 3 x Computation and Graphics Accelerators Note: A maximum of 3 GPUs of the same type are supported. The RTX GPUs' minimum AOS requirement is 5.19.
	Nvidia Tesla T4 16GB
	Nvidia Tesla V100 16GB
	Nvidia Tesla V100 32GB
	Nvidia Tesla P40 24GB

	Nvidia Tesla V100S 32GB
	Nvidia RTX6000 24GB
	Nvidia RTX8000 48GB
	Nvidia Tesla A100 40GB

inMerge1000M6G & inMerge1000M6G-Core Configuration

Qualification date: November 2021

Use cases:

- End-User Computing/Virtual Desktop Infrastructure

Note: Only UEFI BIOS is supported.

Table 1: Server Model

Component	Description
Server Model	NF5280M6 12x 3.5inch, Redundant PS, BMC +KVM, Rails, Rackmount ARM 2U Nodes per chassis: 1
	BIOS: 6.00.01
	BMC: 4.14.02
Boot Drive	Boot drive or RAID card
	480GB/960GB Intel S4510 M.2 SSD or 240GB/480GB Samsung PM883a M.2 SSD Qty: 1-2
	SND 9230 M.2 Raid card; Firmware: 2.3.24.1008 Qty: 1
Power Supply	800W/1300W/1600W 1U PSU Qty: 2

Table 2: CPU and Memory

CPU configuration	Memory configuration
Intel Ice Lake Various CPU	DDR4 2933MHz~3200 MHz, 1.2V, 16 GB, RDIMM
<ul style="list-style-type: none"> ● Silver, Gold or Platinum CPU 	8 x 16 GB = 128GB
<ul style="list-style-type: none"> ● 8 or more cores per CPU 	12 x 16 GB = 192GB

Qty: 2	16 x 16 GB = 256GB 24 x 16 GB = 384GB 32 x 16 GB = 512GB
	DDR4 2933MHz~3200 MHz ,1.2V, 32 GB, RDIMM 8 x 32 GB = 256GB 12 x 32 GB = 384GB 16 x 32 GB = 512GB 24 x 32 GB = 768GB 32 x 32 GB = 1024GB
	DDR4 2933MHz~3200 MHz ,1.2V, 64 GB, RDIMM 8 x 64 GB = 512GB 12 x 64 GB = 768GB 16 x 64 GB = 1024GB 24 x 64 GB = 1536GB 32 x 64 GB = 2048GB

Table 3: Storage

Component	Description	
Storage Controller	Inspur SAS Card PM8222 ; Firmware: 4.11	
Storage: All-Flash	Only SATA/SAS SSDs	
	2, 3, 4, 5, 6, 7, or 8 x 2.5" SATA/SAS SSDs	
	960GB	Intel S4610 SATA SSD
	1.92TB	Intel S4610 or Samsung PM883, SM883 SATA SSD
	3.84TB	Intel S4510,S4610 SATA SSD
Storage: Hybrid	Mix of SATA/SAS SSDs and SAS HDDs	
	2 x 2.5" SATA/SAS SSDs	
	960GB	Intel S4610 SATA SSD
	1.92TB	Intel S4610 or Samsung PM883, SM883 SATA SSD
	3.84TB	Intel S4510,S4610 SATA SSD
	4, 5, or 6 x 2.5"/3.5" SAS HDDs	
	Note:	<ul style="list-style-type: none"> • The HDDs need to be twice or more the number of SSDs. • A maximum of 160 TB storage per node is supported.
	2.5" SAS	2.4TB 10K RPM SAS HDDs

	3.5" SAS	12TB, 14TB,16TB 7.2K RPM SAS HDDs
--	----------	-----------------------------------

Table 4: Networking

Component	Description	Firmware
PCIe Card Interface	Supported up to 2 Cards	
	Inspur X710 10G Dual LC NIC	8.15
	Intel X710 10G Dual LC NIC	8.15
	Intel X710 10G Quad NIC	8.15
	Inspur E810 25G Dual LC NIC	2.3
	Intel E810 25G Dual LC NIC	2.30
	SND I350-AM2 1G Dual RJ45 NIC	1.63
FLOM Adapter	Supported up to 1 Card	
	OCP 10G Inspur X710_Dual_LC NIC	8.15
	OCP 25G Mellanox CX5 NIC	16.28.2006
Dual NIC Configuration	By default the system supports up to two NICs. In case additional NICs are required please contact Inspur for more details.	

Table 5: GPU

Component	Description
Computation and Graphics Accelerators	1, 2 Computation and Graphics Accelerators Note: A maximum of 2 GPUs of the same type are supported. The RTX GPUs' minimum AOS requirement is 5.20.1.1.
	Nvidia Tesla T4 16GB
	Nvidia Tesla V100S 32GB
	Nvidia A10 24GB
	Nvidia A30 24GB
	Nvidia Tesla A40 48GB
	Nvidia Tesla A100 40GB

inMerge1000M5S & inMerge1000M5S-Core Configuration

Qualification date: May 2020

Use cases:

- Analytics and Big Data
- Backup and Disaster Recovery
- Private Cloud
- Test and Development
- End-User Computing/Virtual Desktop Infrastructure

Note: Only Legacy BIOS is supported.

Table 1: Server Model

Component	Description
Server Model	NF5280 M5 24x 2.5inch, Redundant PS, BMC +KVM, Rails, Rackmount ARM 2U Nodes per chassis: 1
	BIOS: 4.1.18
	BMC: 4.26.5
Boot Drive	Boot drive or RAID card
	240GB/480GB Intel S4510 M.2 SSD or 240GB/480GB Samsung PM883a M.2 SSD Qty: 1-2
	SND 9230 M.2 Raid card; Firmware: 2.3.24.1008 Qty: 1
Power Supply	800W/1300W/1600W 1U PSU Qty: 2

Table 2: CPU and Memory

CPU configuration	Memory configuration
Intel Skylake Various CPU <ul style="list-style-type: none"> • Silver, Gold, or Platinum • 8 or more cores per CPU Qty: 2	DDR4-2666, 1.2V, 16 GB, RDIMM 12 x 16 GB = 192 GB 24 x 16 GB = 384 GB
	DDR4-2666, 1.2V, 32 GB, RDIMM 8 x 32 GB = 256 GB 12 x 32 GB = 384 GB 16 x 32 GB = 512 GB 24 x 32 GB = 768 GB
	DDR4-2666, 1.2V, 64 GB, RDIMM 12 x 64 GB = 768 GB 16 x 64 GB = 1 TB 24 x 64 GB = 1.5 TB
	Intel Cascade Lake or Cascade Lake Refresh Various CPU <ul style="list-style-type: none"> • Silver, Gold or Platinum • 8 or more cores per CPU Qty: 2
DDR4-2933 1.2V, 16 GB, RDIMM 12 x 16 GB = 192 GB 24 x 16 GB = 384 GB	
DDR4-2666, 1.2V, 32 GB, RDIMM 8 x 32 GB = 256 GB 12 x 32 GB = 384 GB 16 x 32 GB = 512 GB 24 x 32 GB = 768 GB	
DDR4-2933, 1.2V, 32 GB, RDIMM 8 x 32 GB = 256 GB 12 x 32 GB = 384 GB 16 x 32 GB = 512 GB 24 x 32 GB = 768 GB	
DDR4-2666, 1.2V, 64 GB, RDIMM 12 x 64 GB = 768 GB 16 x 64 GB = 1 TB 24 x 64 GB = 1.5 TB	
DDR4-2933, 1.2V, 64 GB, RDIMM 12 x 64 GB = 768 GB	

	16 x 64 GB = 1 TB 24 x 64 GB = 1.5 TB
	DDR4-2666, 1.2V, 64 GB, LRDIMM 12 x 64 GB = 768 GB 16 x 64 GB = 1 TB 24 x 64 GB = 1.5 TB

Table 3: Storage

Component	Description	
Storage Controller	Inspur SAS3008IT Card; Firmware: 16.00.13.00	
Storage: All-Flash	SATA/SAS SSDs	
	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, or 24 x 2.5" SATA/SAS SSDs	
	960GB	Intel S4610 or Samsung SM883 SATA SSD
	1.92TB	Intel S4610, S4510 or Samsung SM883, PM883 SATA SSD; Samsung PM1643 SAS SSD;
	3.84TB	Intel S4510,S4610 or Samsung SM883, PM883 SATA SSD; Samsung PM1643 SAS SSD;
	7.68TB	Samsung PM1643a SAS SSD
Storage: All-Flash	SATA/SAS SSDs and NVMe SSDs	
	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20 x 2.5" SATA SSDs	
	960GB	Intel S4610 or Samsung SM883 SATA SSD
	1.92TB	Intel S4610, S4510 or Samsung SM883, PM883 SATA SSD; Samsung PM1643 SAS SSD;
	3.84TB	Intel S4510,S4610 or Samsung SM883, PM883 SATA SSD; Samsung PM1643 SAS SSD;
	7.68TB	Samsung PM1643a SAS SSD
	4 x 2.5" NVMe SSDs	
	750GB	Intel P4800X Optane SSD
	1.5TB	Intel P4800X Optane SSD

	3.2TB	Intel P4610 SSD
Storage: Hybrid	Mix of SATA/SAS SSDs and SAS HDDs	
	4, 5, 6, 7, or 8 x 2.5" SATA/SAS SSDs	
	960GB	Intel S4610 or Samsung SM883 SATA SSD
	1.92TB	Intel S4610, S4510 or Samsung SM883, PM883 SATA SSD; Samsung PM1643 SAS SSD;
	3.84TB	Intel S4510,S4610 or Samsung SM883, PM883 SATA SSD; Samsung PM1643 SAS SSD;
	7.68TB	Samsung PM1643a SAS SSD
	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20 x 2.5" HDDs	
	Note: • The HDDs need to be twice or more the number of SSDs.	
2.5" SAS	1.2TB, 1.8TB, 2.4TB 10K RPM SAS HDDs	

Table 4: Networking

Component	Description	Firmware
PCIe Card Interface	Supported up to 2 Cards	
	1 x Intel I350-T4V2 NIC	0x80001001
	Intel 82599ES 10G Dual NIC	0093.ffff
	Intel X540 10G Dual NIC	4.05.0
	Intel X710 10G Four NIC	8.15
	Mellanox 25G_MCX4121A-ACAT NIC	14.25.1020
	Inspur E810 25G Dual LC NIC	2.30
	Intel E810 25G Dual LC NIC	2.30
	Inspur 82599ES 10G Dual LC NIC	4022.4022
	Inspur X710 10G Dual LC NIC	8.15
	Inspur X540 10G Dual RJ45 NIC	4.05.0
	Inspur I350-AM4 1G Quad RJ45 NIC	1.63
	Inspur I350-AM2 1G Dual RJ45 NIC	1.63
FLOM Adapter	Supported up to 1 Card	
	OCP 25G_CX4LX NIC	14.25.1020
	OCP 25G_MCX4421ACQN NIC	14.25.1020
	OCP 25G Mellanox CX5 NIC	16.29.2002
	OCP 10G_X520DA2OCP NIC	4030.003

	OCP 10G_X710_Dual_LC NIC	7.10
	OCP 10G_82599_LC NIC	4040.404
Dual NIC Configuration	By default the system supports up to two NICs. In case additional NICs are required please contact Inspur for more details.	

inMerge900M5S&inMerge900M5S-Core Configuration

Qualification date: December 2019

Use cases:

- Analytics and Big Data
- Private Cloud
- Test and Development
- End-User Computing/Virtual Desktop Infrastructure

Note: Only Legacy BIOS is supported.

Table 1: Server Model

Component	Description
Server Model	i24-NS5162 24x 2.5", 2000W Redundant PS, BMC +KVM, Rails Nodes per chassis: 4
	BIOS: 4.1.9
	BMC: 4.4.1
	CMC: 3.18.0
Boot Drive	Boot drive or RAID card
	240GB/480GB Intel S4510 M.2 SSD Qty: 1-2
	SND 9230 M.2 Raid card; Firmware: 2.3.24.1008 Qty: 1
Power Supply	2000W 1U PSU Qty: 2

Table 2: CPU and Memory

CPU configuration	Memory configuration (Per Node)
<p>Intel Skylake Various CPU</p> <ul style="list-style-type: none"> • Silver, Gold or Platinum • 8 or more cores per CPU <p>Qty: 2</p>	<p>DDR4-2666, 1.2V, 16 GB, RDIMM</p> <p>12 x 16 GB = 192 GB</p> <p>16x 16 GB = 256 GB</p>
	<p>DDR4-2933, 1.2V, 16 GB, RDIMM</p> <p>12 x 16 GB = 192 GB</p> <p>16x 16 GB = 256 GB</p>
	<p>DDR4-2666, 1.2V, 32 GB, RDIMM</p> <p>8 x 32 GB = 256 GB</p> <p>12 x 32 GB = 384 GB</p> <p>16 x 32 GB = 512 GB</p>
	<p>DDR4-2933, 1.2V, 32 GB, RDIMM</p> <p>8 x 32 GB = 256 GB</p> <p>12 x 32 GB = 384 GB</p> <p>16 x 32 GB = 512 GB</p>
	<p>DDR4-2666, 1.2V, 64 GB, RDIMM</p> <p>8 x 64 GB = 512 GB</p> <p>12 x 64 GB = 768 GB</p> <p>16 x 64 GB = 1 TB</p>
	<p>DDR4-2666, 1.2V, 64 GB, LRDIMM</p> <p>8 x 64 GB = 512 GB</p> <p>12 x 64 GB = 768 GB</p> <p>16 x 64 GB = 1 TB</p>
	<p>DDR4-2933, 1.2V, 64 GB, LRDIMM</p> <p>8 x 64 GB = 512 GB</p> <p>12 x 64 GB = 768 GB</p> <p>16 x 64 GB = 1 TB</p>
	<p>Intel Cascade Lake or Cascade Lake Refresh Various CPU</p> <ul style="list-style-type: none"> • Silver, Gold, or Platinum • 8 or more cores per CPU <p>Qty: 2</p>
<p>DDR4-2933, 1.2V, 16 GB, RDIMM</p> <p>12 x 16 GB = 192 GB</p> <p>16x 16 GB = 256 GB</p>	
<p>DDR4-2666, 1.2V, 32 GB, RDIMM</p> <p>8 x 32 GB = 256 GB</p>	

	<p>12 x 32 GB = 384 GB</p> <p>16 x 32 GB = 512 GB</p>
	<p>DDR4-2933, 1.2V, 32 GB, RDIMM</p> <p>8 x 32 GB = 256 GB</p> <p>12 x 32 GB = 384 GB</p> <p>16 x 32 GB = 512 GB</p>
	<p>DDR4-2666, 1.2V, 64 GB, RDIMM</p> <p>8 x 64 GB = 512 GB</p> <p>12 x 64 GB = 768 GB</p> <p>16 x 64 GB = 1 TB</p>
	<p>DDR4-2933, 1.2V, 64 GB, RDIMM</p> <p>8 x 64 GB = 512 GB</p> <p>12 x 64 GB = 768 GB</p> <p>16 x 64 GB = 1 TB</p>
	<p>DDR4-2666, 1.2V, 64 GB, LRDIMM</p> <p>8 x 64 GB = 512 GB</p> <p>12 x 64 GB = 768 GB</p> <p>16 x 64 GB = 1 TB</p>
	<p>DDR4-2933, 1.2V, 64 GB, LRDIMM</p> <p>8 x 64 GB = 512 GB</p> <p>12 x 64 GB = 768 GB</p> <p>16 x 64 GB = 1 TB</p>

Table 3: Storage

Component	Description (Per Node)	
Storage Controller	Inspur SAS3008IT Card; Firmware: 16.00.13.00	
Storage: All-Flash	Only SATA/SAS SSDs	
	2, 3, 4, 5, or 6 x 2.5" SATA/SAS SSDs, per node	
	960GB	Intel S4610 or Samsung SM883 SSD
	1.92TB	Intel S4510 or Samsung SM883, PM883 SSD
	3.84TB	Intel S4510, S4610 Samsung PM883, or SM883 SSD
Storage: All-Flash	Only SATA/SAS and NVMe SSDs	
	4 x 2.5" SATA/SAS SSDs, per node	
	960GB	Intel S4610 or Samsung SM883 SSD
	1.92TB	Intel S4510 or Samsung SM883, PM883 SSD
	3.84TB	Intel S4510, S4610 Samsung PM883, or SM883 SSD
	2 x 2.5" NVMe SSDs	
	750GB	Intel P4800X Optane SSD
	1.5TB	Intel P4800X Optane SSD
	3.2TB	Intel P4610 SSD
	Storage: Hybrid	Mix of SATA SSDs and HDDs
2 x 2.5" SATA SSDs		
960GB		Intel S4610 or Samsung SM883 SSD
1.92TB		Intel S4510 or Samsung SM883, PM883 SSD
3.84TB		Intel S4510, S4610 or Samsung PM883, SM883 SSD
4 x 2.5" HDDs		
Note: • The HDDs need to be twice or more the number of SSDs.		
2.5" SAS		1.2TB, 1.8TB, 2.4TB 10K RPM SAS HDDs

Table 4: Networking

Component	Description	Firmware
PCIe Interface Card	Supported up to 1 Card	
	Inspur I350-AM4 1G Quad RJ45 NIC	1.63
	Inspur 82599ES 10G Dual LC NIC	4022.4022
	Inspur X550 10G Dual RJ45 NIC	1.1937.0
	1 x Mellanox 25G_MCX4121A-ACAT NIC	14.25.1020
FLOM Adapter	Supported up to 1 Card	
	OCP 25G_CX4Lx NIC	14.25.1020
	OCP 25G_CX5 NIC	16.29.2002
	OCP 25G_MCX4421ACQN NIC	14.25.1020
	OCP 10G_X520DA2OCP NIC	4030.003
	OCP 10G_82599_LC NIC	4040.404
	OCP 10G_X557 RJ NIC	3.33
Dual NIC Configuration	The system can support 2 NICs	

Note: The PCIe Network Interface quantity is per node

inMerge600M5S & inMerge600M5S-Core Configuration

Qualification date: Jan 2021

Use cases:

- Private Cloud
- Test and Development
- End-User Computing/Virtual Desktop Infrastructure

Note: Only Legacy BIOS is supported.

Table 1: Server Model

Component	Description
Server Model	NF5180M5 10x 2.5inch, Redundant PS, BMC +KVM, Rails, Rackmount ARM 1U Nodes per chassis: 1
	BIOS: 4.1.12
	BMC: 4.18.2
Boot Drive	Boot drive or RAID card

	240GB/480GB Intel S4510 M.2 SSD Qty: 1-2
	SND 9230 M.2 Raid card; Qty: 1
Power Supply	800W 1U PSU Qty: 2

Table 2: CPU and Memory

CPU configuration	Memory configuration (Per Node)
Intel Cascade Lake or Cascade Lake Refresh Various CPU • Silver, Gold or Platinum • 8 or more cores per CPU Qty: 2	DDR4-2933 1.2V, 16 GB, RDIMM 12 x 16 GB = 192 GB 24 x 16 GB = 384 GB
	DDR4-2933, 1.2V, 32 GB, RDIMM 8 x 32 GB = 256 GB 12 x 32 GB = 384 GB 16 x 32 GB = 512 GB 24 x 32 GB = 768 GB
	DDR4-2933, 1.2V, 64 GB, RDIMM 12 x 64 GB = 768 GB 16 x 64 GB = 1 TB 24 x 64 GB = 1.5 TB

Table 3: Storage

Component	Description	
Storage Controller	Inspur SAS3008IT Card; Firmware: 16.00.13.00	
Storage: Hybrid	Mix of SATA SSDs and SAS HDDs	
	2 x 2.5" SATA/SAS SSDs	
	960GB	Intel S4610
	1.92TB	Intel S4610,S4510 or Samsung PM883 SSD
	3.84TB	Intel S4510,S4610 or Samsung PM883 SSD
	4,5 or 6 x 2.5" HDDs	
	Note: • The HDDs need to be twice or more the number of SSDs.	

	2.5" SAS	1.2TB, 1.8TB, 2.4TB 10K RPM SAS HDDs
--	----------	--------------------------------------

Table 4: Networking

Component	Description	Firmware
PCIe Interface Card	Supported up to 1 Card	
	1 x Intel I350-T4V2 NIC	0x80001001
	Intel 82599ES 10G Dual NIC	0093.ffff
	Intel X540 10G Dual NIC	4.05.0
	Mellanox 25G_MCX4121A-ACAT NIC	14.25.1020
	Inspur 82599ES 10G Dual LC NIC	4022.4022
	Inspur X540 10G Dual RJ45 NIC	4.05.0
	Inspur I350-AM4 1G Quad RJ45 NIC	1.63
	Inspur I350-AM2 1G Dual RJ45 NIC	1.63
FLOM Adapter	Supported up to 1 Card	
	OCP 25G_CX4LX NIC	14.25.1020
	OCP 25G_MCX4421ACQN NIC	14.25.1020
	OCP 10G_X520DA2OCP NIC	4030.003
	OCP 10G_82599_LC NIC	4040.404
Dual NIC Configuration	By default the system supports up to two NICs. In case additional NICs are required please contact Inspur for more details.	

Software Compatibility Overview

Note:

For more information about supported AOS and Hypervisor versions, you can refer to: <https://portal.nutanix.com/page/documents/compatibility-interopability-matrix/hardware>

For platform M5

The recommended qualified software versions are as follow :

AOS	Hypervisor Version	Foundation	NCC
>= 5.15.2(LTS)	AHV >= 20170830.434 ESXi 6.5 U3, 6.7U3, 7.0 U2a	5.x	>=4.2
>=5.20 (LTS)	AHV >=20201105.2030 ESXi 6.5 U3, 6.7U3, 7.0 U2a		
>=6.0 (STS)	AHV >=20201105.2076 ESXi 6.5 U3, 6.7U3, 7.0 U2a		

For platform M6

The recommended qualified software versions are as follow:

AOS	Hypervisor Version	Foundation	NCC
>=5.20.1.1 (LTS)	AHV-20201105.2096 AHV-20201105.2267 ESXi 7.0.U2a	>=5.1	>=4.3
6.1 (STS)	AHV-20201105.30142 ESXi 7.0.U2a		

Note : AOS 5.20.1.1 ,Foundation 5.1 are the minimum requirements for platform inMerge1000M6L 、 inMerge1000M6L-Core、 inMerge1000M6G 、 inMerge1000M6G-Core.

