机器一:6CCL/2P KP920

硬件: Kunpeng 920: 96 核, 分为 4 个 Die (NUMA node)。每个 Die有 6个 CCL。

L1D cache: 64KB per coreL2 cache: 512KB per core

• L3 cache: 22.5MB per Die (avg. 960KB per core)

BIOS 版本: dmidecode -t 0
BIOS Information

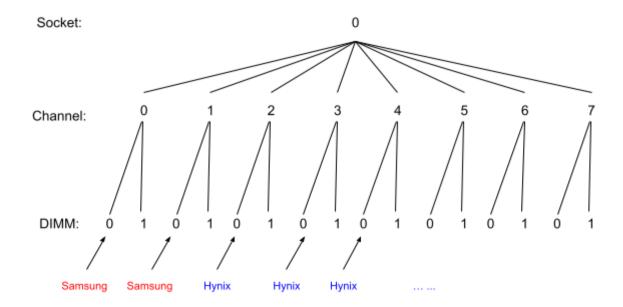
Vendor: Huawei Corp.

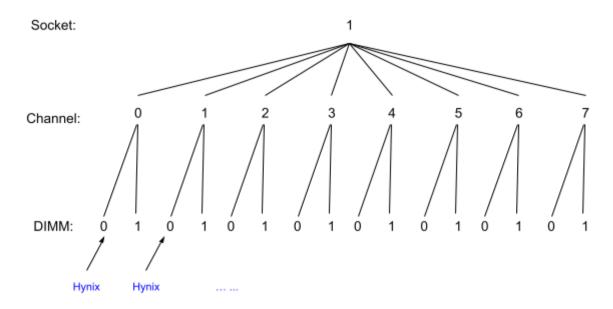
Version: 2280-V2 CS V3.B250.01

Release Date: 04/16/2020

Address: 0x7F000

• Memory Layout and Configuration: (as reported by `dmidecode`)





- 0
- 合计,32个 DIMM 插槽。如图。
 - 所有的 DIMM 0 都是 32GB。合计 512GB。
 - 所有的 DIMM 1 都是 空。
- 其中,
 - 最前面两个DIMM槽插的是 Samsung 内存: Socket 0 Channel 0 DIMM 0, 和 Socket 0 Channel 1 DIMM 0
 - 其它 DIMM 槽插的都是 Hynix 内存。
- Total: 32 DIMMs. With 'board locator':
 - SOCKET 0 CHANNEL 0 DIMM 0

- Samsung, 32GB, 2933MHz, 1.2V/2.0V (M393A4K40CB2-CVF)
- SOCKET 0 CHANNEL 0 DIMM 1
 - None
- SOCKET 0 CHANNEL 1 DIMM 0
 - Samsung, 32GB, 2933MHz, 1.2V/2.0V (M393A4K40CB2-CVF)
- SOCKET 0 CHANNEL 1 DIMM 1
 - None
- SOCKET 0 CHANNEL 2 DIMM 0
 - Hynix, 32GB, 2933MHz, 1.2V/2.0V (HMA84GR7JJR4N-WM)
- SOCKET 0 CHANNEL 2 DIMM 1
 - None
- SOCKET 0 CHANNEL 3 DIMM 0
 - Hynix, 32GB, 2933MHz, 1.2V/2.0V (HMA84GR7JJR4N-WM)
-
 - (All other DIMM 1's are Hynix, All other DIMM 0's are None.)
- SOCKET 1 CHANNEL 7 DIMM 1
 - None

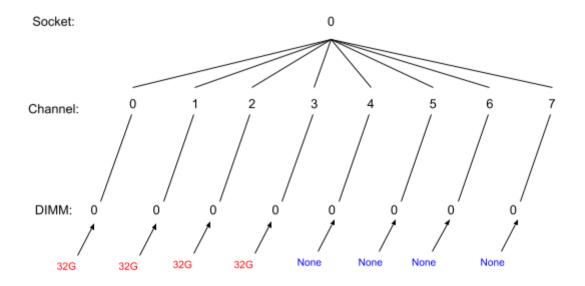
软件: Kernel 5.10-rc2

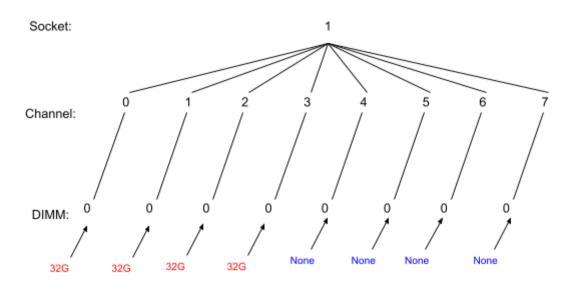
机器二: 8CCL/2P KP920:

硬件: Kunpeng 920: 128核, 分为 4 个 Die (NUMA node)。每个 Die有 8个 CCL。

- # dmidecode -s system-product-name XA320 V2
- BIOS 版本: dmidecode -t 0
 - BIOS Information
 - o Vendor: Huawei Corp.
 - Version: 0.86
 - o Release Date: 07/19/2019
 - Address: 0x5F000

Total 16 Memory devices. 256GB physical memory. Each NUMA node has 64GB physical memory. 每个NUMA节点都有 64GB 内存。





Socket 0

0

- channel 0 DIMM 0: 32GB, Hynix, 2666MHz, HMA84GR7AFR4N-VK
- channel 1 DIMM 0: 32GB, Samsung, 2666MHz, M393A4K40CB2-CTD
- channel 2 DIMM 0: 32GB, Samsung, 2666MHz, M393A4K40CB2-CTD
- channel 3 DIMM 0: 32GB, Hynix, 2666MHz, HMA84GR7AFR4N-VK
- channel 4 DIMM 0: empty
- channel 5 DIMM 0: empty
- channel 6 DIMM 0: empty
- channel 7 DIMM 0: empty

Socket 1

- channel 0 DIMM 0: 32GB, Hynix, 2666MHz, HMA84GR7AFR4N-VK
- channel 1 DIMM 0: 32GB, Hynix, 2666MHz, HMA84GR7AFR4N-VK

- channel 2 DIMM 0: 32GB, Samsung, 2666MHz, M393A4K40CB2-CTD
- channel 3 DIMM 0: 32GB, Hynix, 2666MHz, HMA84GR7AFR4N-VK
- channel 4 DIMM 0: empty
- channel 5 DIMM 0: empty
- channel 6 DIMM 0: empty
- channel 7 DIMM 0: empty

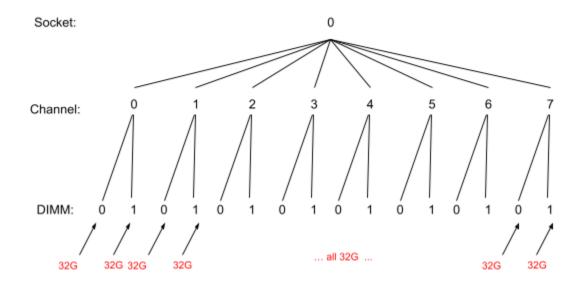
机器三: 8CCL/2P KP920(一聪04/30):

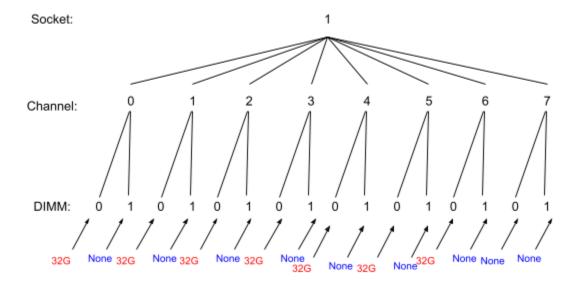
- Memory Layout and Configuration: (as reported by `dmidecode`)
 - 合计,32个 DIMM 插槽。如图。

○ 实测: NUMA 0: 256GB 内存

■ NUMA1: 256GB 内存■ NUMA2: 96GB 内存

■ NUMA3: 128GB 内存





机器四: 8CCL/2P KP920 (机器二+增加内存条 2021/5/6):

硬件: Kunpeng 920: 128核, 分为 4 个 Die (NUMA node)。每个 Die有 8个 CCL。

- # dmidecode -s system-product-name XA320 V2
- BIOS 版本: dmidecode -t 0

0

- **BIOS Information**
- Vendor: Huawei Corp.
- o Version: 0.86
- o Release Date: 07/19/2019
- o Address: 0x5F000

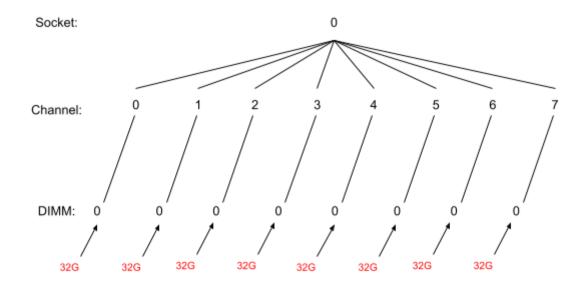
Memory Layout and Configuration: (as reported by `dmidecode -t 17`)

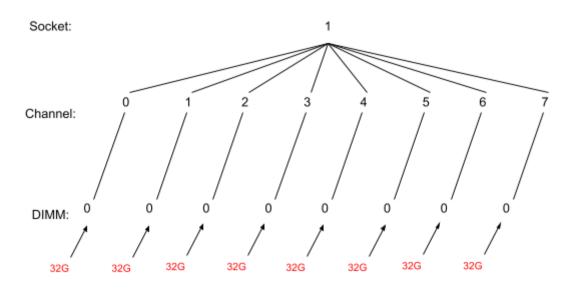
Socket 0

- channel 0 DIMM 0: 32GB, Hynix, 2666MHz, HMA84GR7AFR4N-VK
- channel 1 DIMM 0: 32GB, Samsung, 2666MHz, M393A4K40CB2-CTD
- channel 2 DIMM 0: 32GB, Samsung, 2666MHz, M393A4K40CB2-CTD
- channel 3 DIMM 0: 32GB, Hynix, 2666MHz, HMA84GR7AFR4N-VK
- channel 4 DIMM 0: 32GB, Hynix, 2666MHz, HMA84GR7AFR4N-VK
- channel 5 DIMM 0: 32GB, Samsung, 2666MHz, M393A4K40BB2-CTD
- channel 6 DIMM 0: 32GB, Samsung, 2666MHz, M393A4K40BB2-CTD
- channel 7 DIMM 0: 32GB, Samsung, 2666MHz, M393A4K40CB2-CTD

Socket 1

- channel 0 DIMM 0: 32GB, Hynix, 2666MHz, HMA84GR7AFR4N-VK
- channel 1 DIMM 0: 32GB, Hynix, 2666MHz, HMA84GR7AFR4N-VK
- channel 2 DIMM 0: 32GB, Samsung, 2666MHz, M393A4K40CB2-CTD
- channel 3 DIMM 0: 32GB, Hynix, 2666MHz, HMA84GR7AFR4N-VK
- channel 4 DIMM 0: 32GB, Samsung, 2666MHz, M393A4K40BB2-CTD
- channel 5 DIMM 0: 32GB, Samsung, 2666MHz, M393A4K40BB2-CTD
- channel 6 DIMM 0: 32GB, Samsung, 2666MHz, M393A4K40CB2-CTD
- channel 7 DIMM 0: 32GB, Hynix, 2666MHz, HMA84GR7AFR4N-VK





0