Memory an	Part Name	# of Parts	Capacity	Lithography	Carbon-per-size	E_soc	
Unit	N/A		GB	nm	g CO2 / GB	g CO2	
DRAM	Samsung 8GB DDR4 PC4-21300		8	10	65	520	ht
SSD	870 EVO SATA 2.5" SSD 4 TB		4000	N/A	10.7	42800	ht
HDD							

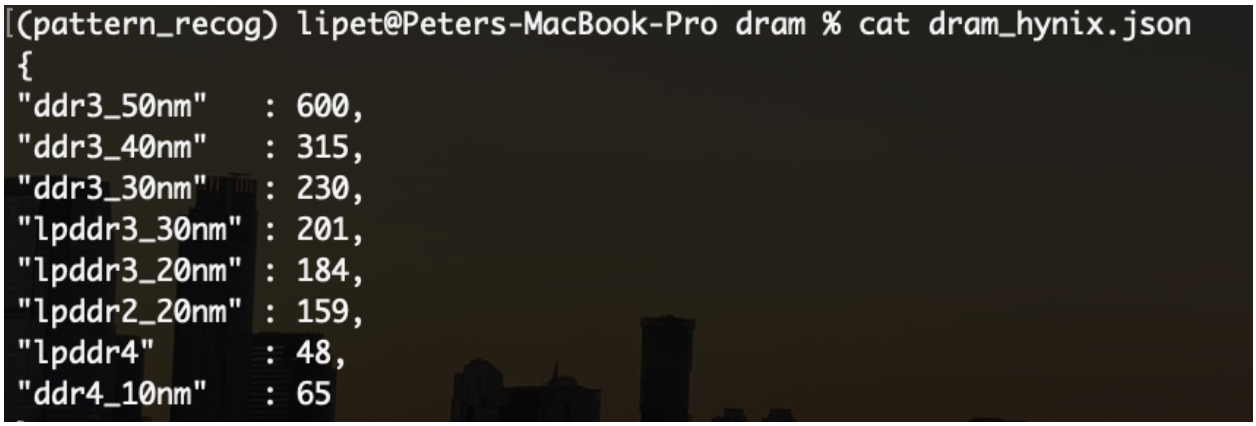
Updates:

- Found similar RAM (popular RAM) as substitute:

Samsung 8GB DDR4 PC4-21300:
https://www.amazon.com/Samsung-PC4-21300-2666MHZ-desktop-memory/dp/B07F72RJY

Found the approximate lithography here:
https://web.archive.org/web/20160706231128/http://ddr4.org/contact-us

Computed the CPS_dram using the dram_hynix.json



- Found a substitute for the SSD using 870 EVO SATA 2.5” SSD 4 TB since this is approximately the 3.8 TB and 4.4 TB found on the SuperCloud website:

https://www.westerndigital.com/products/internal-drives/wd-blue-sata-2-5-ssd?ef_id=Cj0KCQiA4OybBhCzARIsAIcfn9masMsJLktL8OgSPeaWW9fMF_CxrXgOa-NTl5dSaxyt1OiJoF7ZqRcaAirvEALw_wcB:G:s&s_kwcid=AL!15012!3!!!!x!!!17824513874!&utm_medium=pdsh2&utm_source=gads&utm_campaign=WD-NA-US-PLA&utm_content=&utm_term=WDS400T2B0A#WDS400T2B0A

Computed the CPS_ssd using ssd_western.json

```
(pattern_recog) lipet@Peters-MacBook-Pro ssd % cat ssd_western.json
{
  "western_digital_2016": 24.4,
  "western_digital_2017": 17.9,
  "western_digital_2018": 12.5,
  "western_digital_2019": 10.7
```

Additional information also found in the wd_ssd.pdf file found in “Peter Updates” folder

Questions:

1. Still having trouble finding the number of integrated circuits to calculate the N_r
    a. Tried looking at the Mechanical drawings, but having trouble decoding the