

Making Memory Chips Quiz

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Making Memory Chips - Quiz ideas

1) In what order – from left to right – are memory chips made? Choose the best answer.

- A) Technology Development – Fabrication – Design – Assembly – Probe – Final Test
- B) Technology Development – Design – Fabrication – Assembly – Final Test - Probe
- C) Design – Technology Development – Fabrication - Assembly – Probe – Final Test
- D) Design – Technology Development – Fabrication – Probe – Assembly – Final Test

2) What is a “Fab” in the memory semiconductor world?

- A) A cleanroom where wafers are processed in different tools through more than a 1000 steps
- B) The room where the wafers are probed to check for functionality
- C) The room where the assembled die go through the final test which includes cycling them through high temperatures
- D) The room where the final product is packaged and is ready to ship to customers

3) How small are the smallest components of a memory chip compared to the width of a human hair?

- A) Much larger than the width of a human hair
- B) About the same width of a human hair
- C) 10 times smaller than the width of a human hair
- D) About 5,000 times smaller than the width of a human hair

4) How long does it take to make a state-of-the-art memory chip in a Micron Fab? Choose the best answer.

- A) About 30 minutes
- B) About 10 days
- C) More than 30 days
- D) Close to 1 year

Making Memory Chips - Quiz ideas

5) What is the purpose of the AMHS (Automated Material Handling System) in a Micron memory semiconductor fab?

- A) Automate the photolithography process
- B) Automate moving wafers in the fab from tool to tool
- C) Automate testing of every die in a wafer
- D) Automate shipment of wafers to our customer

6) What is the purpose of the Probe step?

- A) Dice the wafer into individual die using a diamond saw
- B) Laser mark each chip with a part number
- C) Test the initial functionality of every die on the wafer
- D) Place components into boxes for shipping to customer

7) Which of these steps is NOT part of the Assembly step?

- A) Thin wafers
- B) Attach thinned wafers to an adhesive backing
- C) Dice wafers into individual die using a diamond saw
- D) Place components into boxes for shipping to customer

8) Which of the following is NOT true about Final Test at Micron?

- A) Final Test is done on full wafers, before they are diced into individual die
- B) Final Test is done in all assembled chip
- C) Final Test is done to ensure non-working chip are not shipped to customers
- D) Final Test involves exposing assembled chip to high temperatures



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