

# Материнская плата

Лекцию подготовил  
преподаватель  
Тукубаев А.С.

Конспект лекции <http://fro.kz/vtsh/>

# GIGABYTE™



Insist on **Ultra Durable**

Designed for Overclocking  
AMD A-Series APUs and for use  
in Water Cooled Systems

Best Of  
COMPUTEX  
2012  
Tom's hardware



Industry Leading 60A Rated Power Stage with  
Lower Losses, Higher Efficiency and Excellent  
Thermal Management



Ultra Durable™ Motherboard (Socket FM2)

# F2A85X-UP4



DIGITAL POWER



Patent Pending

3D BIOS

Dual UEFI BIOS™

2X  
Copper PCB

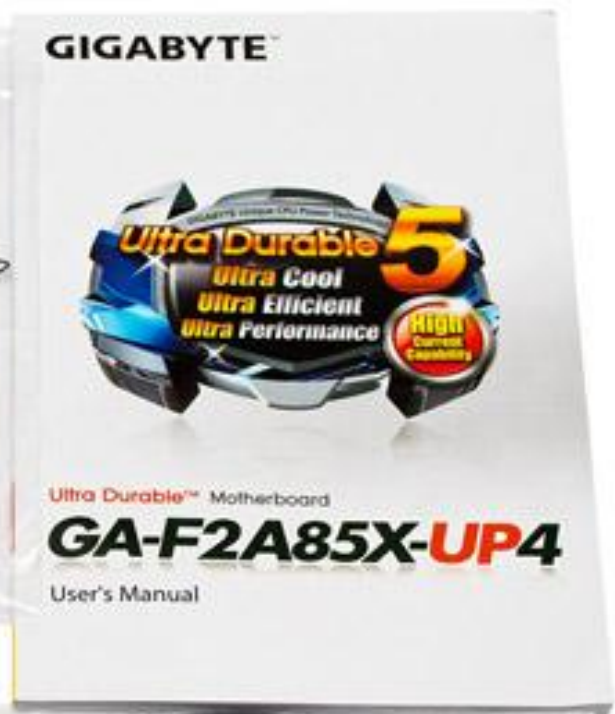


Humidity Protection

New Glass  
Fabric PCB

OVERCLOCKERS.UA

001



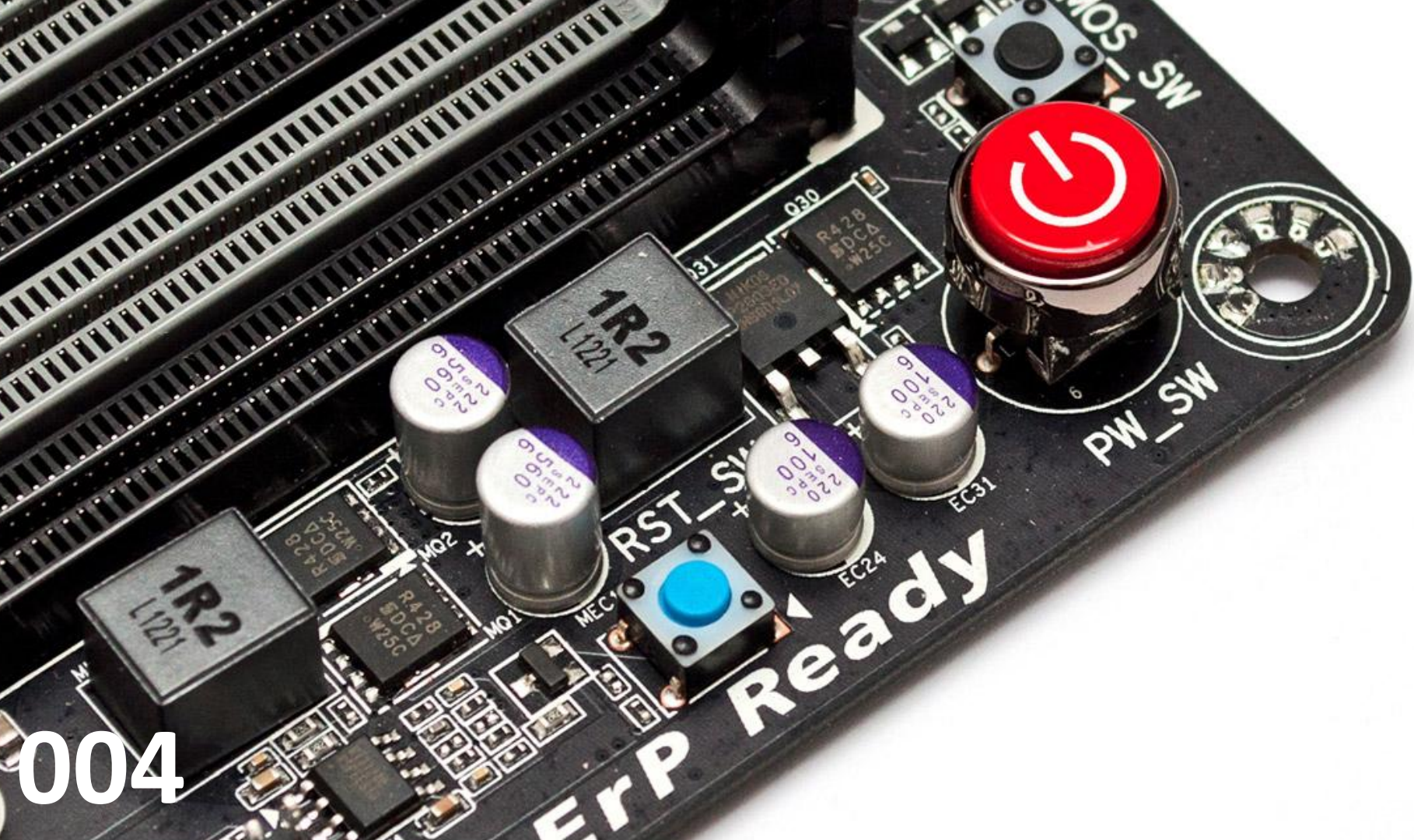
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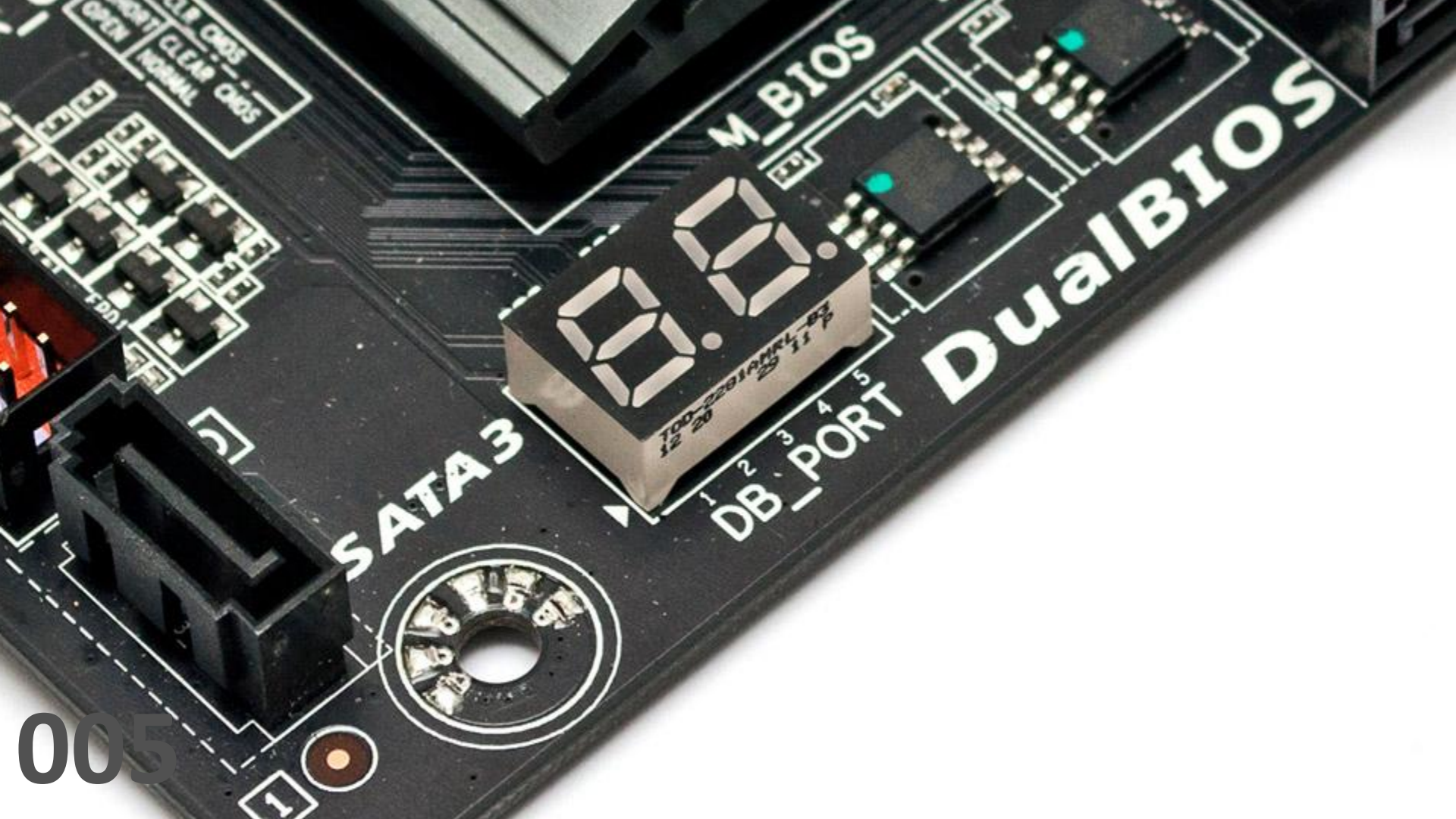
003



004







M\_BIOS

DualBIOS

SATA3

DB\_PORT  
1 2 3 4 5

100-2291AHL-82  
12 20 25 11 P

005

CLEAR CMOS  
NORMAL  
OPEN



GIGABYTE

CLR\_CMOS

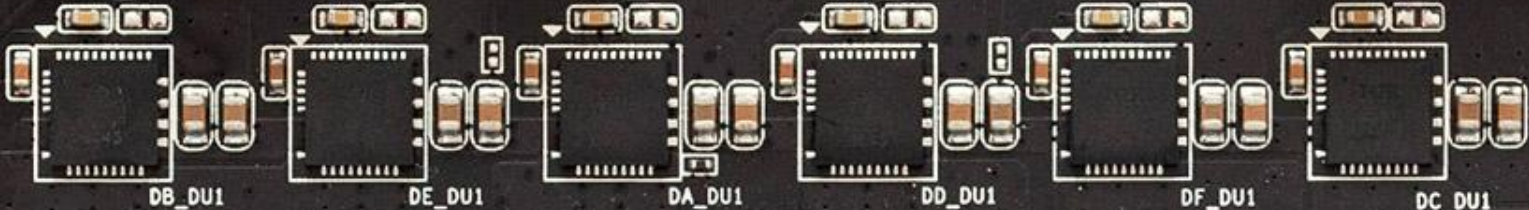
SHORT	CLR_CMOS
OPEN	CLEAR_CMOS
	NORMAL
	CMOS

M\_BIOS B\_BIOS SATA

006



FAN



DB\_DU1

DE\_DU1

DA\_DU1

DD\_DU1

DF\_DU1

DC\_DU1



EC16



DB\_DL1



DEC5



DE\_DL1



DEC11



DA\_DL1



DEC10



DD\_DL1



DEC12



DF\_DL1



DC\_DL1



DEC6



DEC9



DG\_DL1



NBEC1



N



DH\_DL1

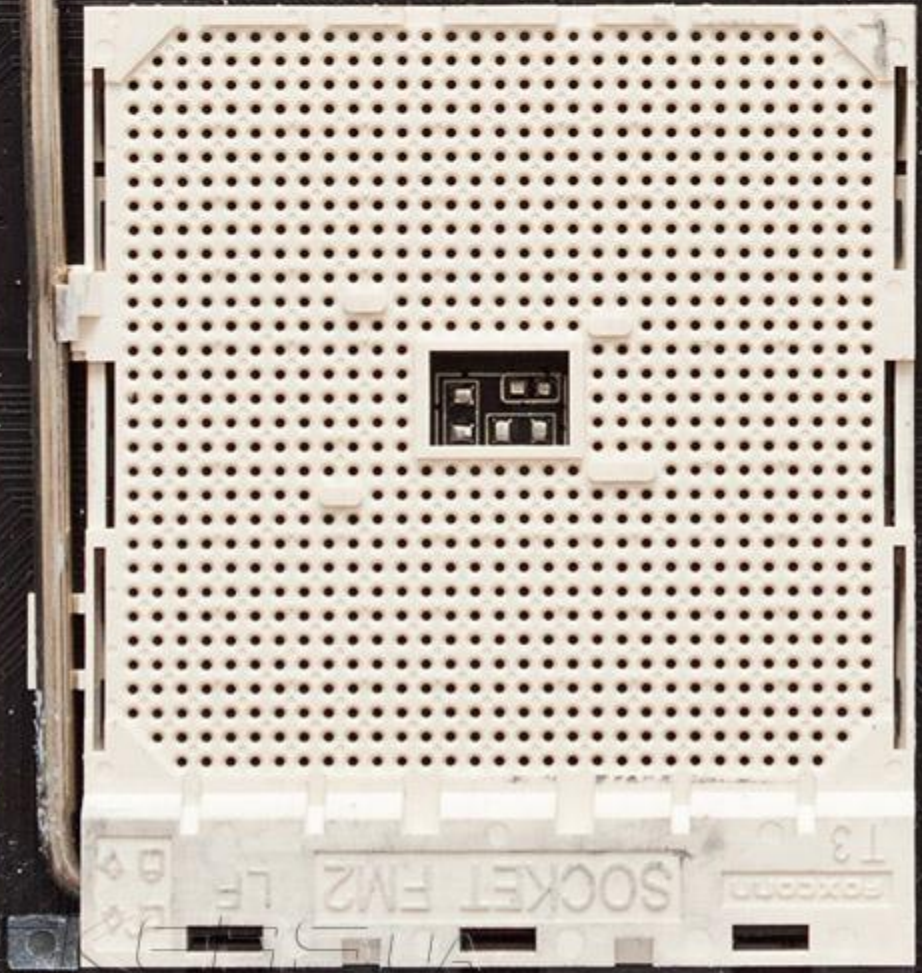


007



800

AMCO



SOCKET FM2 LF

SOXCON T3

AMCO

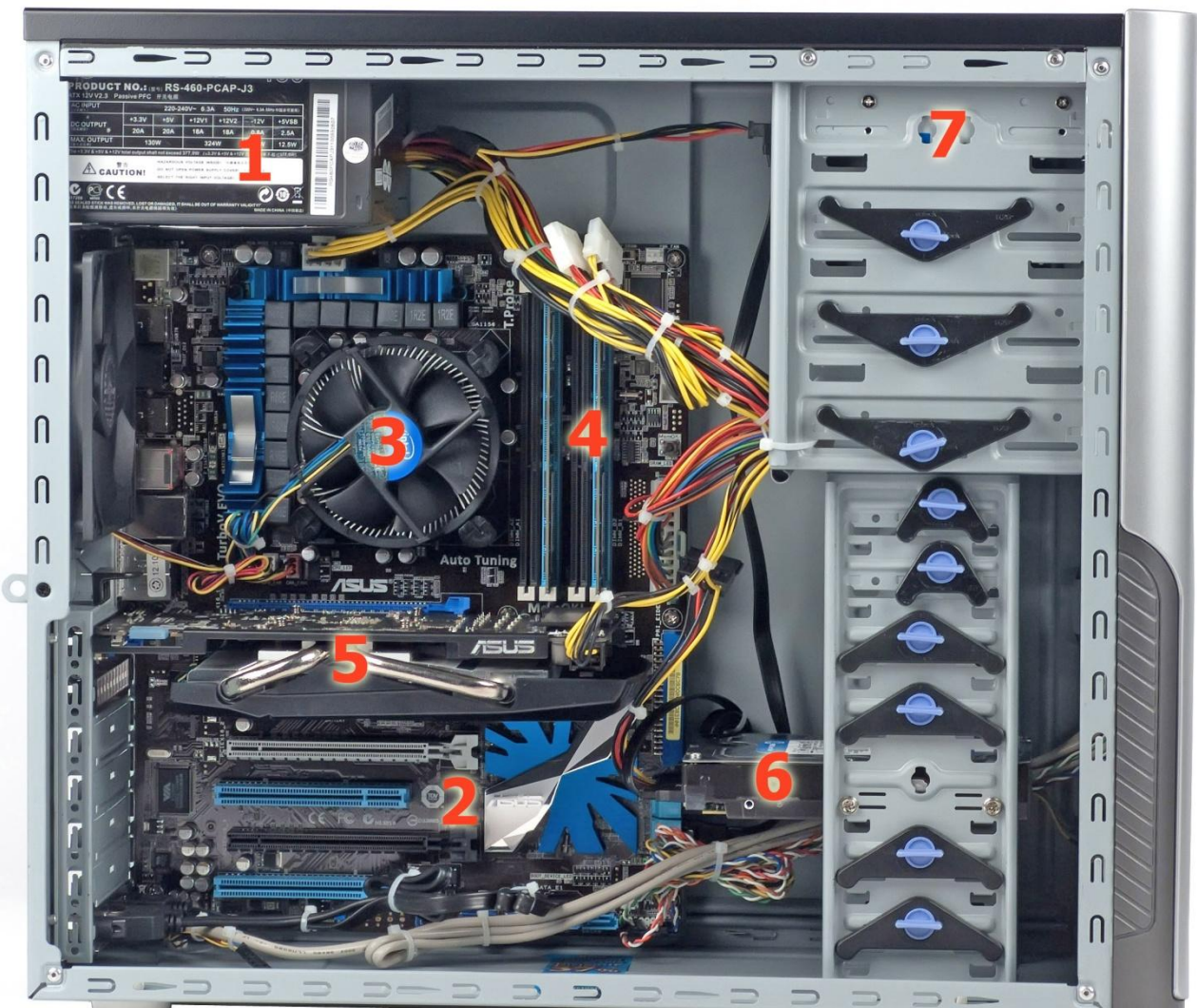




009



010





PRODUCT NO.: (型号) RS-460-PCAP-J3

ATX 12V V2.3 Passive PFC 开关电源

AC INPUT (规格)	220-240V~ 6.3A 50Hz (220V~6.3A 50Hz 中国专用规格)					
DC OUTPUT (规格)	+3.3V	+5V	+12V1	+12V2	-12V	+5VSB
	20A	20A	18A	18A	0.8A	2.5A
MAX. OUTPUT (最大输出)	130W		324W		12.5W	

\*The +3.3V & +5V & +12V total output shall not exceed 377.5W. (+3.3V & +5V & +12V)

**CAUTION!** 警告! HAZARDOUS VOLTAGE. (警告: 危险电压) DO NOT OPEN POWER SUPPLY COVER. (请勿打开电源供应器盖) SELECT THE RIGHT INPUT VOLTAGE. (请选择正确的输入电压)

17260 17260 CE 100% RECYCLED MATERIALS 100% 再生材料 100% 再生材料 MADE IN CHINA (中国大陆)

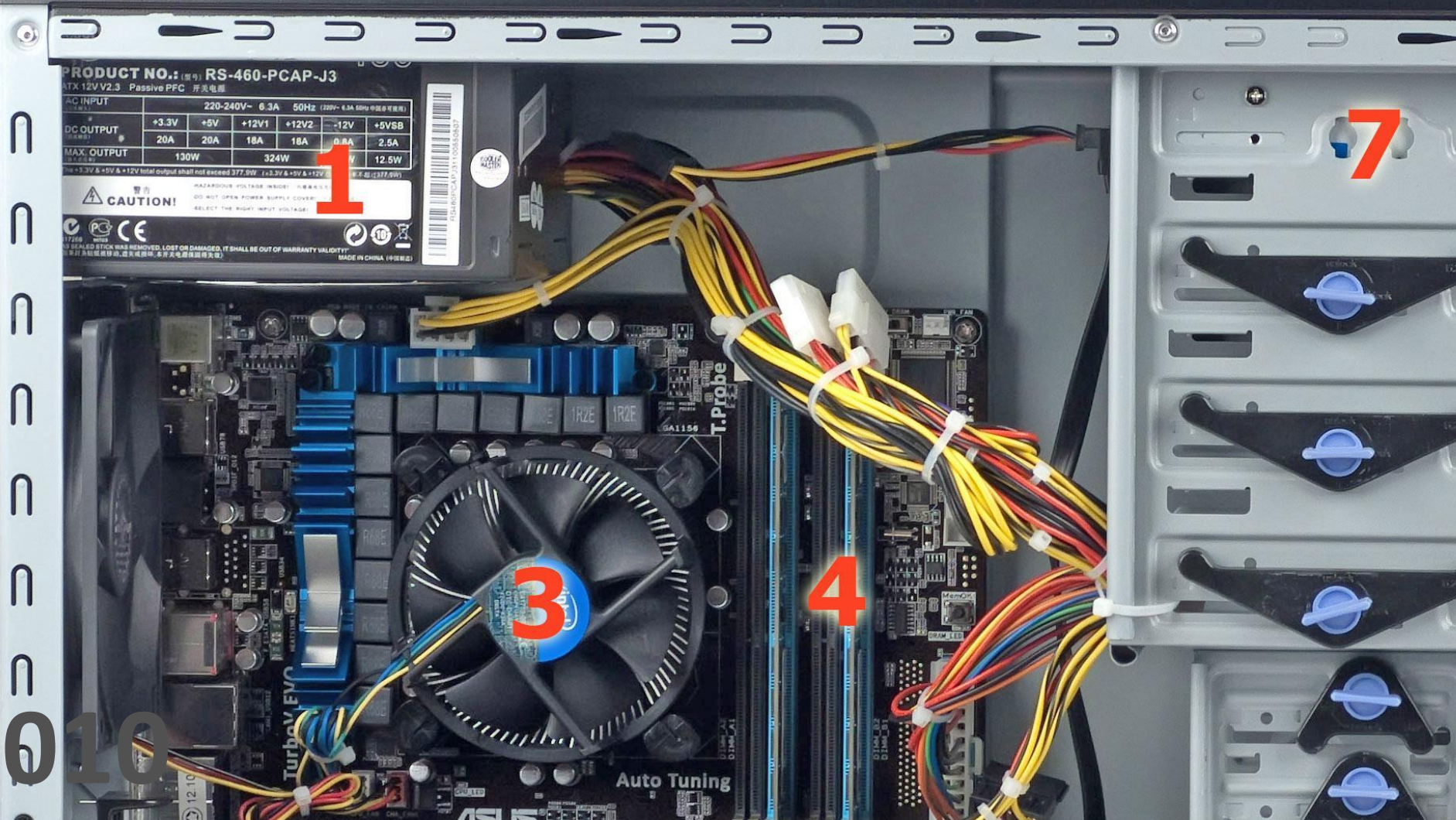
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7

4

3

10





PRODUCT NO.: (型号) RS-460-PCAP-J3

ATX 12V V2.3 Passive PFC 开关电源

DC OUTPUT (DC输出)	+3.3V	+5V	+12V1	+12V2	-12V	+5VSB
MAX. OUTPUT (最大输出)	20A	20A	18A	18A	0.8A	2.5A

MAX. OUTPUT (最大输出)  
130W      324W      12.5W

\*The +3.3V & +5V & +12V total output shall not exceed 377.0W. (+3.3V & +5V & +12V)

CAUTION! 警告! HAZARDOUS VOLTAGE. (警告: 有电危险) DO NOT OPEN POWER SUPPLY COVER. (请勿打开电源供应器盖) SELECT THE RIGHT INPUT VOLTAGE. (请选择正确的输入电压)

17260 100% CE  
IF SEALED STICK WAS REMOVED, LOST OR DAMAGED, IT SHALL BE OUT OF WARRANTY VALIDITY!  
MADE IN CHINA (中国制造)

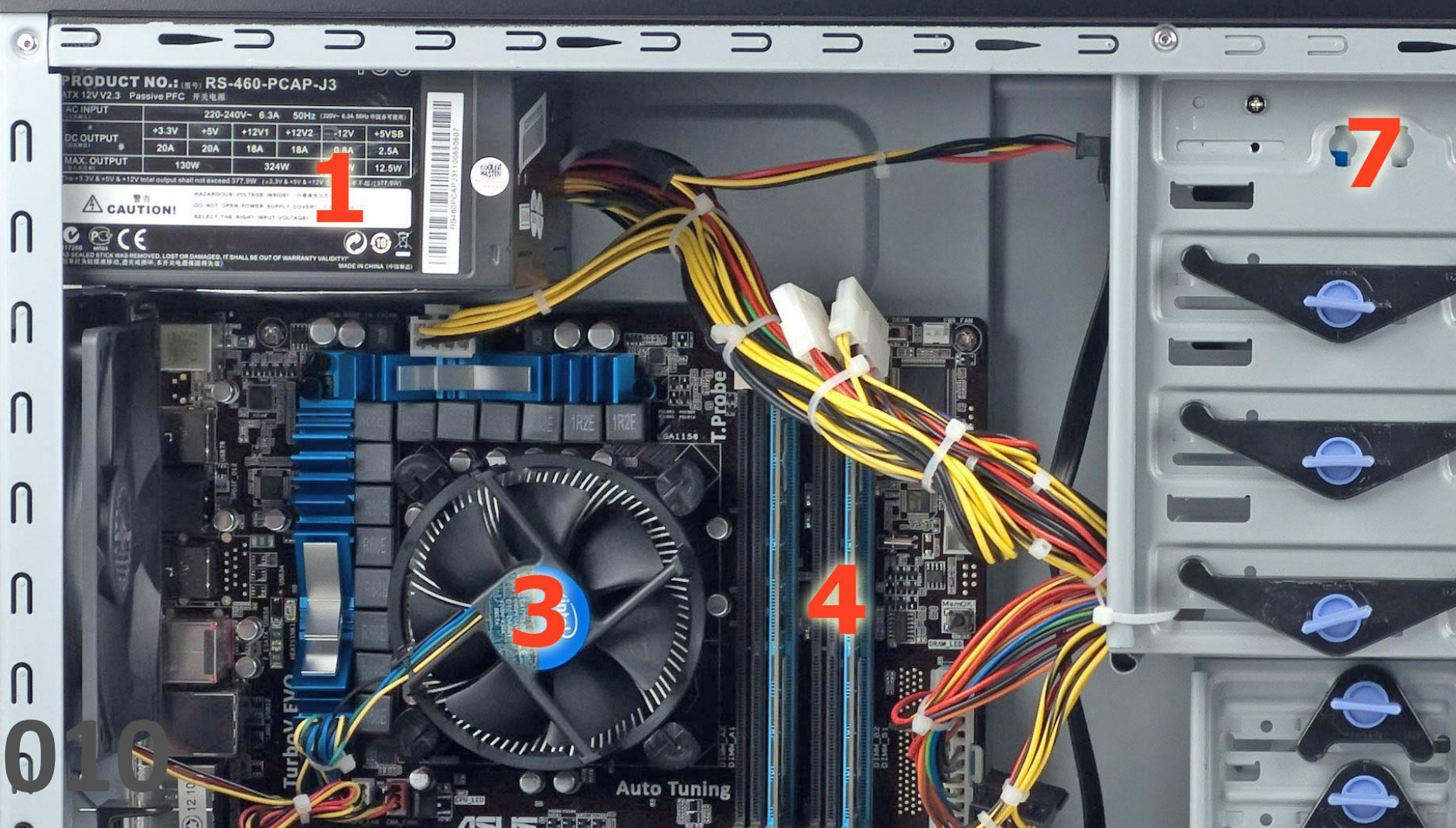
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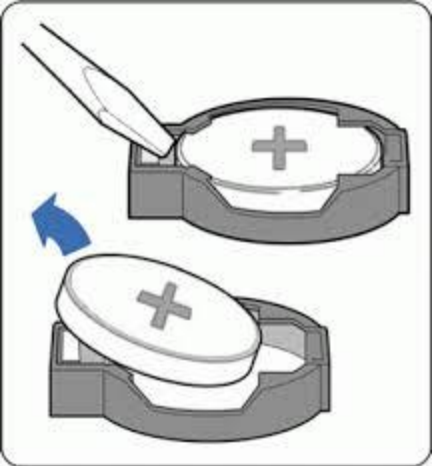
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011

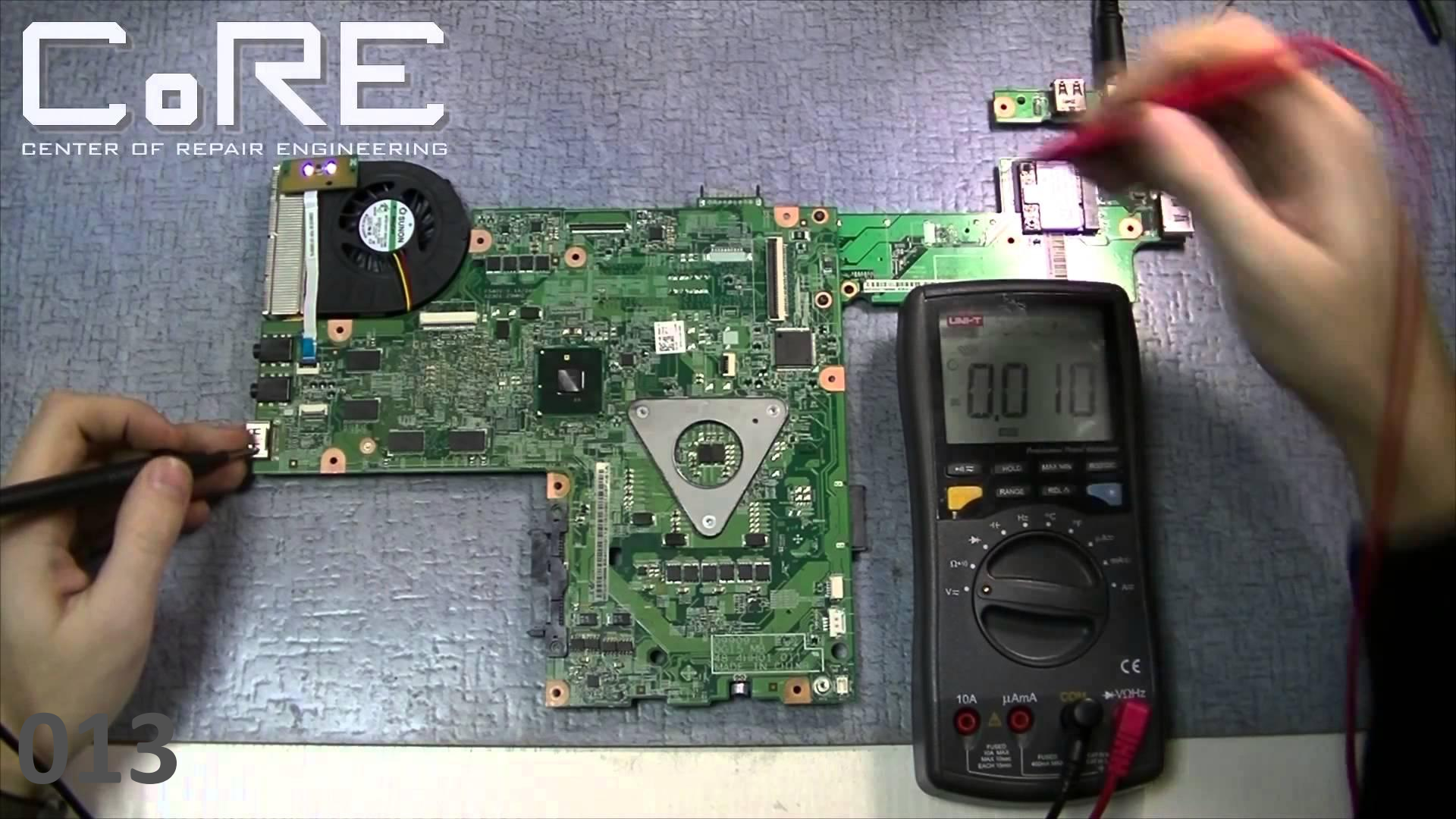




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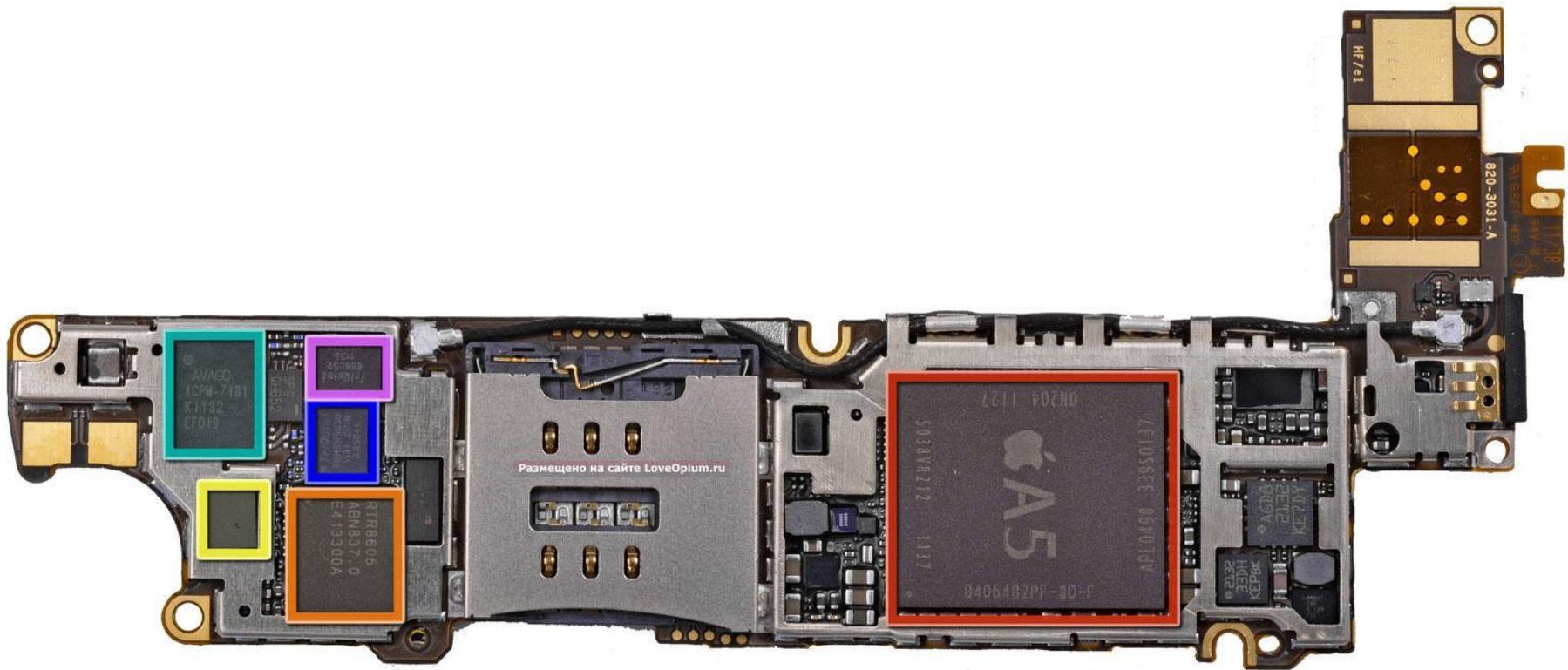
# C.o.R.E

CENTER OF REPAIR ENGINEERING



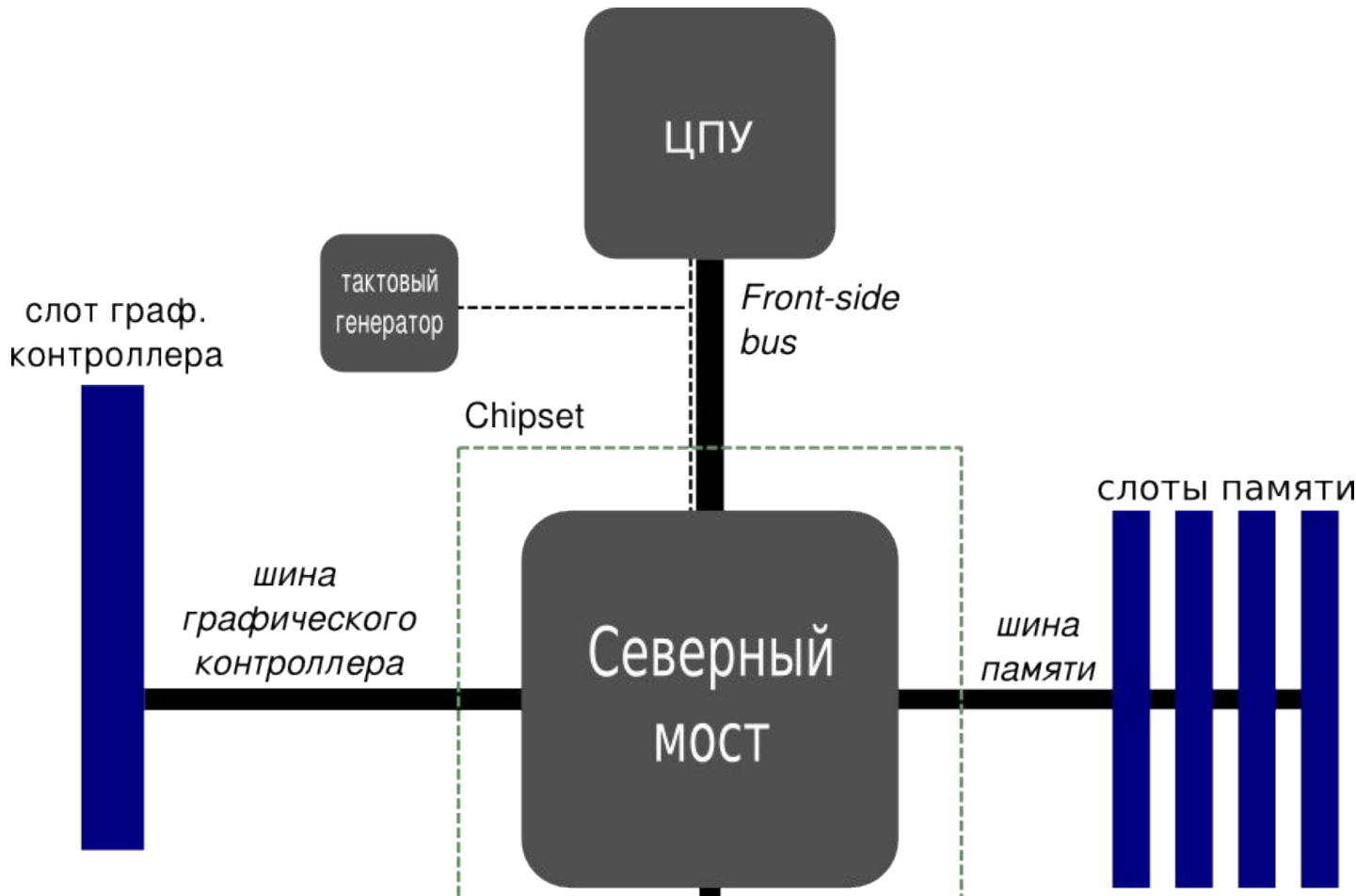
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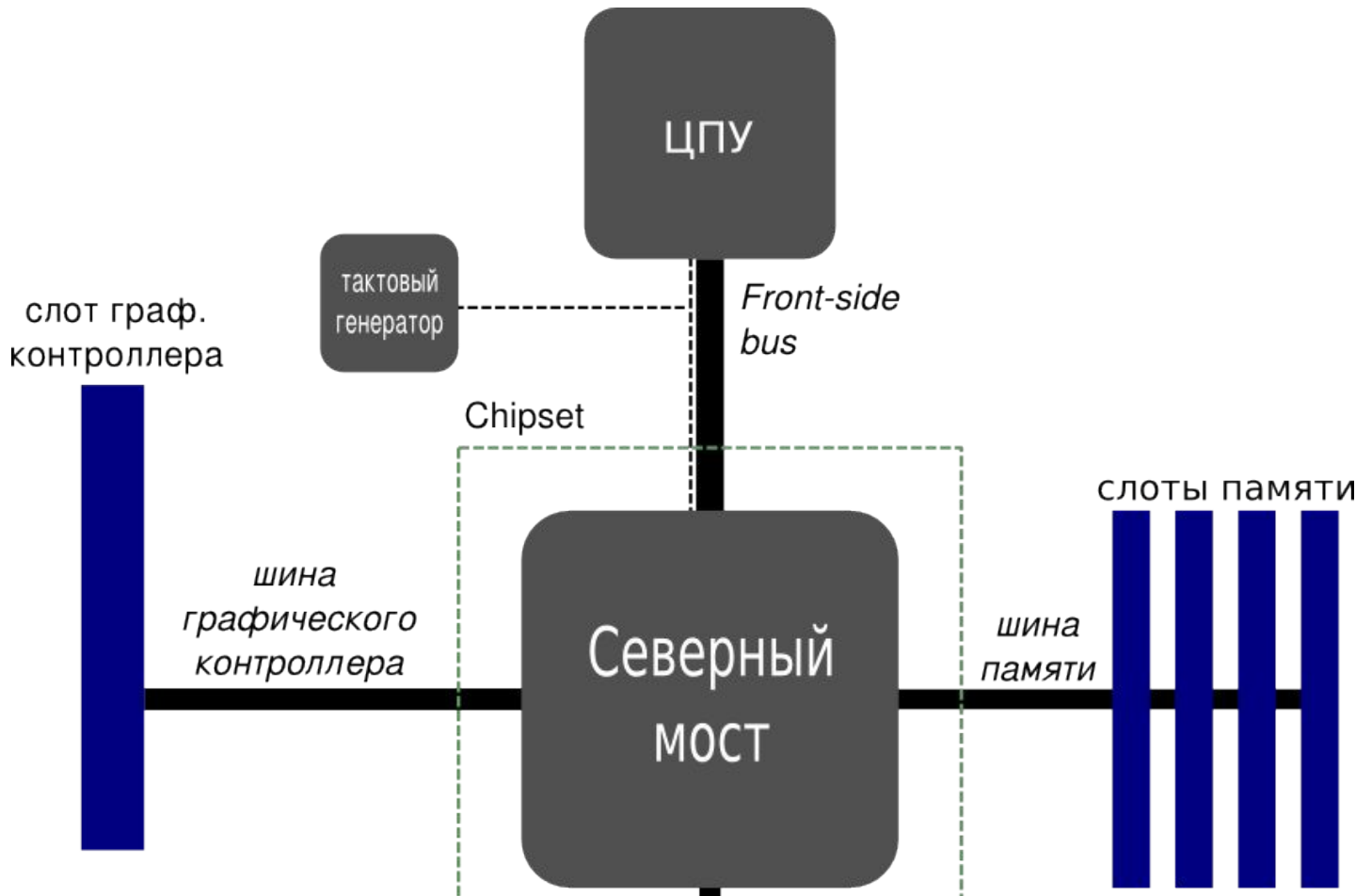
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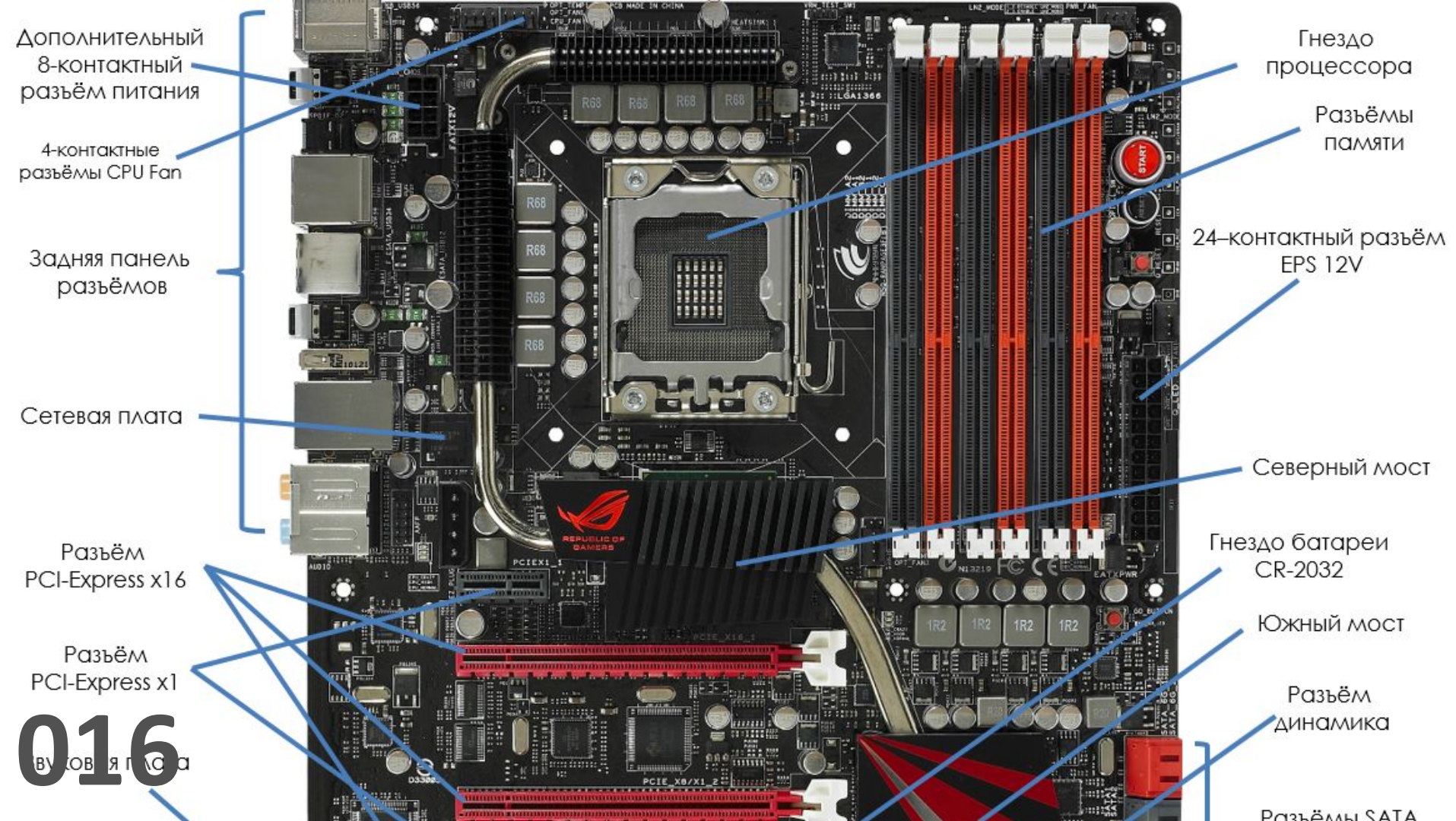
015





015





Дополнительный  
8-контактный  
разъем питания

4-контактные  
разъемы CPU Fan

Задняя панель  
разъемов

Сетевая плата

Разъем  
PCI-Express x16

Разъем  
PCI-Express x1

**016**  
ВУЛОВ Я ПУС

Гнездо  
процессора

Разъемы  
памяти

24-контактный разъем  
EPS 12V

Северный мост

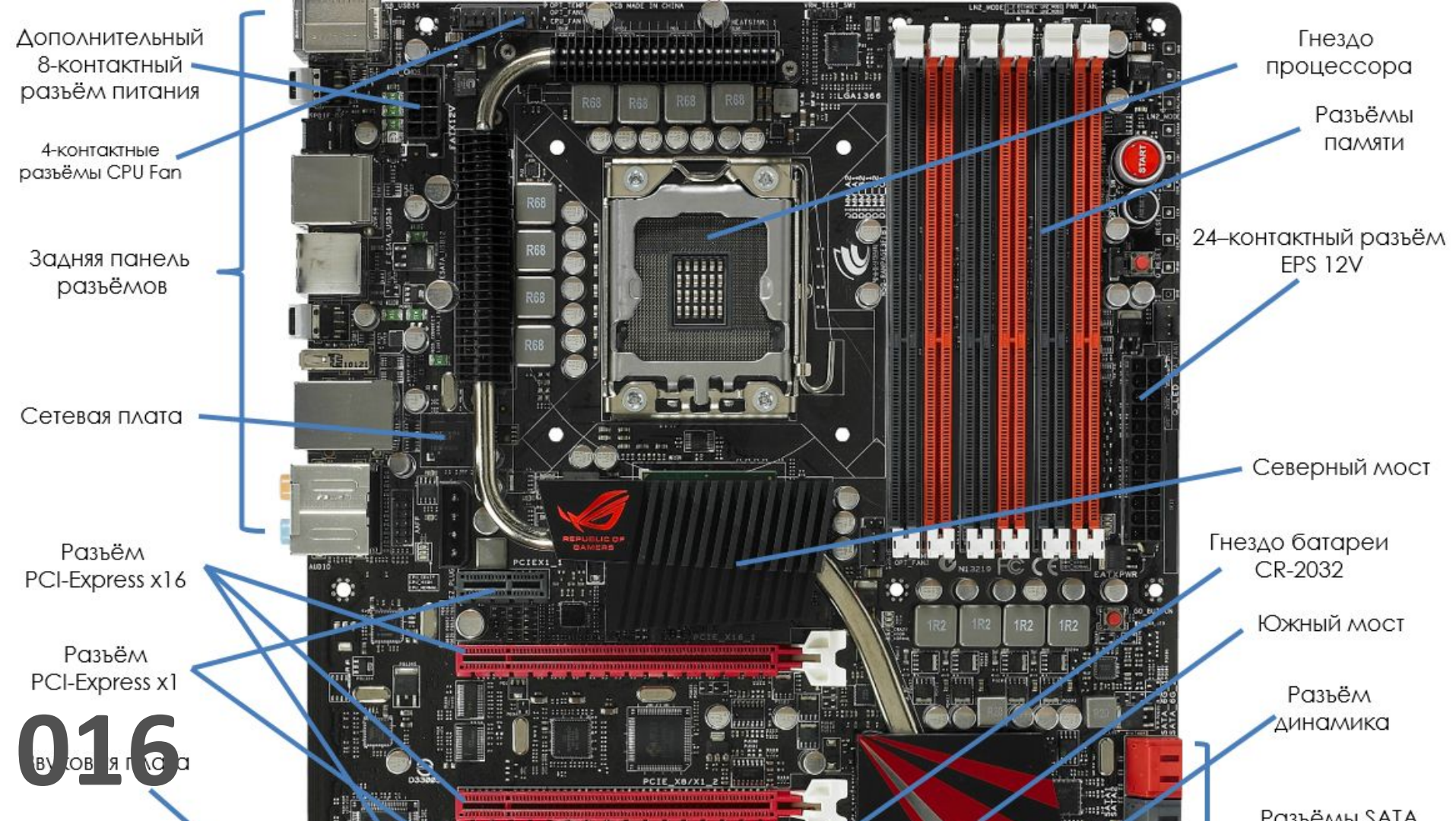
Гнездо батареи  
CR-2032

Южный мост

Разъем  
динамика

Разъемы SATA





Дополнительный  
8-контактный  
разъем питания

4-контактные  
разъемы CPU Fan

Задняя панель  
разъемов

Сетевая плата

Разъем  
PCI-Express x16

Разъем  
PCI-Express x1

**016**  
ВУЛОВ Я ПУСКО

Гнездо  
процессора

Разъемы  
памяти

24-контактный разъем  
EPS 12V

Северный мост

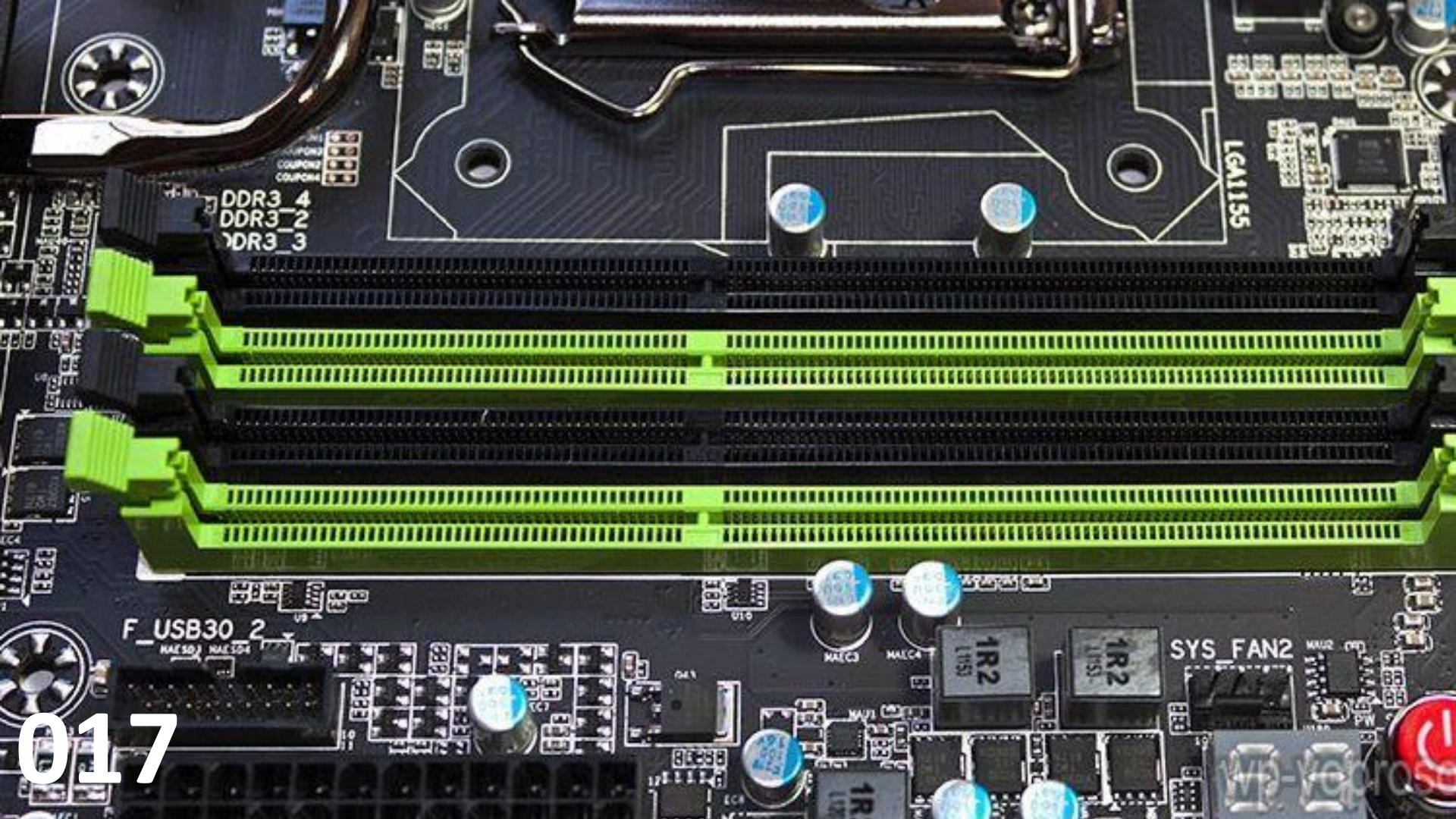
Гнездо батареи  
CR-2032

Южный мост

Разъем  
динамика

Разъемы SATA





DDR3\_4  
DDR3\_2  
DDR3\_3

LGA1155

F\_USB30\_2

SYS\_FAN2

1R2

1R2

MAEC3

MAEC4

1R2

1R2

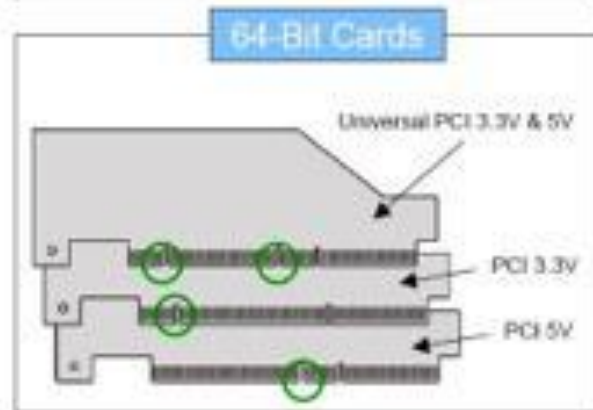
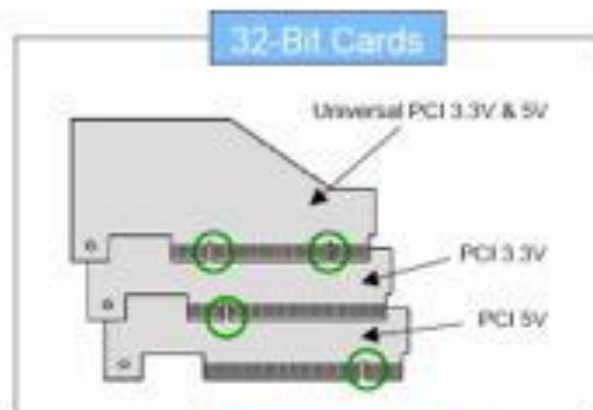
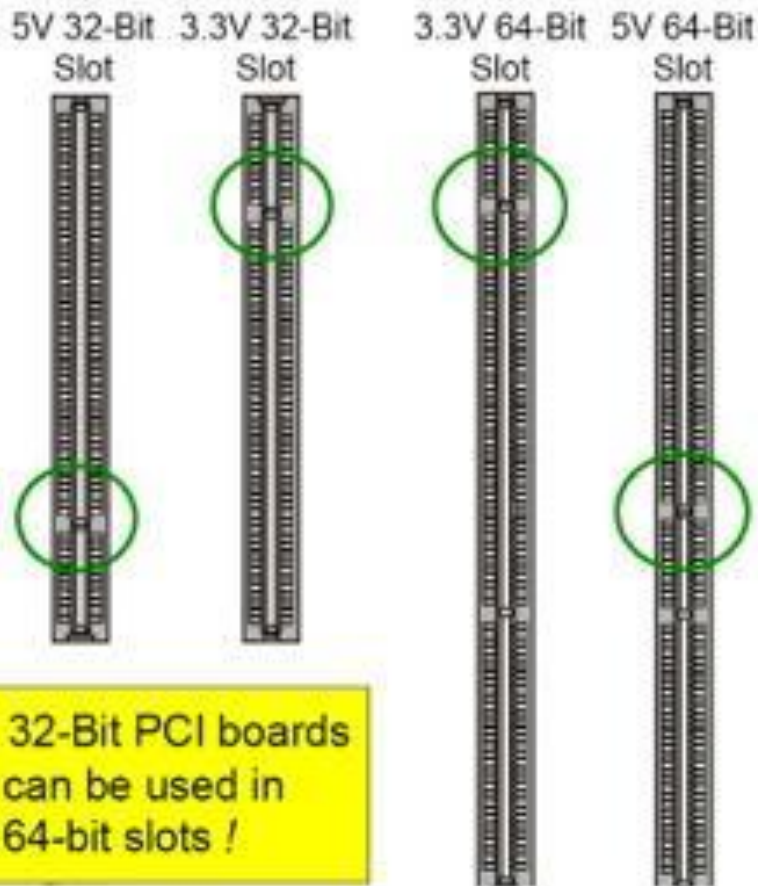
MAEC3

MAEC4

017



# 32-Bit vs 64-Bit Slots/Boards



PCIe x 1

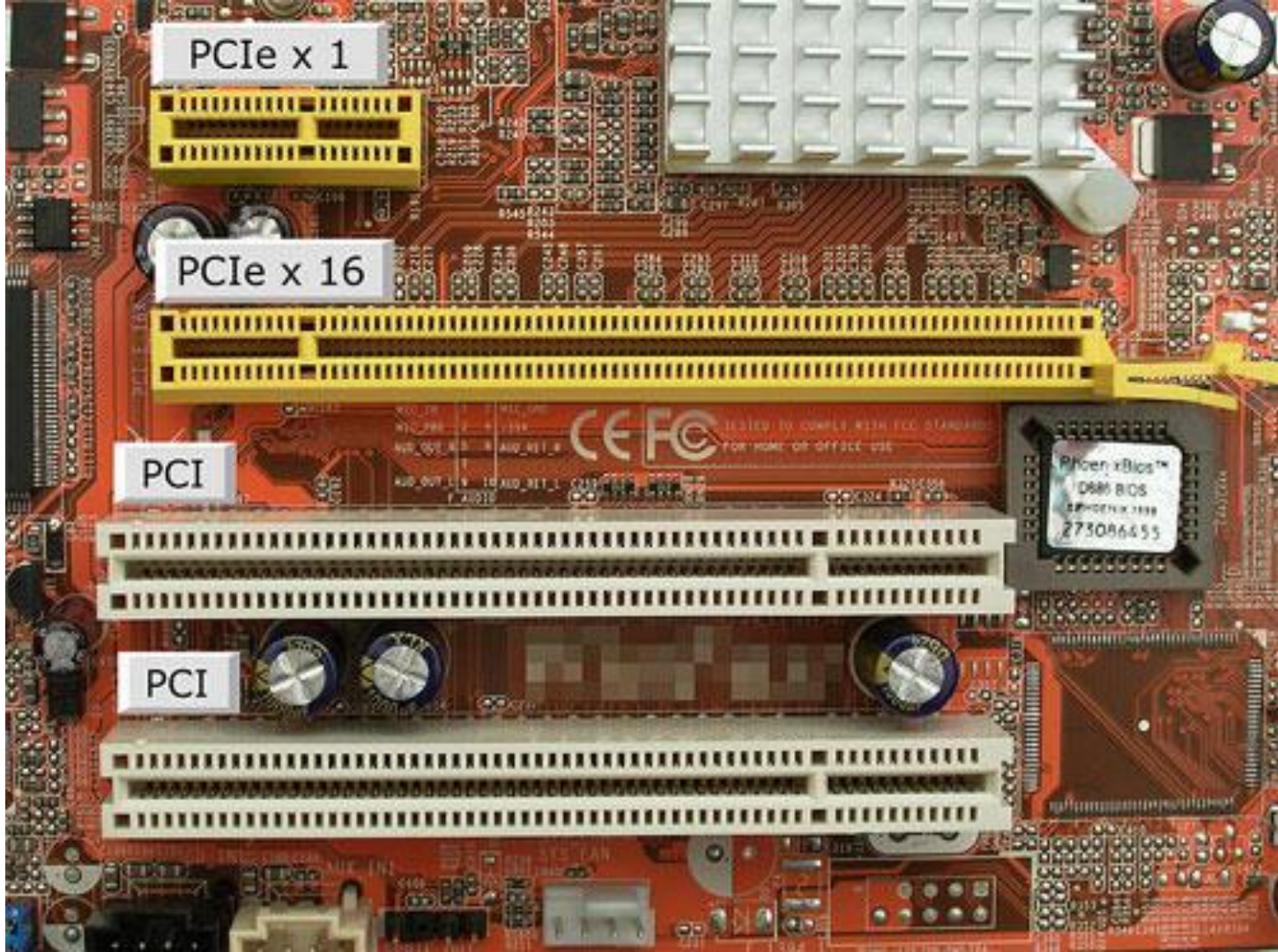
PCIe x 16

PCI

PCI

Phoenix BIOS™  
D885 BIOS  
Phoenix 1.0.0.0  
275086455

019







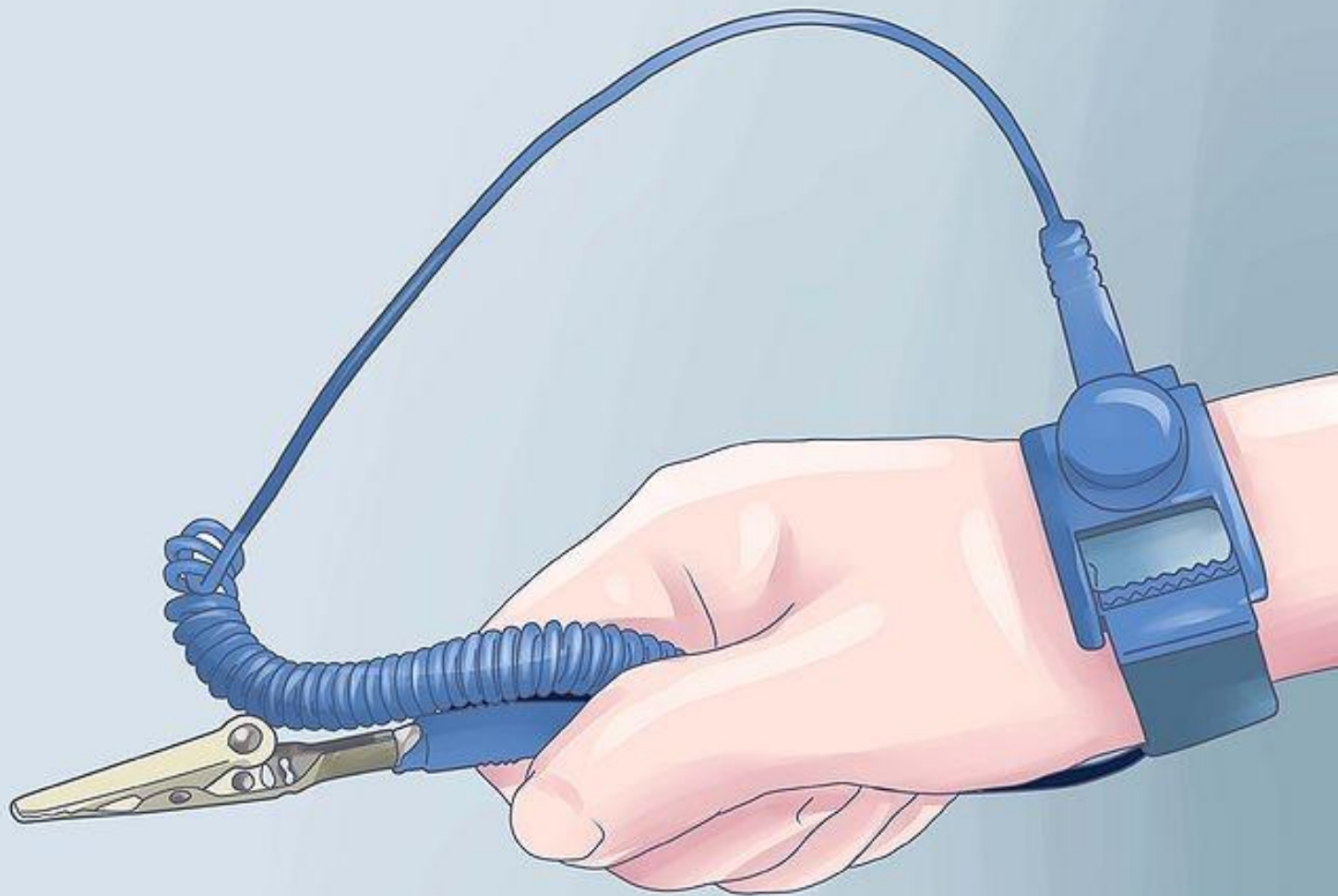
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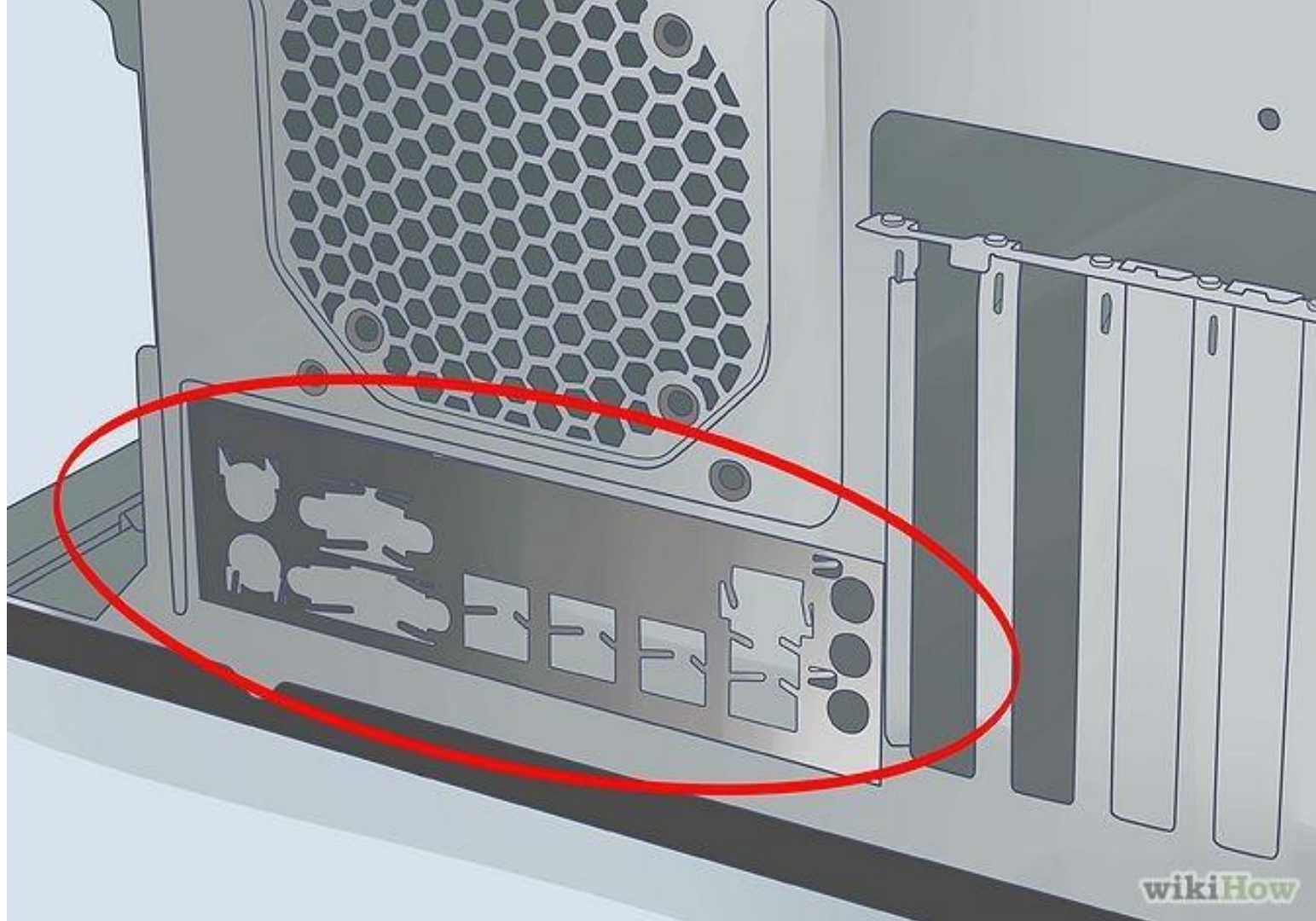




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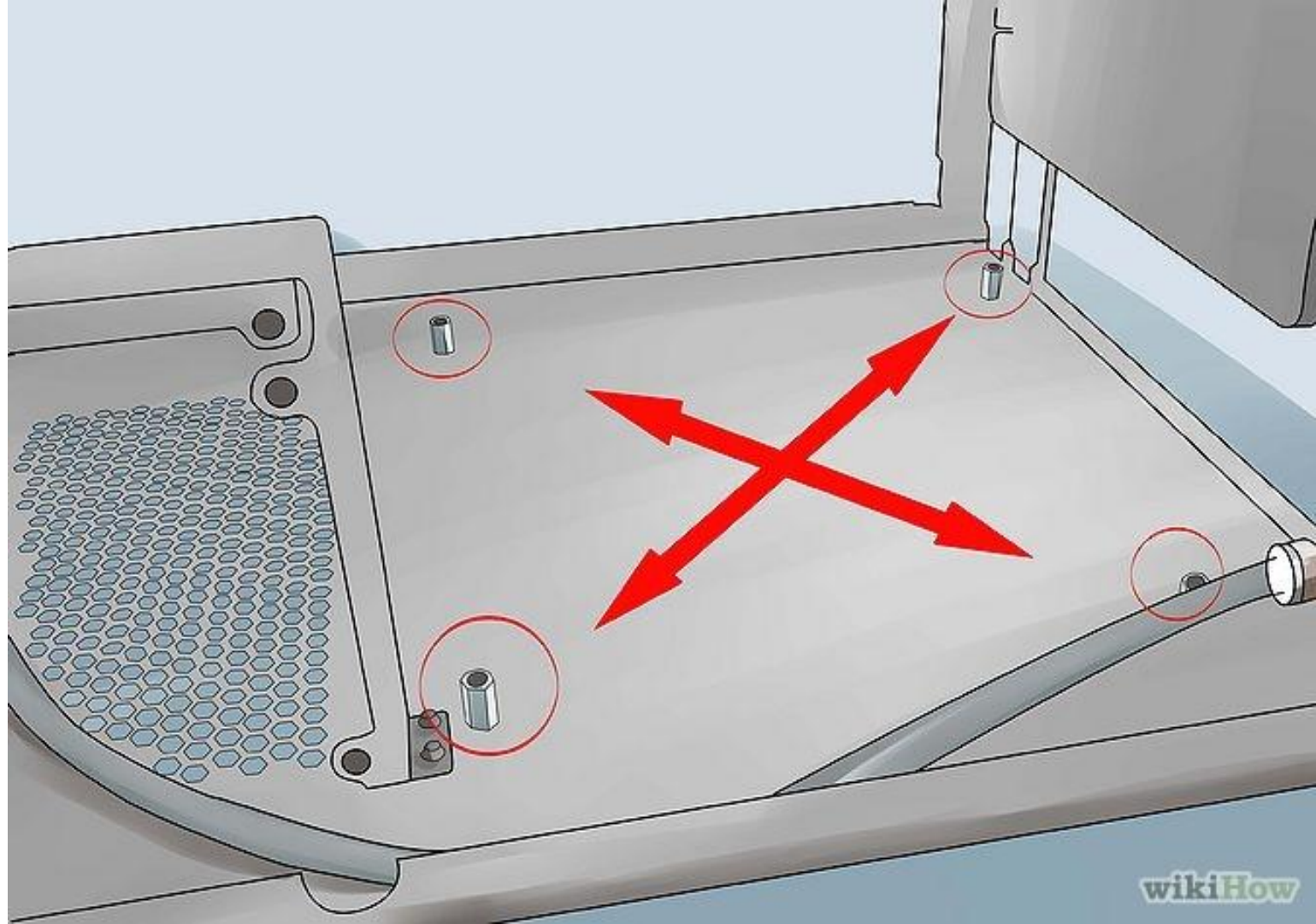


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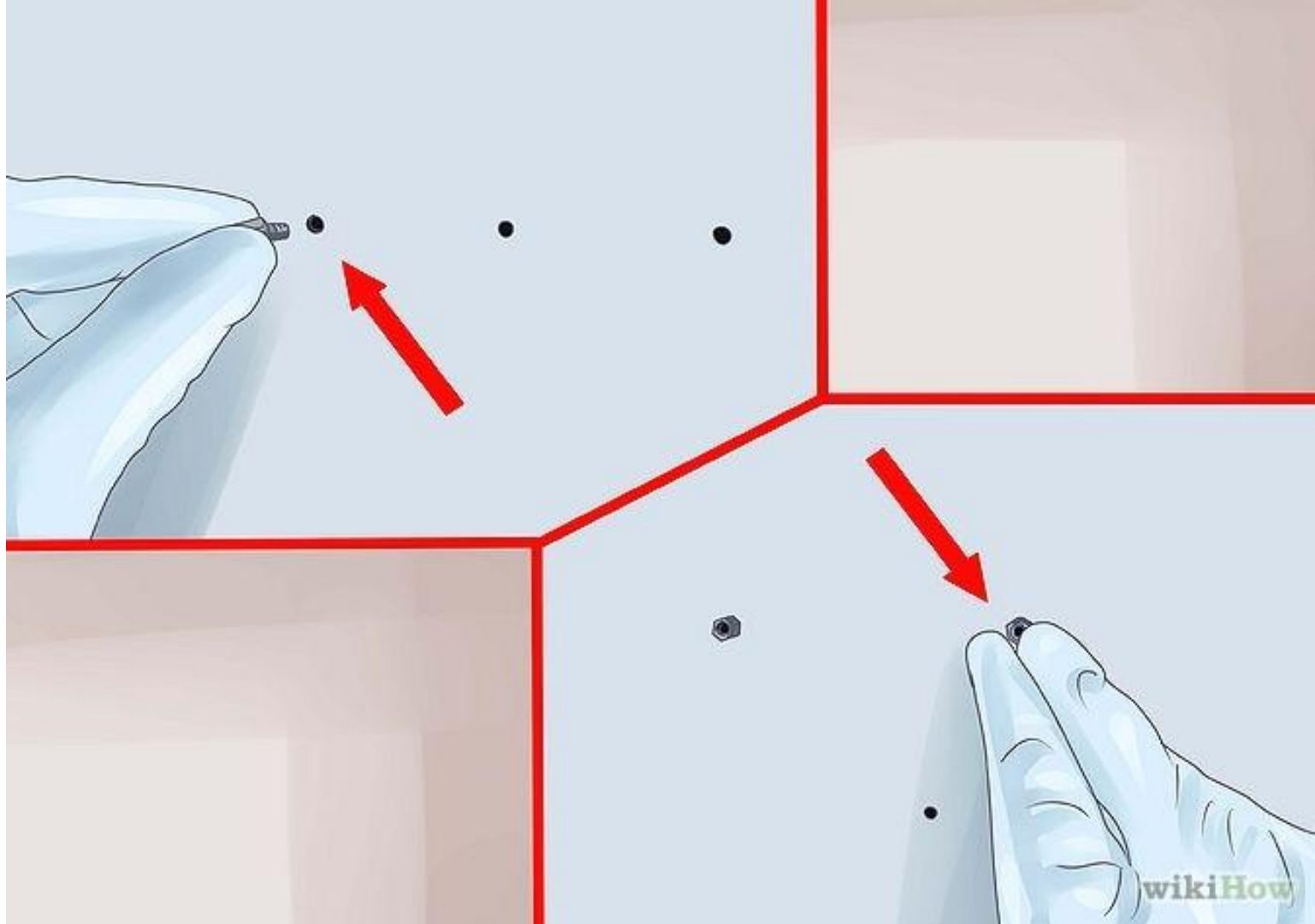




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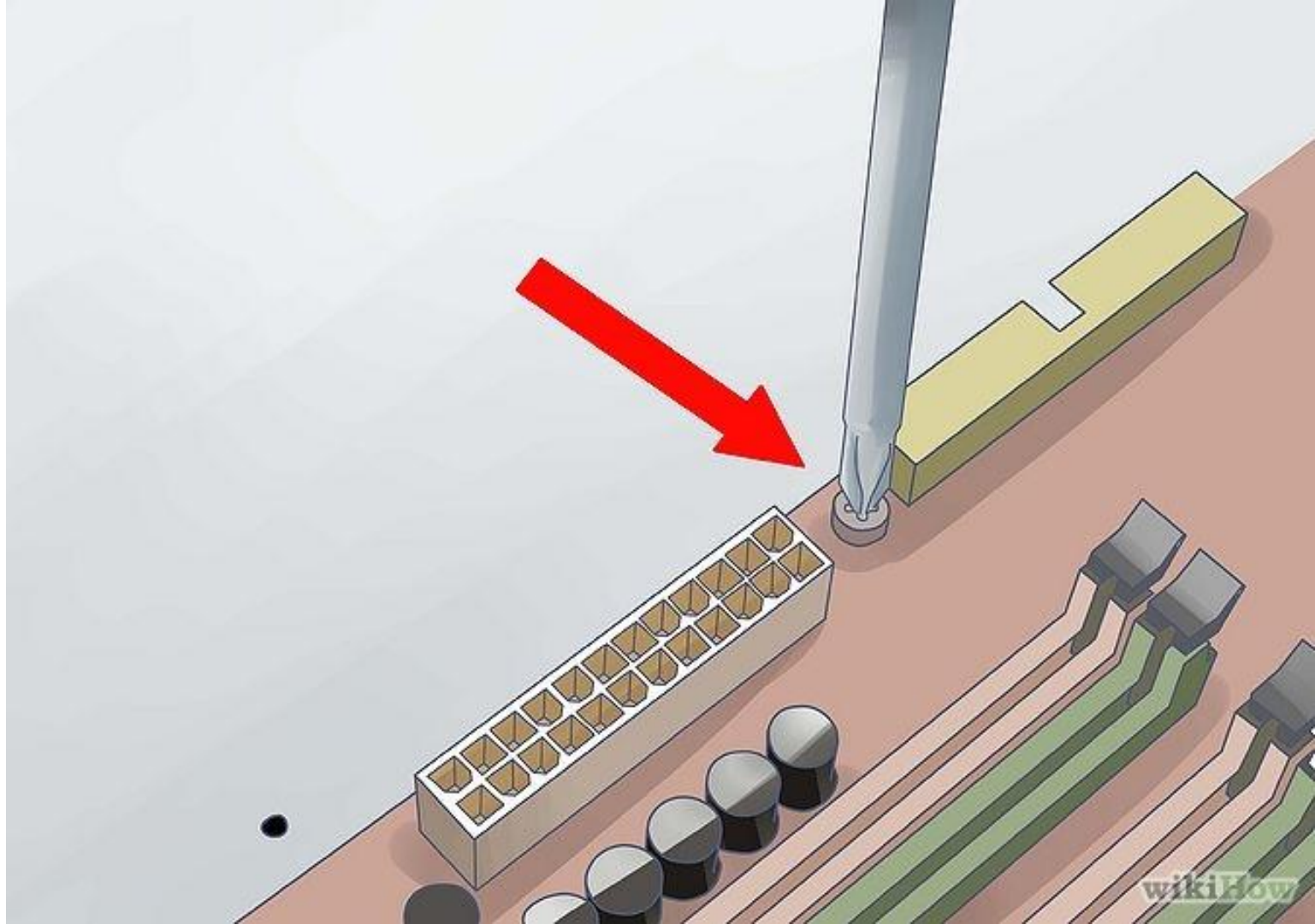


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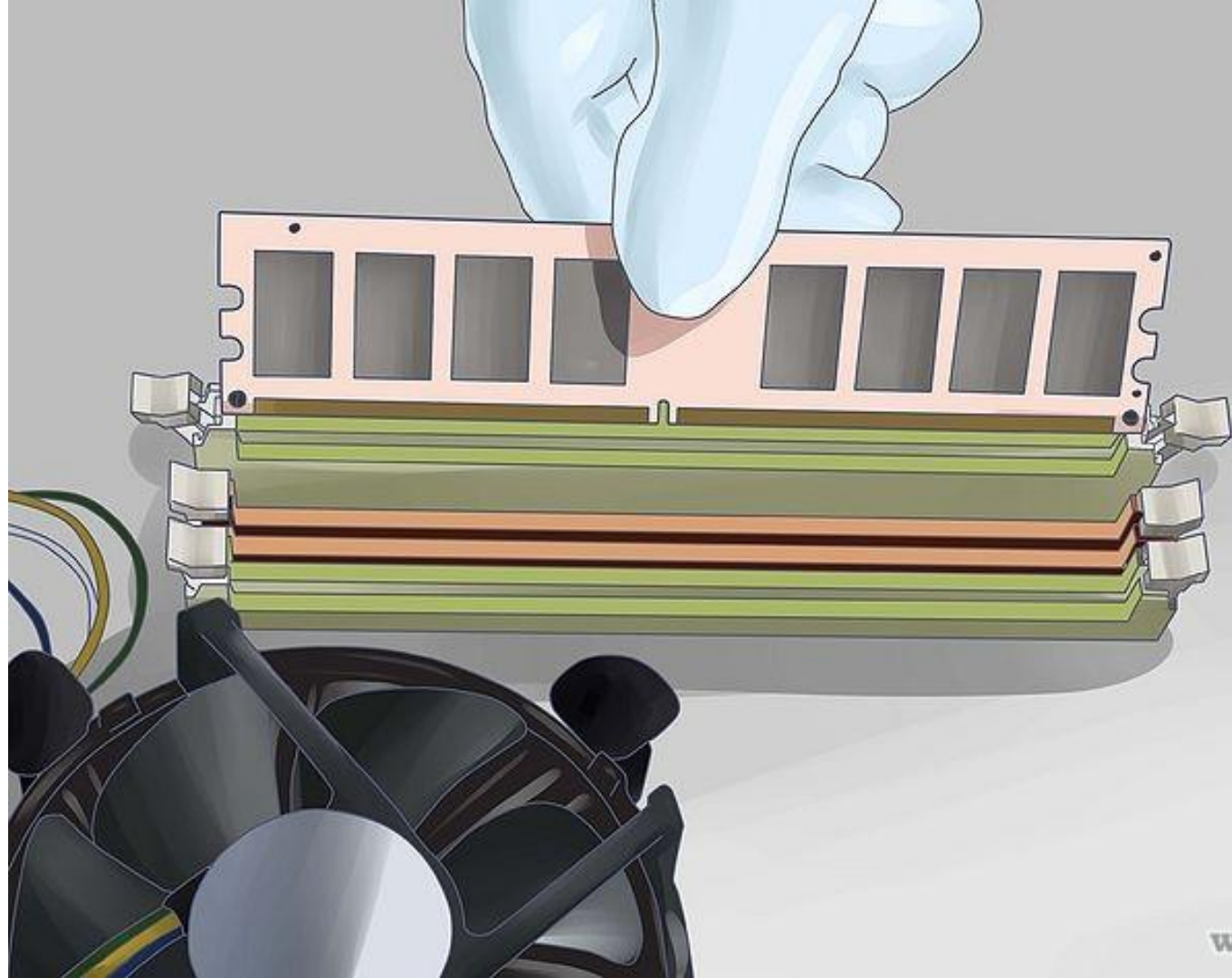




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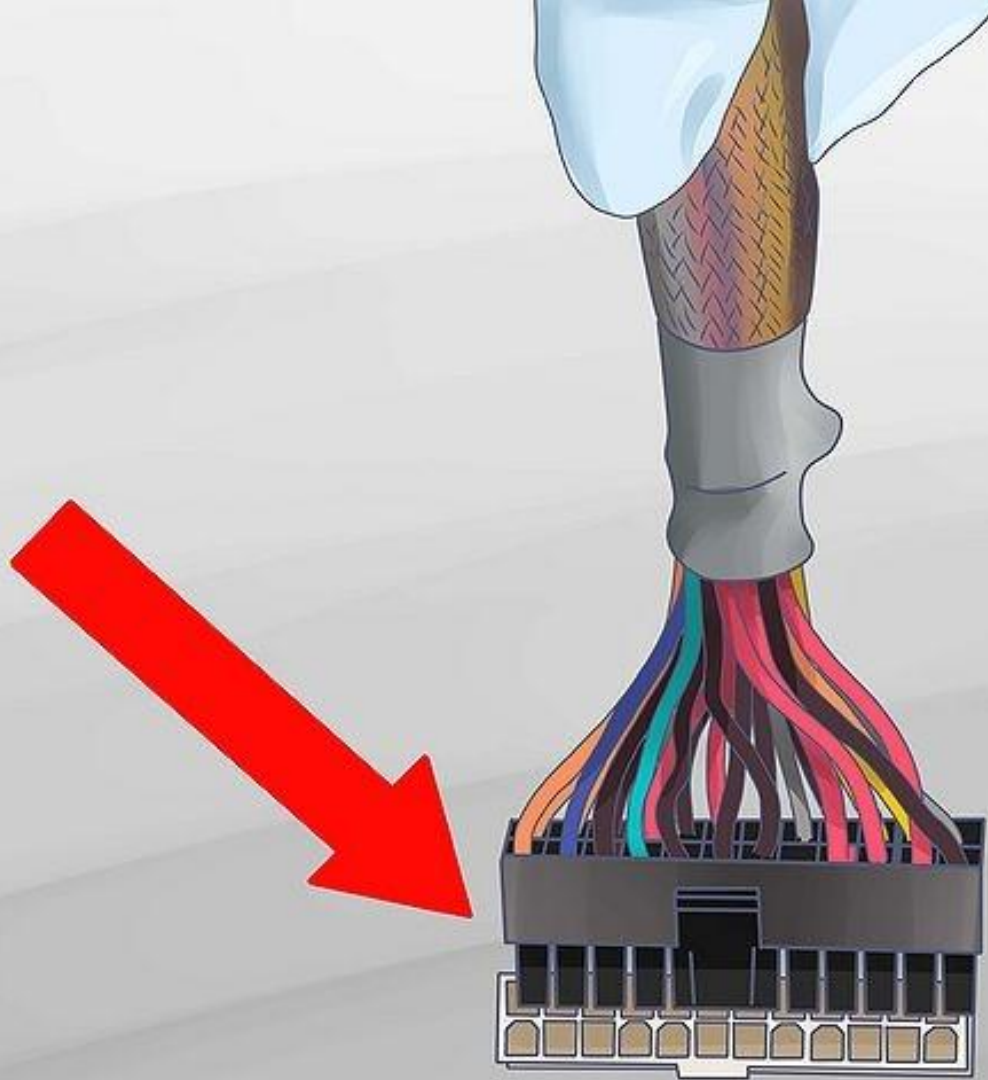


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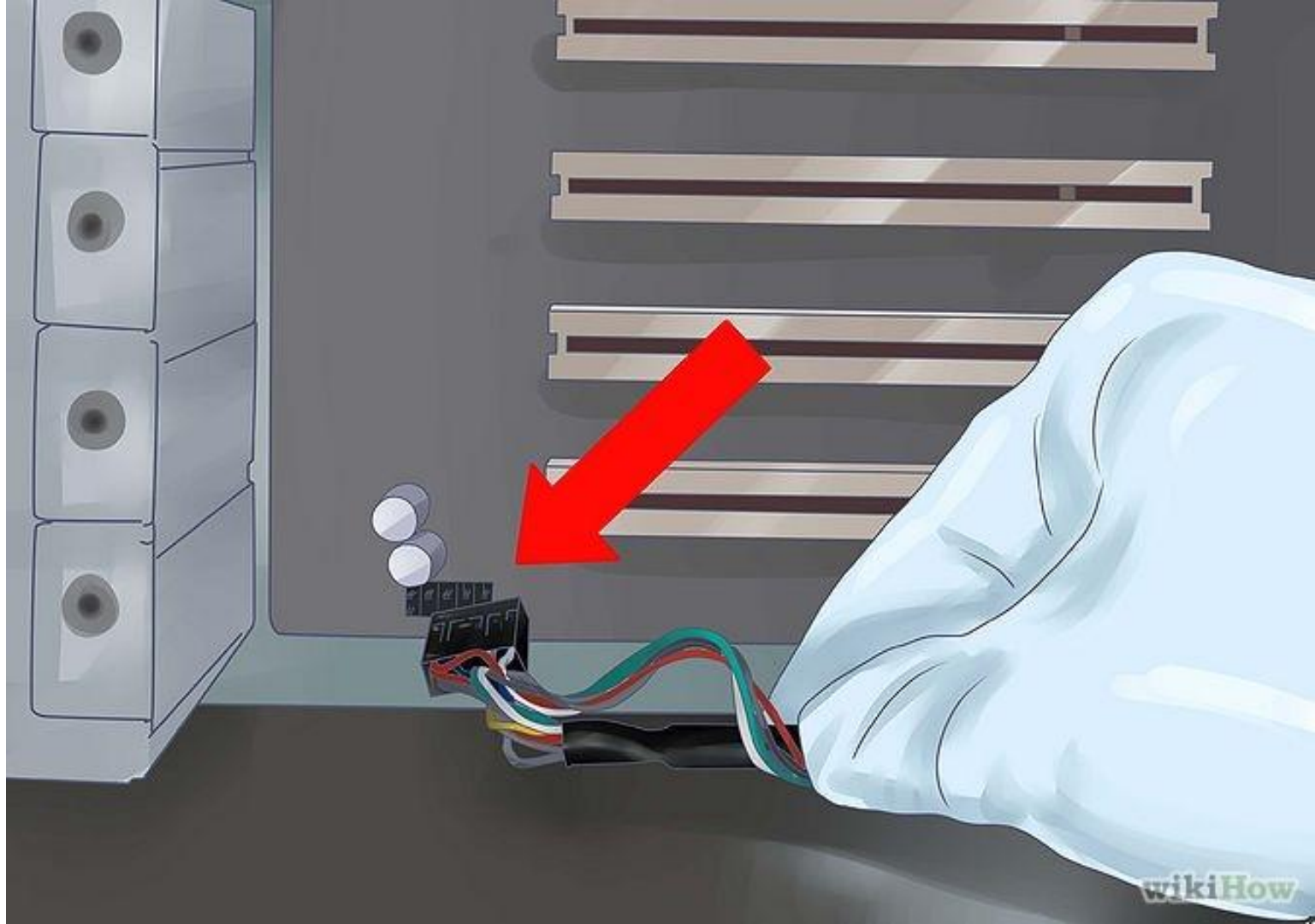




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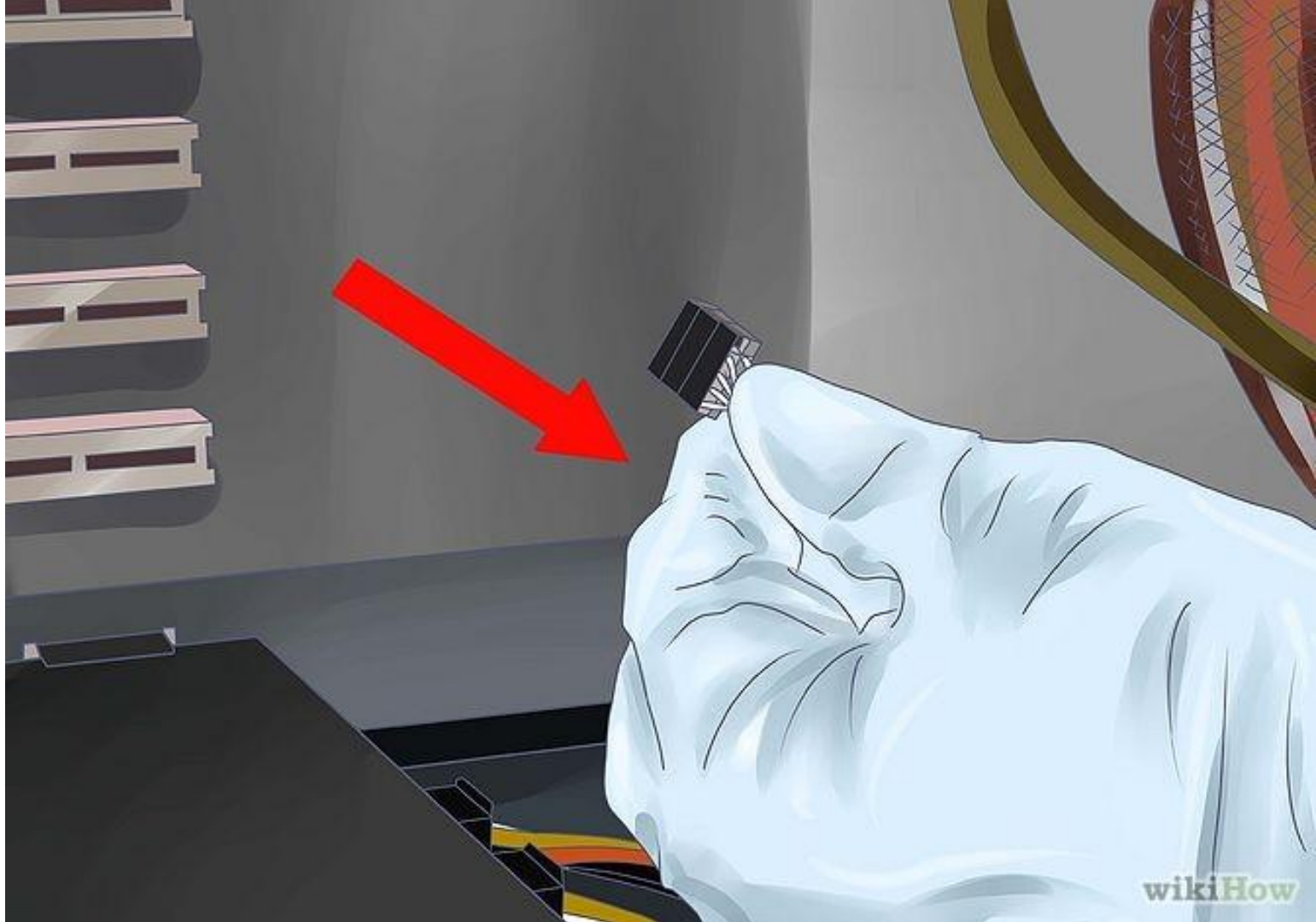


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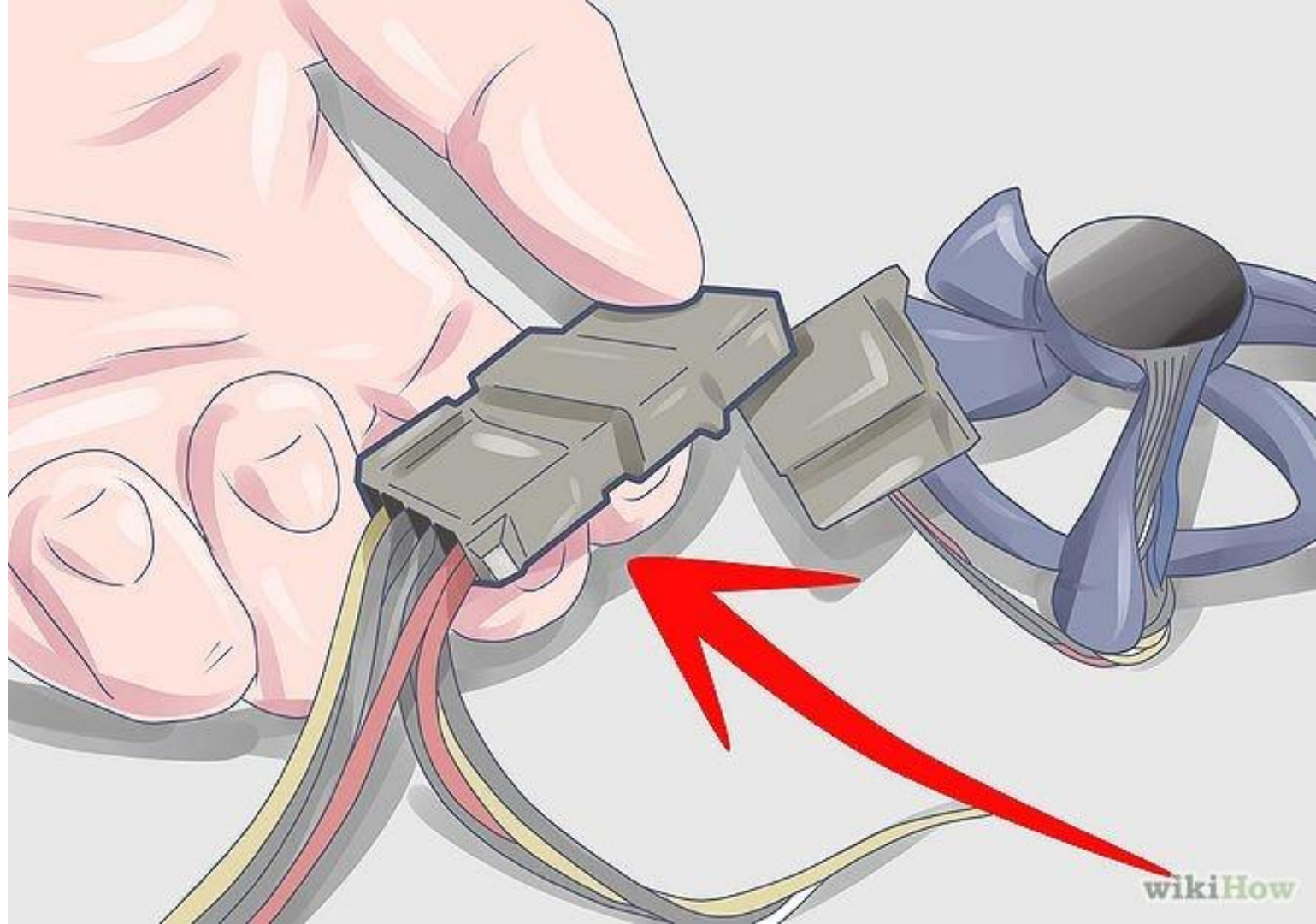




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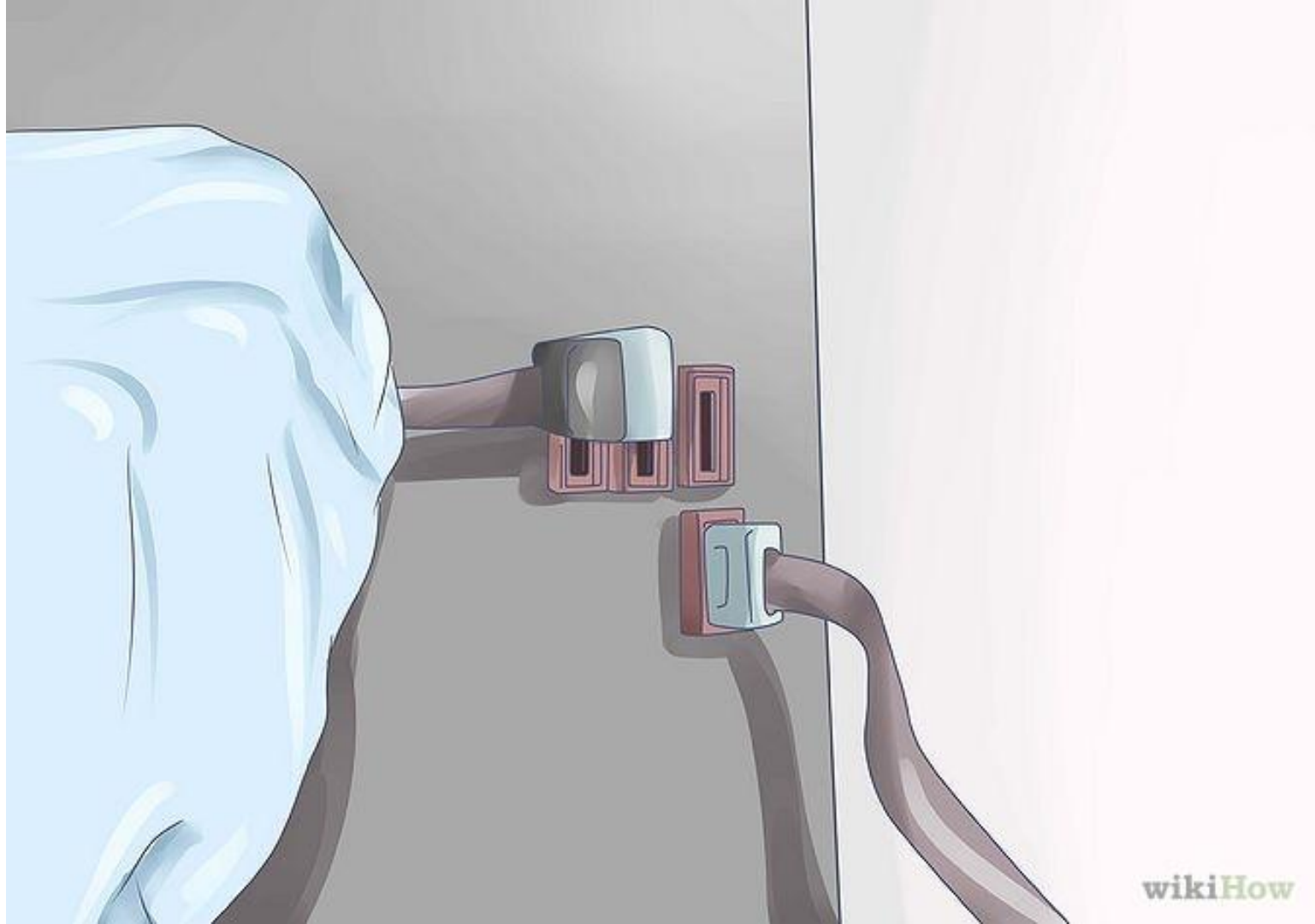


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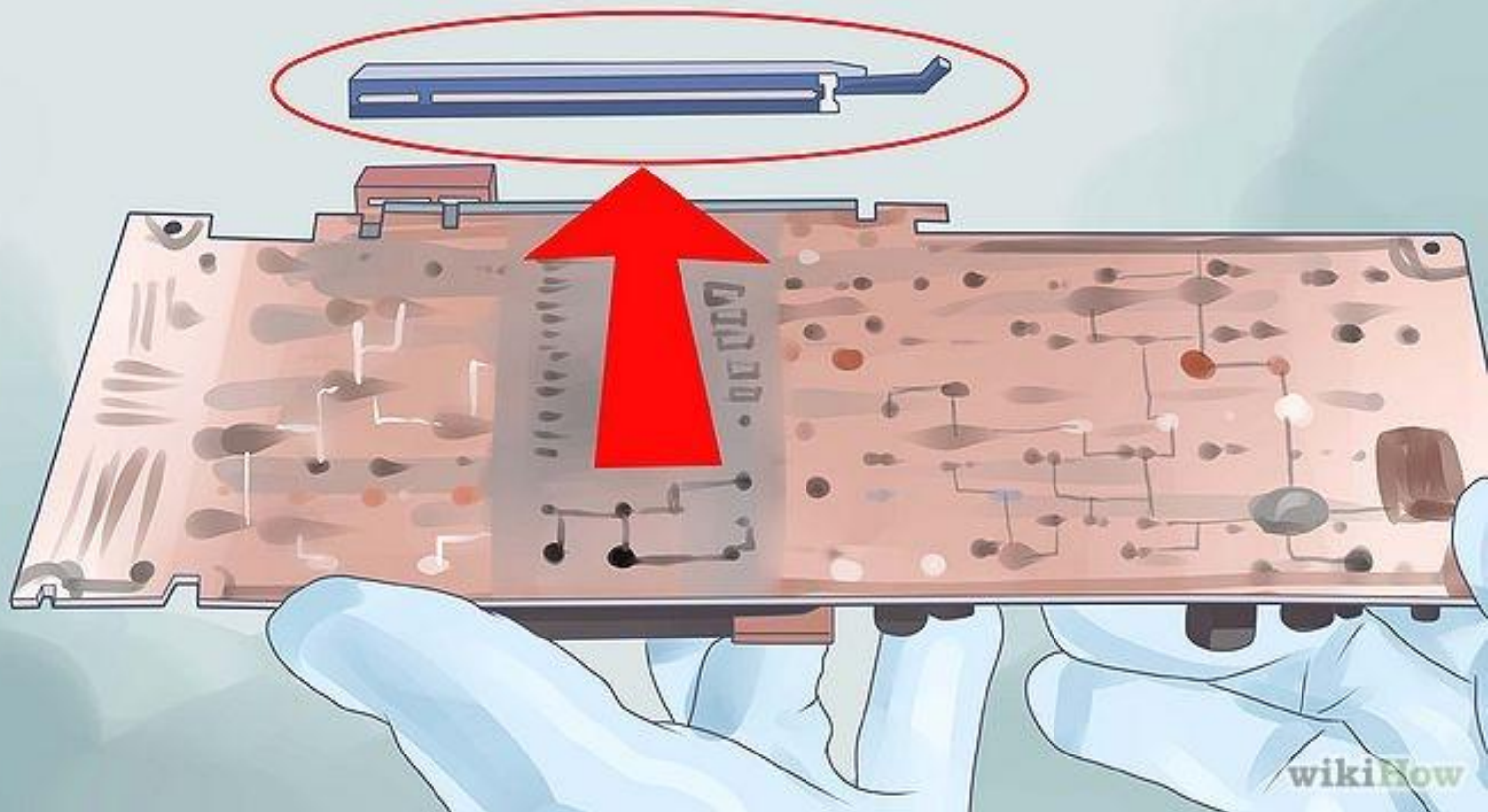




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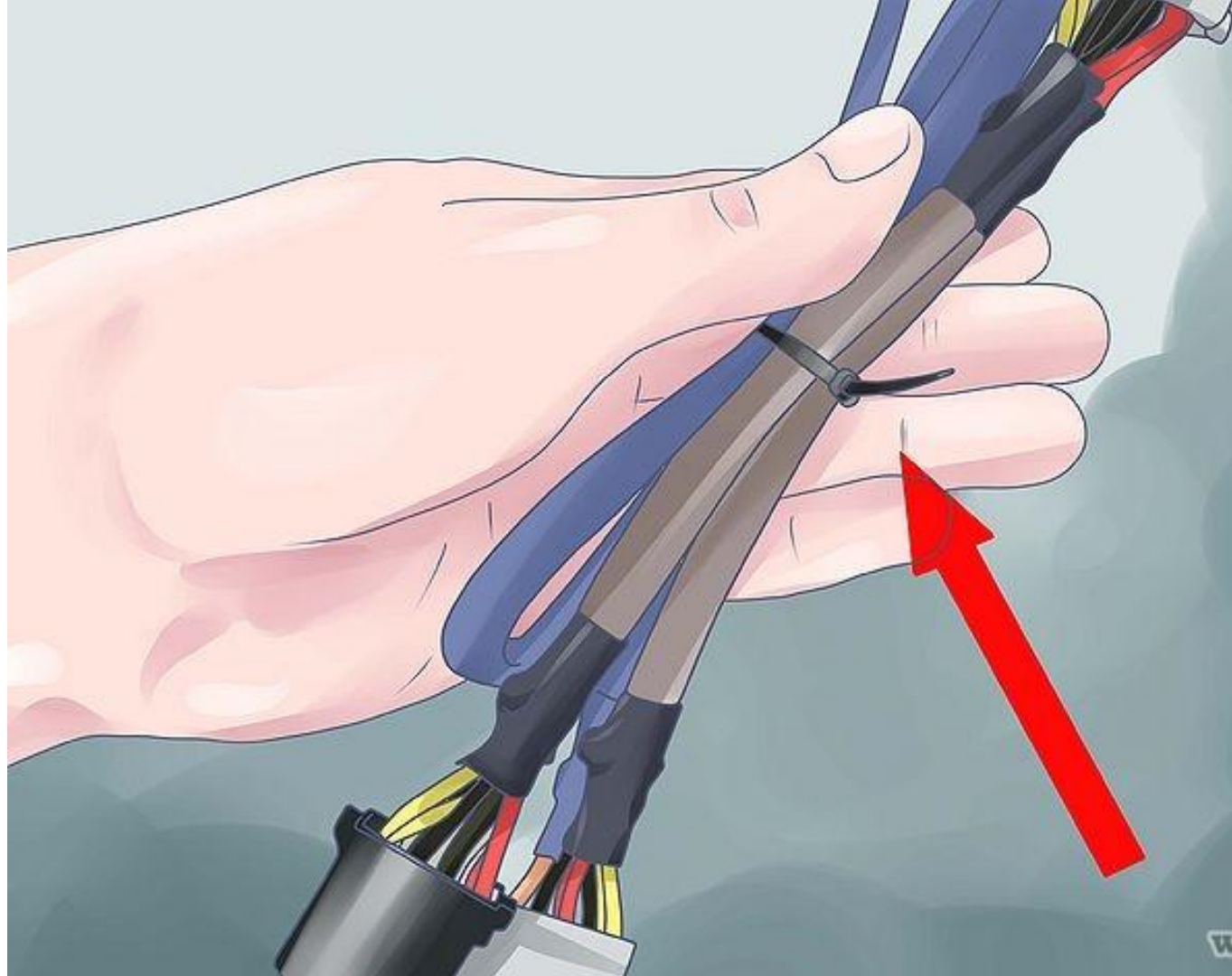


033





034





035