

Inspur inMerge HCI System

Best Recipe

V 1.6

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 |

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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 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 • 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>DDR4-2933 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 | |
| | 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 Intel S4510 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 |
| • Gold CPU | 8 x 16 GB = 128GB |
| • 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: 3.53 | |
| 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 Interface Card | 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 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 • 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>DDR4-2933 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 |

| | | |
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| | 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 Intel S4510 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 |
| • Gold CPU | 8 x 16 GB = 128GB |
| • 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: 3.53 | |
| 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 Interface Card | 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 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 | DDR4-2666, 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 | |

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|--|---------------------------------------------------------------------------------------------------|
| | 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: <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 | |

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 16 x 32 GB = 512 GB</p> |
| | <p>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</p> |
| | <p>DDR4-2666, 1.2V, 64 GB, RDIMM 8 x 64 GB = 512 GB 12 x 64 GB = 768 GB 16 x 64 GB = 1 TB</p> |
| | <p>DDR4-2933, 1.2V, 64 GB, RDIMM 8 x 64 GB = 512 GB 12 x 64 GB = 768 GB 16 x 64 GB = 1 TB</p> |
| | <p>DDR4-2666, 1.2V, 64 GB, LRDIMM 8 x 64 GB = 512 GB 12 x 64 GB = 768 GB 16 x 64 GB = 1 TB</p> |
| | <p>DDR4-2933, 1.2V, 64 GB, LRDIMM 8 x 64 GB = 512 GB 12 x 64 GB = 768 GB 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 | | 1.2, 1.8, 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. | |

| | | |
|--|------------------------------------------------------|----------------------------------|
| | • A maximum of 160 TB storage per node is supported. | |
| | 2.5" SAS | 1.2, 1.8, 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 |
| | MelanoX 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 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.

