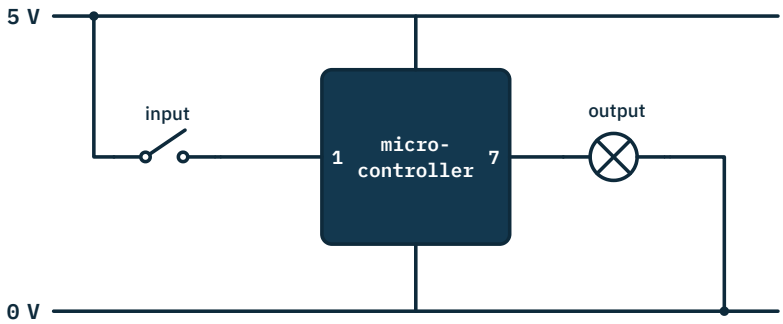
E7 on one page

MICROCONTROLLER

WHAT	computer on one chip
INSIDE	processor · memory · I/O pins
RUNS	a stored program

ADVANTAGES

1	reprogrammable
2	fewer components
3	smaller, cheaper in volume
4	complex control



Switch: 5 V → input pin. Output device: output pin → 0 V.

USES

DOMESTIC	washing machine, microwave
COMMERCIAL	vending machine, ticket barrier
INDUSTRIAL	conveyor, wind turbine
TRANSPORT	traffic lights, level crossing

SHORT CIRCUIT · EXAMINER TIPS

- Name a specific advantage and link it to the product.
- Use the pin numbers in the question.
- Inputs from 5 V; outputs to 0 V.