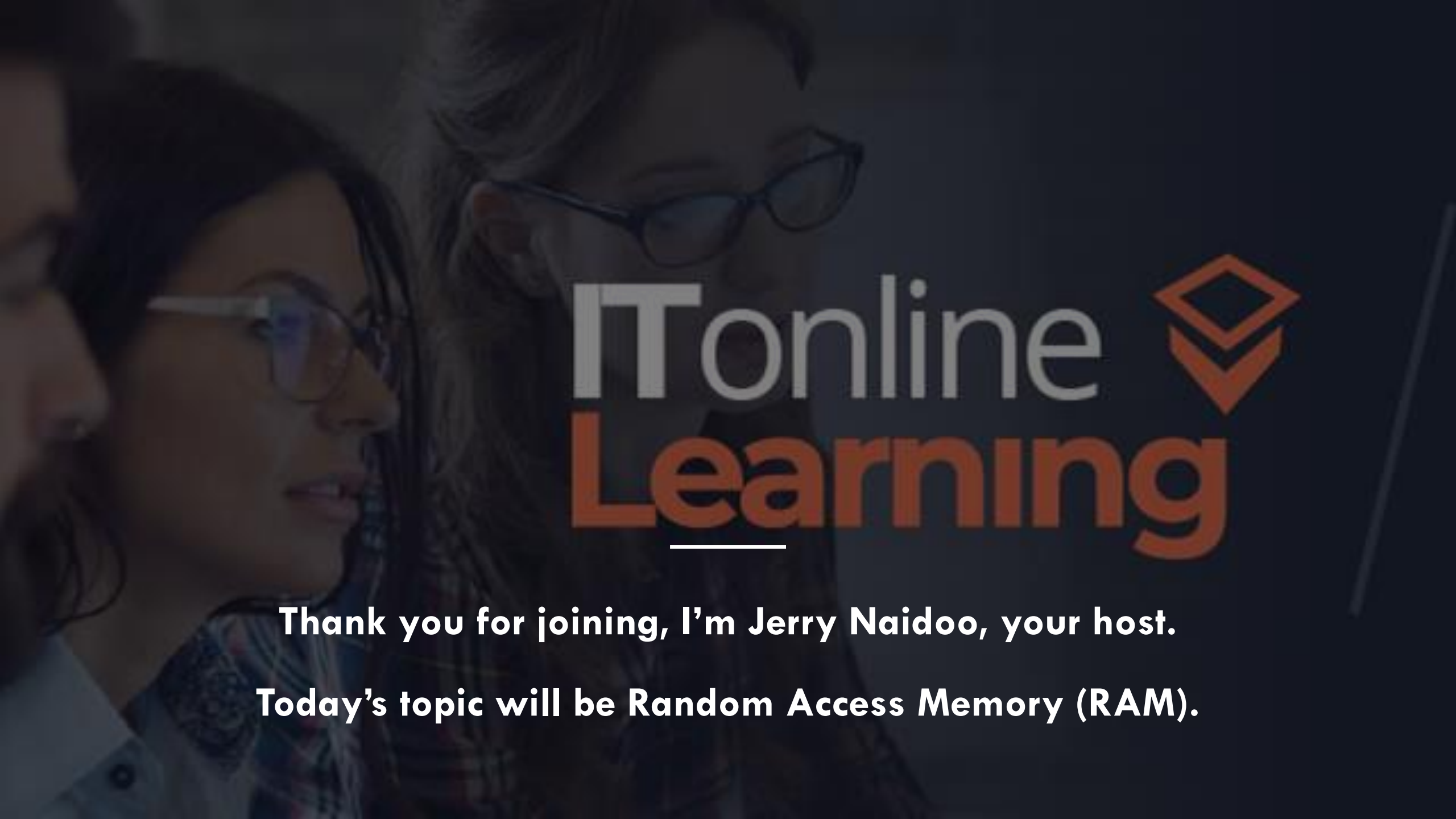


Thank you for joining, I'm Jerry Naidoo, your host.

Today's topic will be Random Access Memory (RAM).

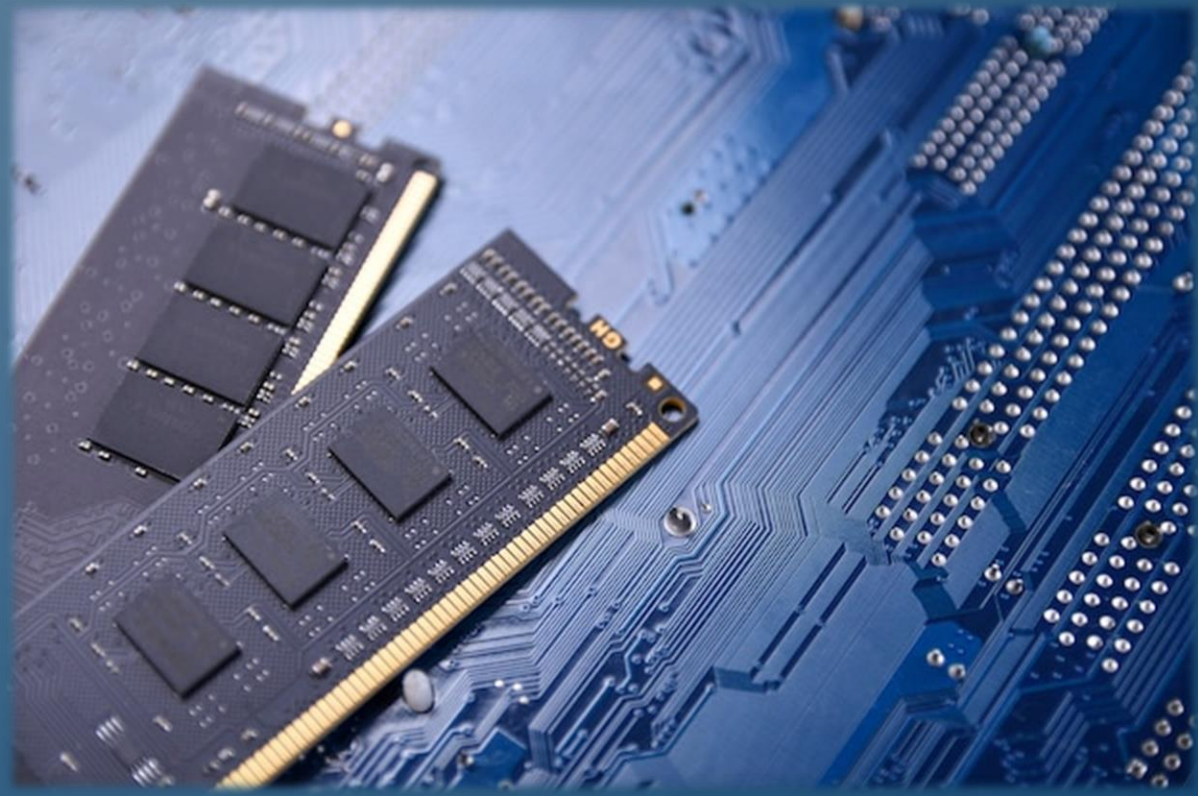
RANDOM ACCESS MEMORY (RAM)

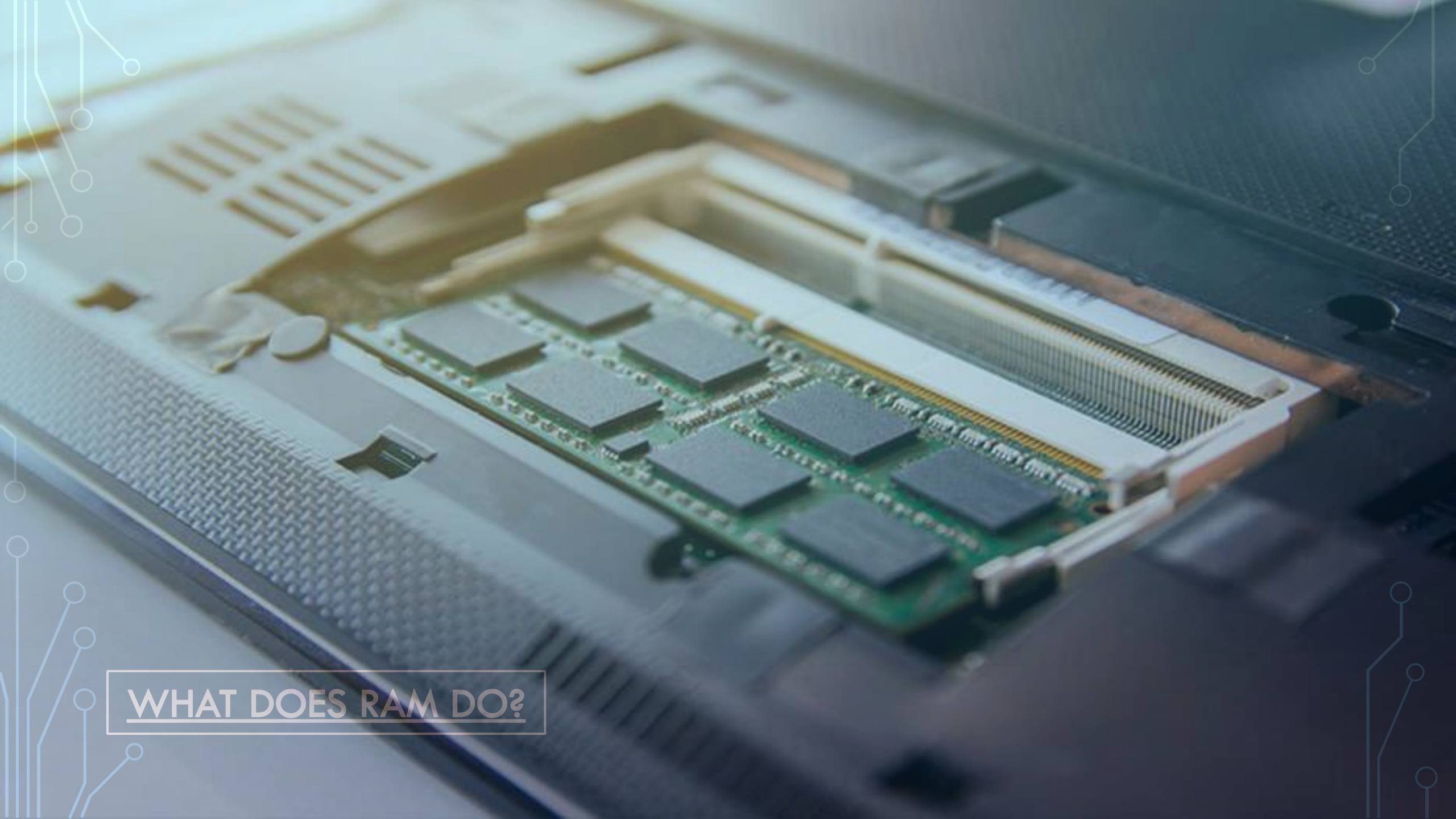
SESSION 1

WHY IS COMPUTER MEMORY (RAM) SO IMPORTANT?

Advantages of RAM (Random Access Memory):

- RAM is faster than secondary storage.
- RAM can capably read and write any type of data.
- RAM consumes less power compared to hard disk, CD, DVD, FLOPPY disk.
- No part of RAM moves when RAM executes an instruction.
- RAM memory increases your computer speed.
- Central Processing Unit (CPU) reads any data faster because of RAM.





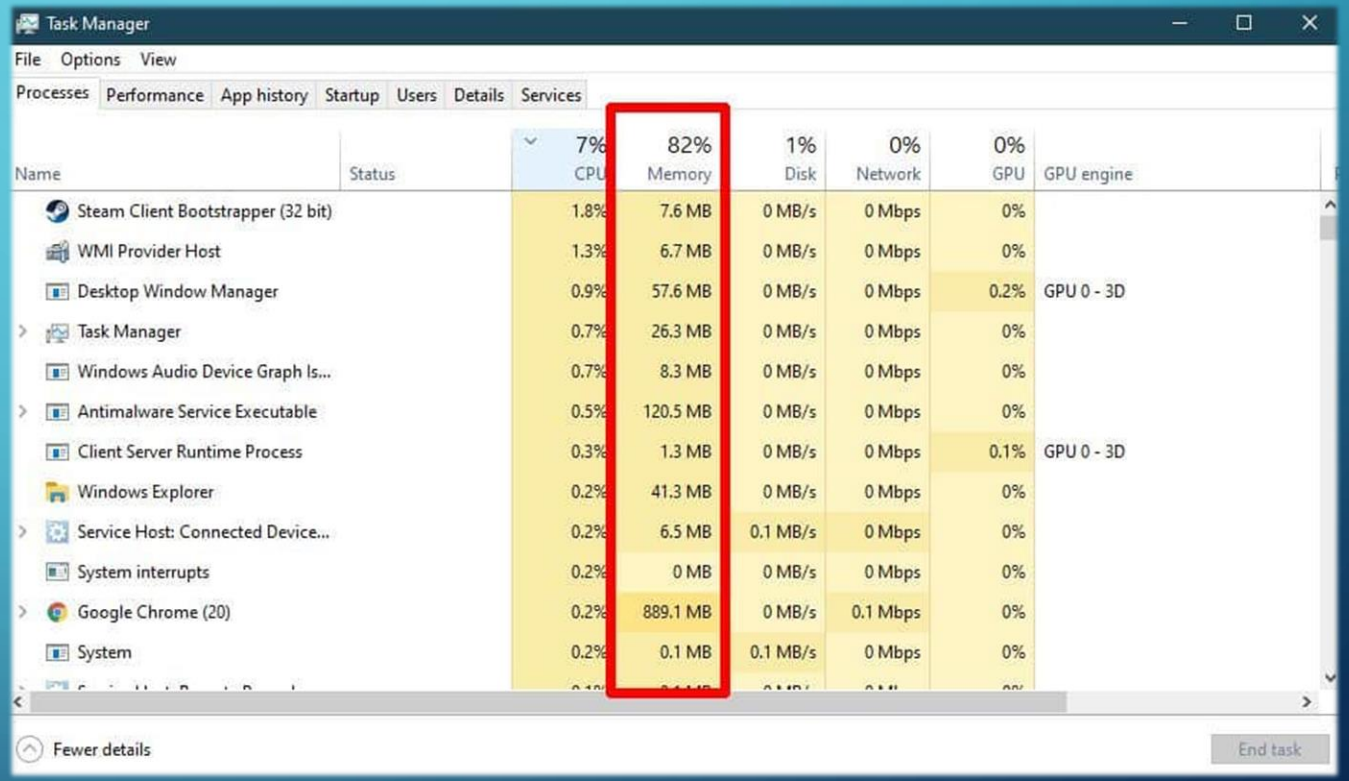
WHAT DOES RAM DO?

WHAT USES RAM IN OUR COMPUTER?

Note:

If you're frustrated by unresponsive programs, lagging load times, and a generally slow computer, lack of RAM is probably to blame.

The more things you do on your computer, the more GB of RAM you need. As time goes on you will likely need to increase your computer memory as newer programs demand more memory bandwidth.

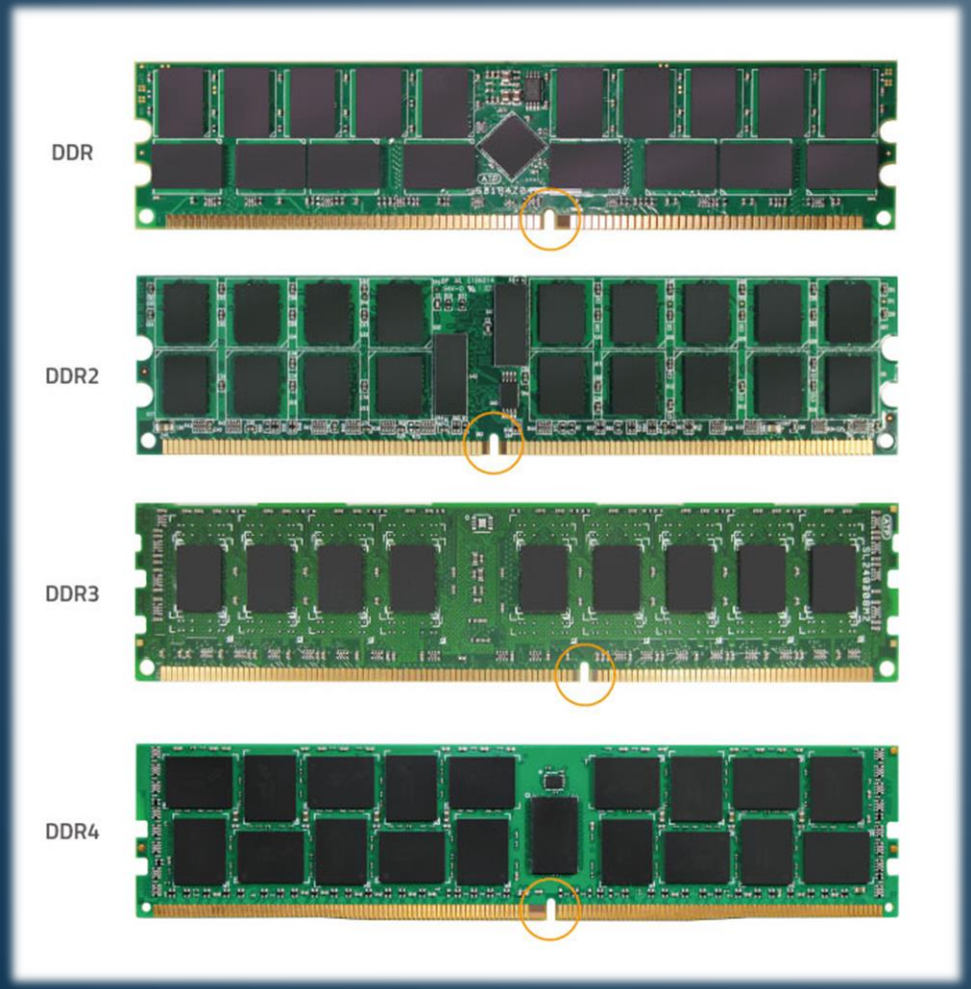


RAM FORM FACTORS

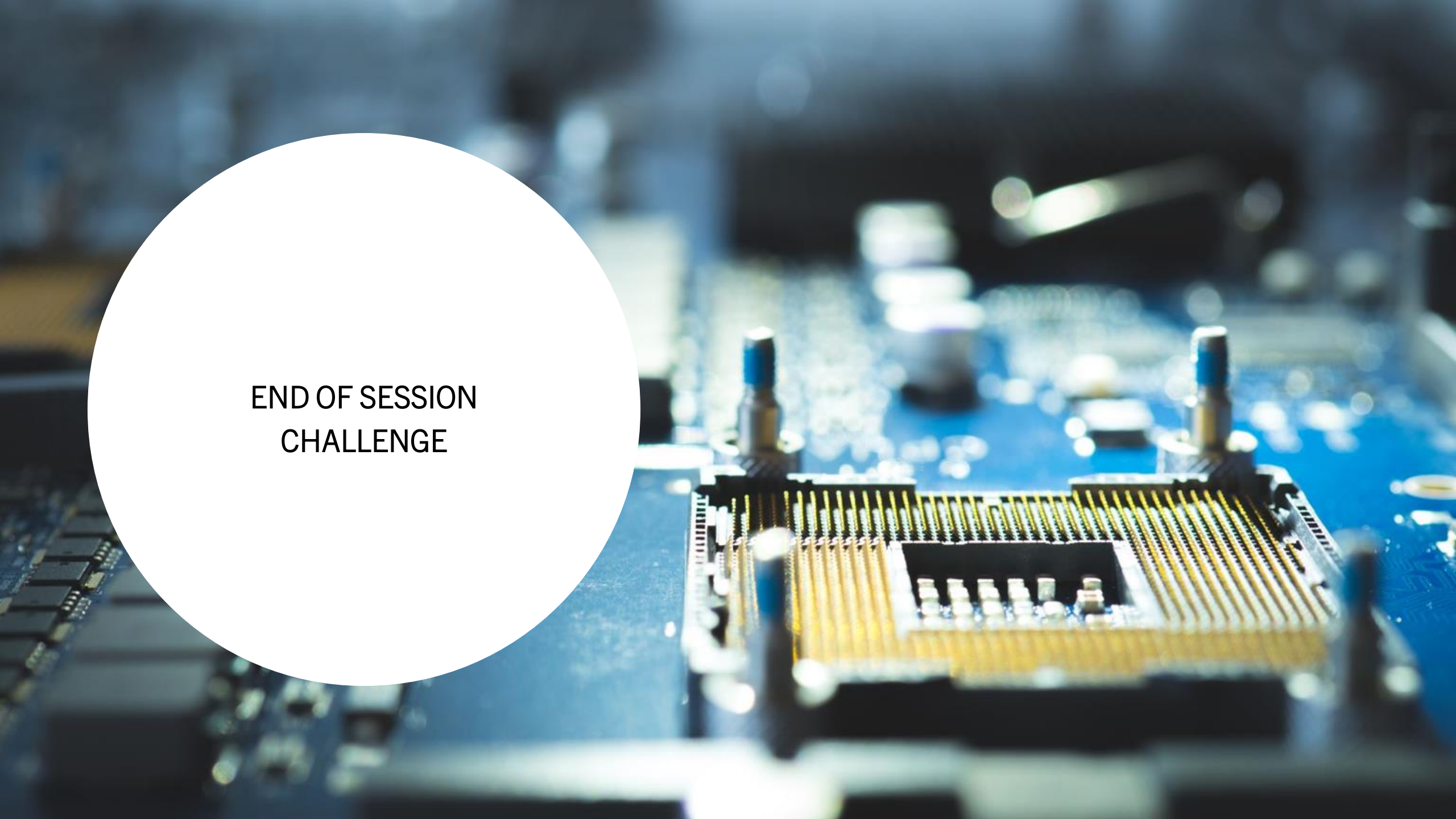
DIMM

SO-DIMM

DIFFERENT TYPES OF DDR RAM



DDR SDRAM Standard	Internal rate (MHz)	Bus clock (MHz)	Prefetch	Data rate (MT/s)	Transfer rate (GB/s)	Voltage (V)
SDRAM	100-166	100-166	1n	100-166	0.8-1.3	3.3
DDR	133-200	133-200	2n	266-400	2.1-3.2	2.5/2.6
DDR2	133-200	266-400	4n	533-800	4.2-6.4	1.8
DDR3	133-200	533-800	8n	1066-1600	8.5-14.9	1.35/1.5
DDR4	133-200	1066-1600	8n	2133-3200	17-21.3	1.2



END OF SESSION CHALLENGE

SESSION 1 QUIZ

1. Which of the following are terms used to identify memory modules?

1. PATA
2. DIMM
3. SATA
4. AGP

2. A customer needs to use several applications. Currently, the computer cannot keep all the necessary applications open at the same time. Which of the following components should you consider upgrading?

1. Hard disk drive
2. Memory
3. CPU
4. System board

3. You have just received an order of various system components from an order you placed several weeks ago. One of the components is labelled as SODIMM memory.

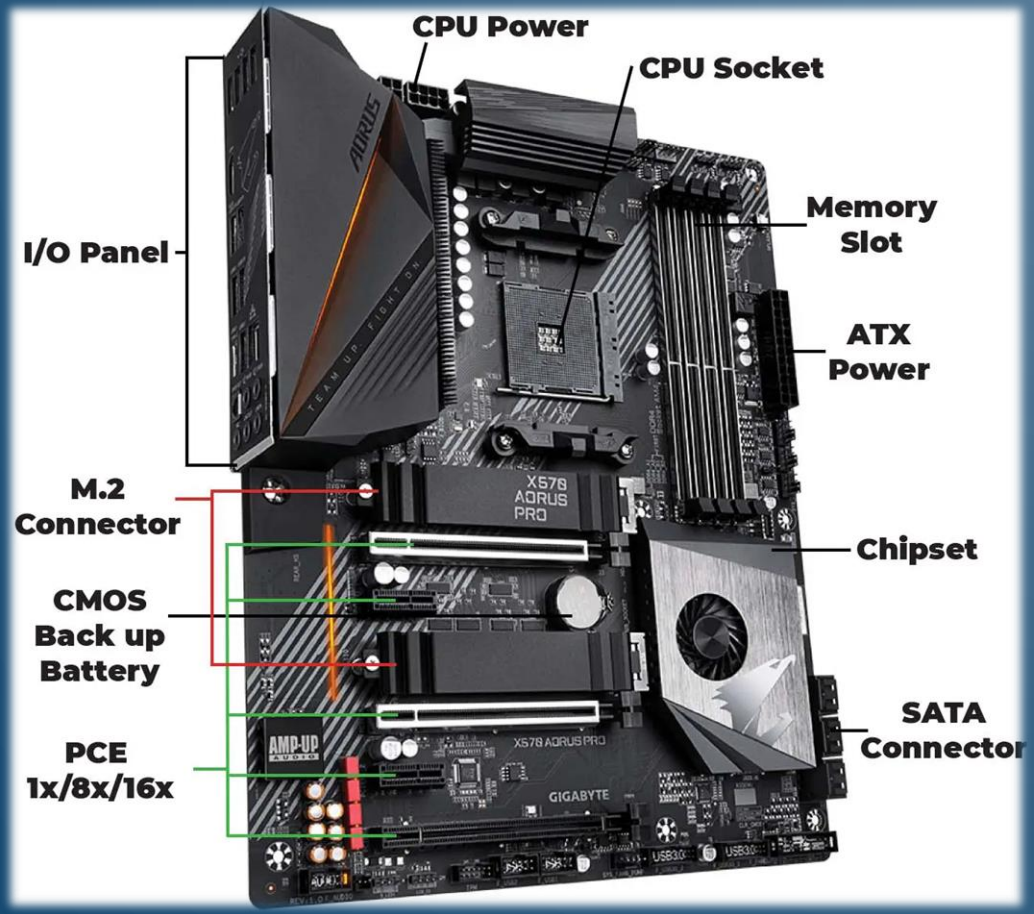
For which of the following was this memory MOST likely purchased?

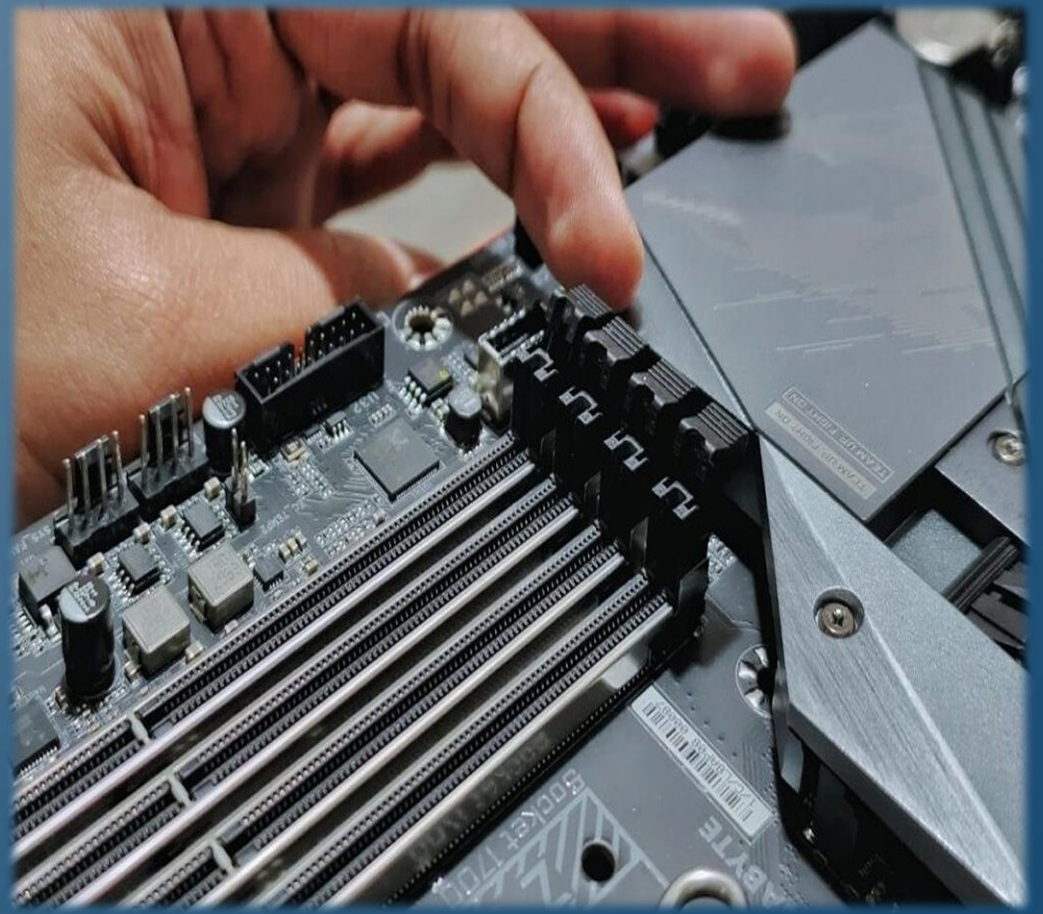
1. Printers
2. Laptop computers
3. Servers
4. Desktop workstations

RANDOM ACCESS MEMORY (RAM)

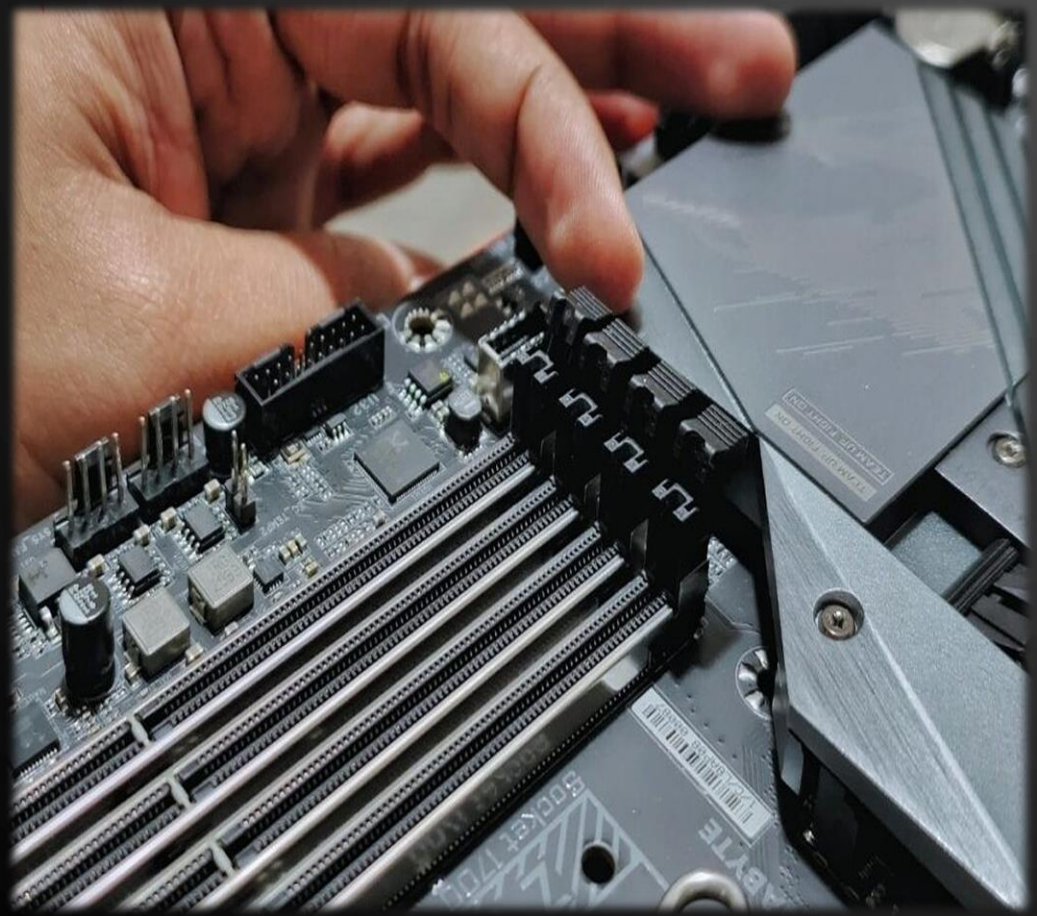
SESSION 2

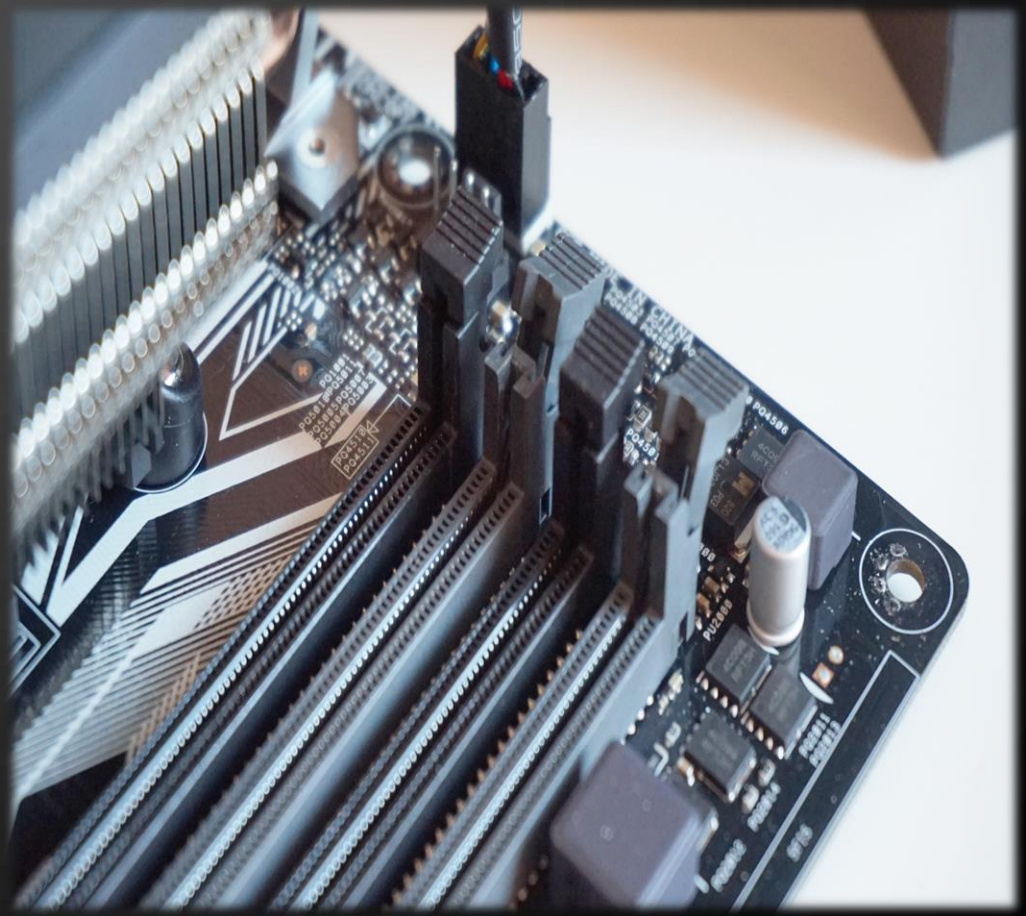
STEP 1: LOCATE THE CORRECT SLOT FOR INSTALLING THE RAM STICK



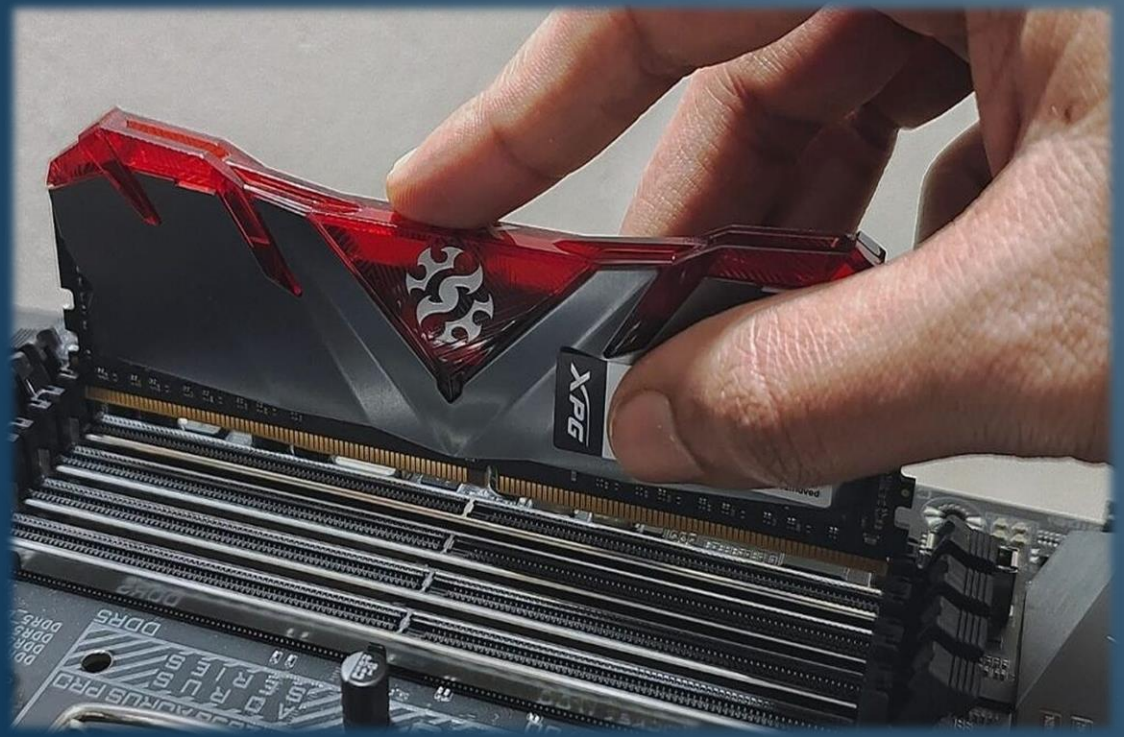


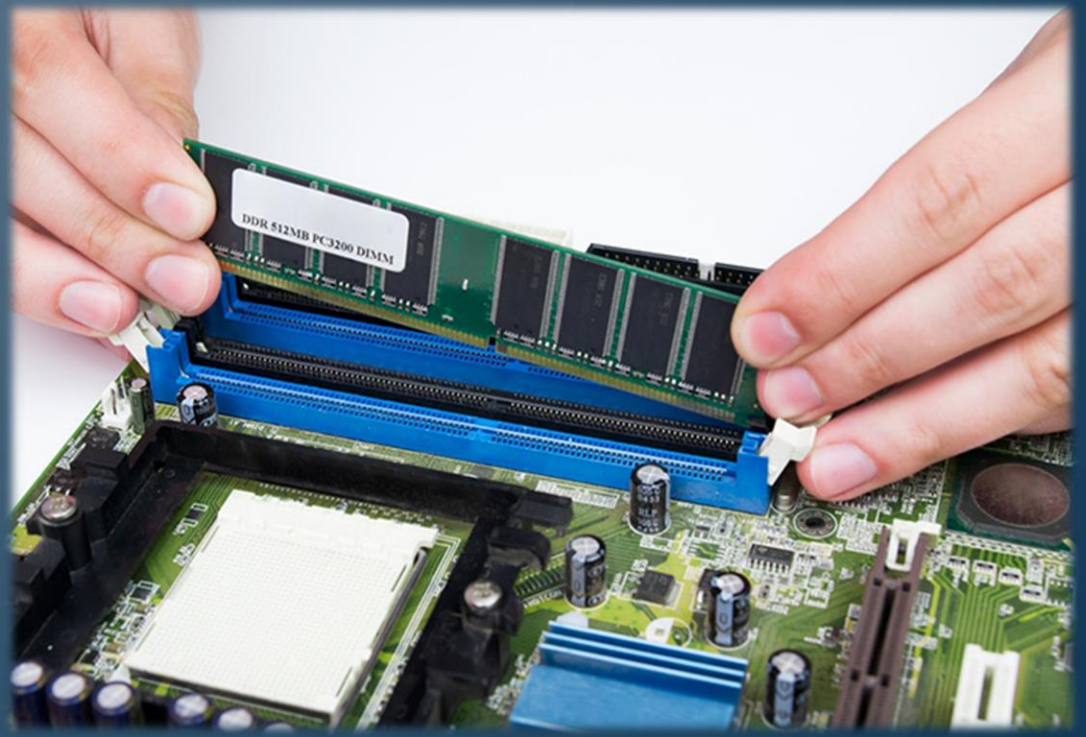
STEP 2: UNLOCK THE SLOT/S ON MOTHERBOARD



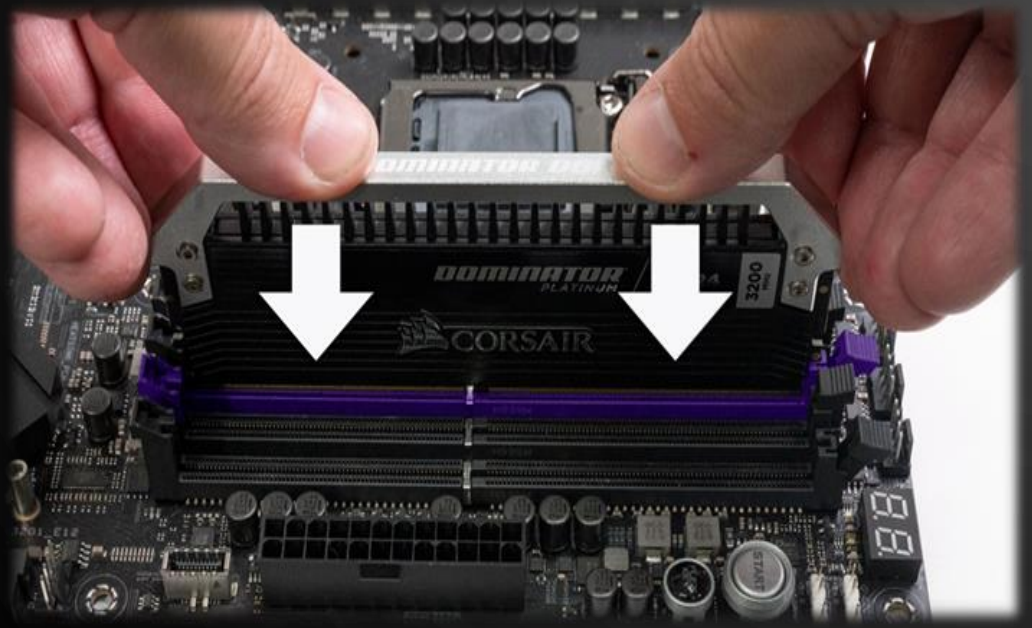


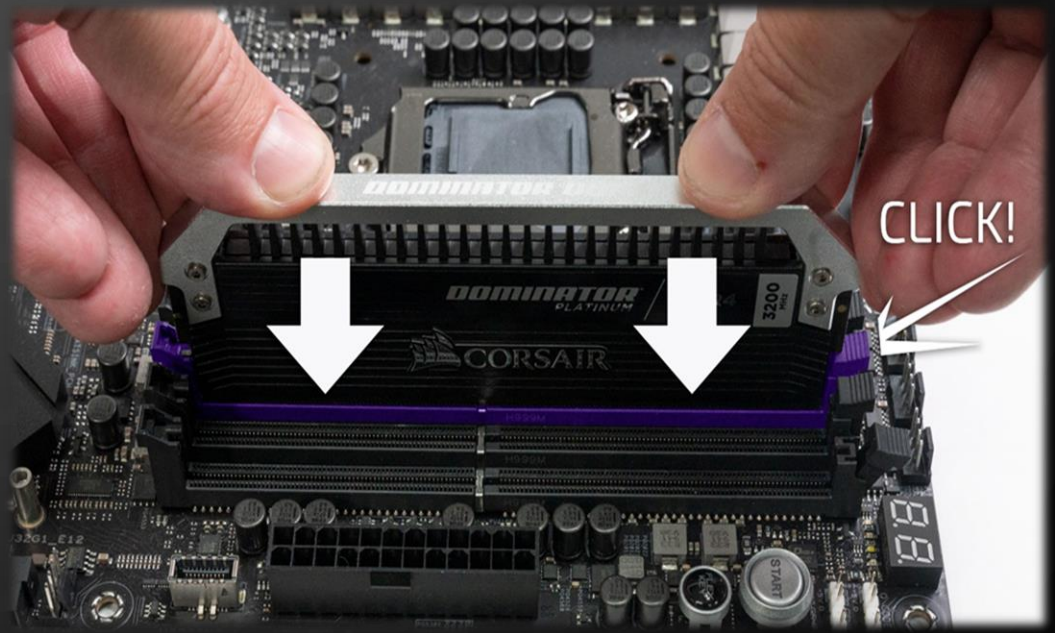
STEP 3: INSERT THE RAM MODULE/S



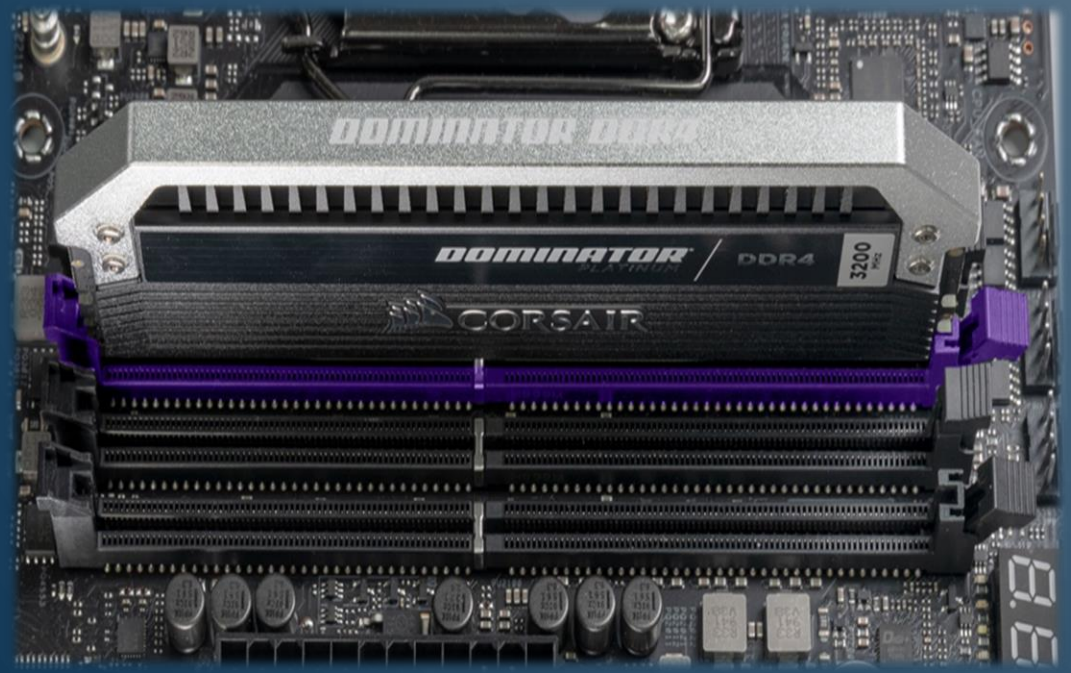


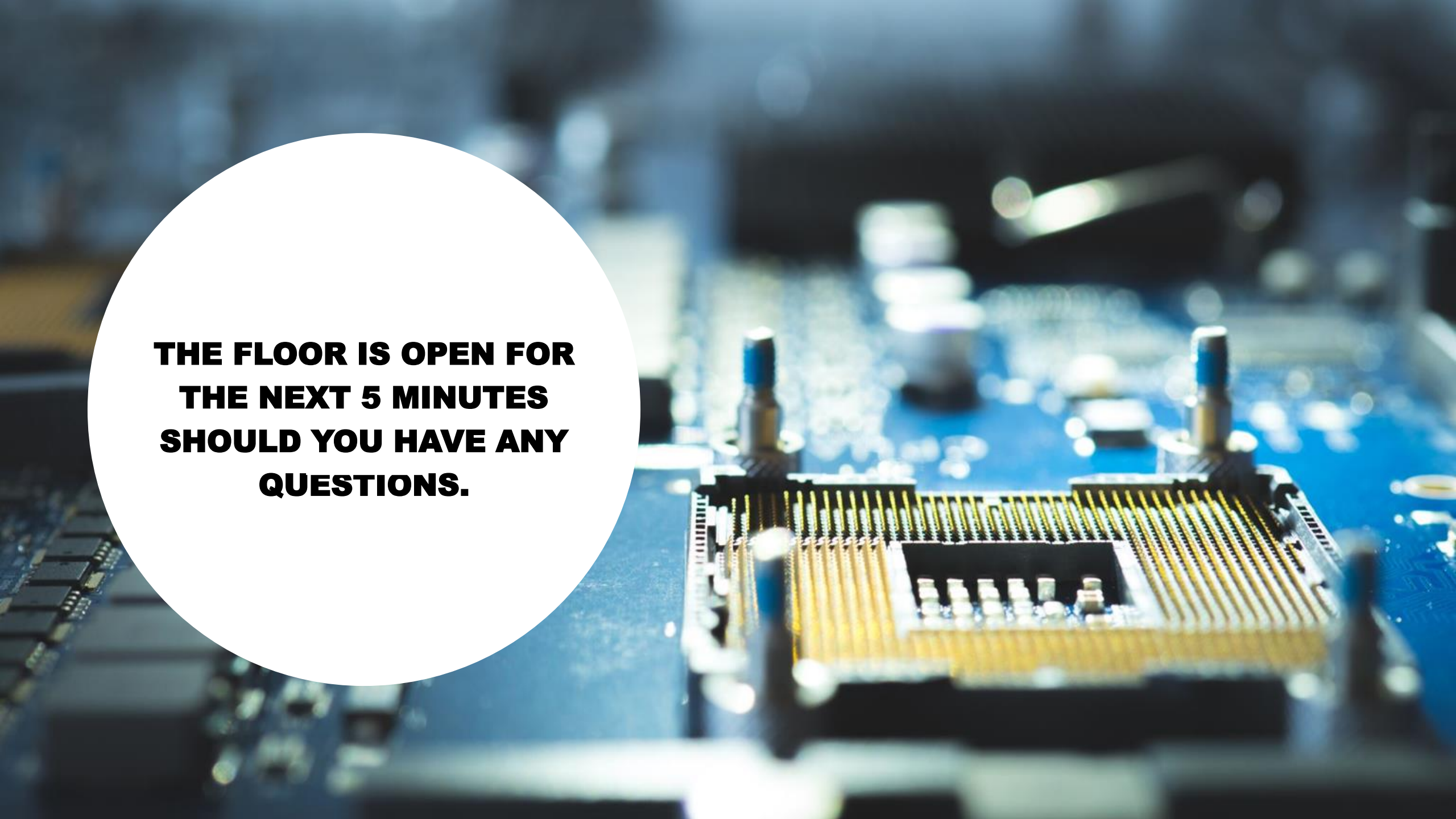
STEP 3 CONTINUED





STEP 4: CONFIRM THE SLOT/S IS LOCKED





THE FLOOR IS OPEN FOR THE NEXT 5 MINUTES SHOULD YOU HAVE ANY QUESTIONS.

Please feel free to reach out to me if you have any further questions.

jerry@itonlinelearning.com