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BY DAVE STAFFORD

PC Component List

- Central Processing Unit (CPU)
- Graphics Processing Unit
- Motherboard
- Random Access Memory (RAM)
- Power Supply Unit (PSU)
- Case

Support 40-series VGA, MAX. VGA Length 430mm
(MAX. VGA Length 430mm with nothing on front plate,
400mm with fans, 370mm with radiator)

7PCI
Slots

315mm
MAX. PSU Length

180mm
MAX. CPU Cooler Height

ITX

M-TX

—— 430mm ——

ATX

315mm

SAMA
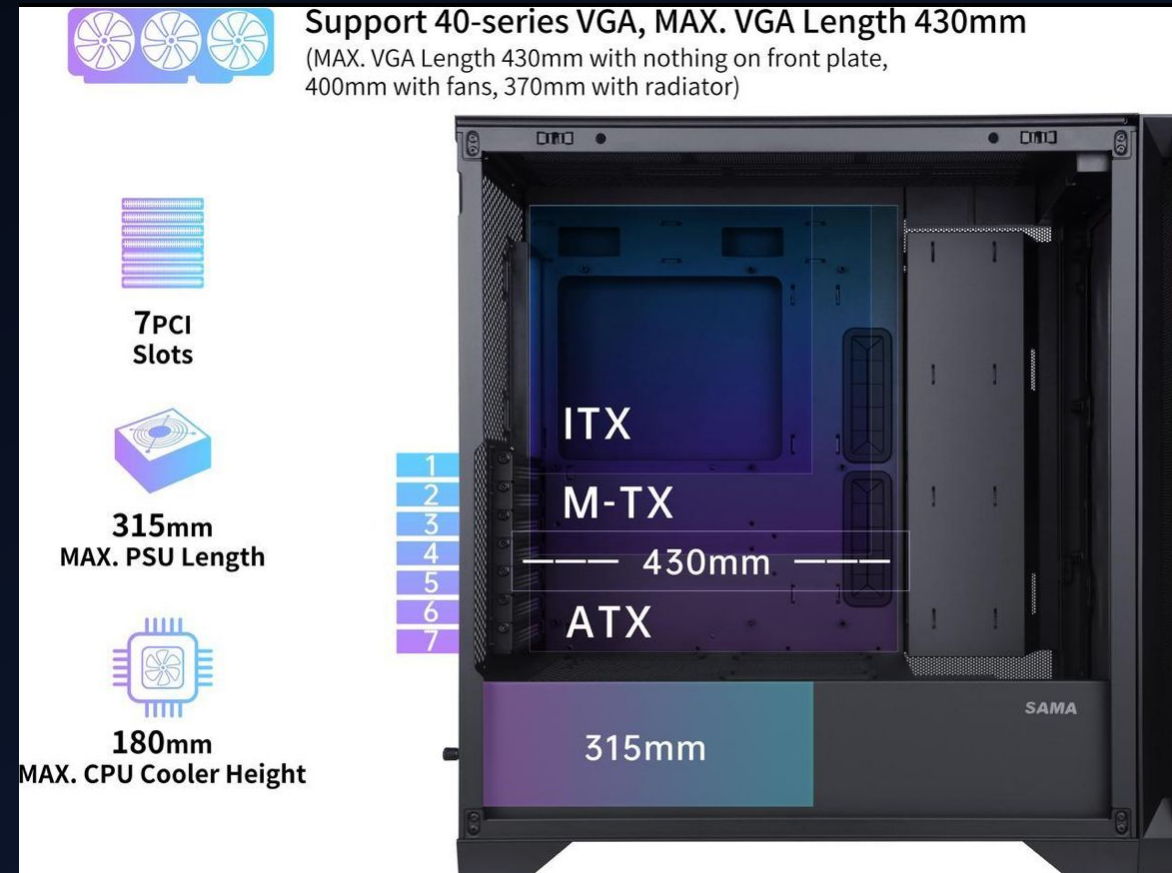
SOURCE: PC PART PICKER

- Integrated PC builder w/ compatibility guidance

- Lists DIY PC parts w/ price listings

- Used for generating PC part database
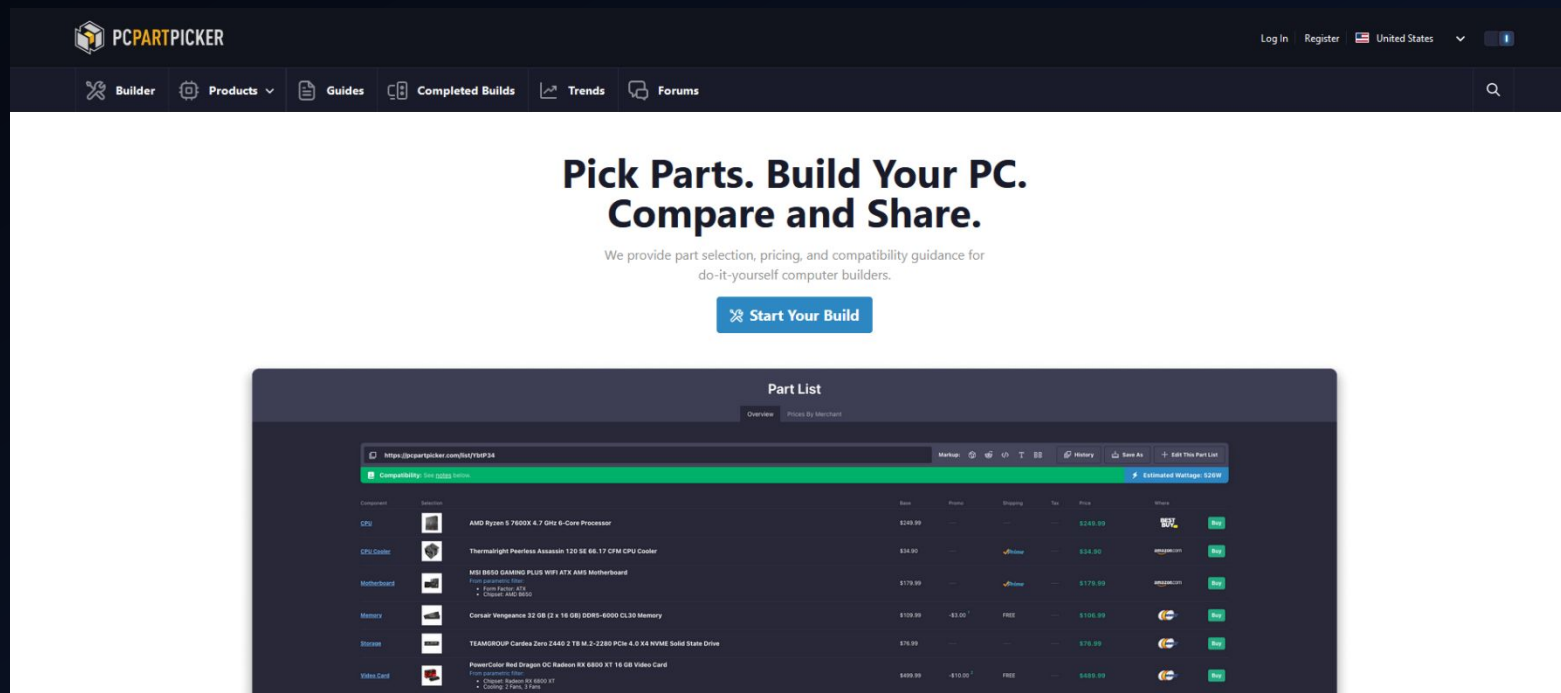
Central Processing Unit (CPU)

PROPERTIES

- Brands: Intel, AMD

- Models:
  - Intel: 12th to 14th gen
  - AMD: 5000 & 7000 series
  - ~ 60 total models

- Gaming & App performance

- Thermal Design Power (TDP)

COMPATIBILITY CHECKS

- Motherboard
  - Compatible CPU socket

- Power Supply
  - Wattage Support (when combined w/ GPU)

CPU

Graphics Processing Unit (GPU)

Graphics cards

PROPERTIES

- Brands: Intel, AMD, NVIDIA

- Chipsets:
  - Intel: Arc Series
  - AMD: Radeon 6000 & 7000 series
  - NVIDIA: RTX 30 & 40 series

- ~ 190 total variations

- Gaming performance

- Recommended PSU Wattage

COMPATIBILITY CHECKS

- Case
  - GPU Length Support

- Power Supply
  - Wattage Support (when combined w/ GPU)
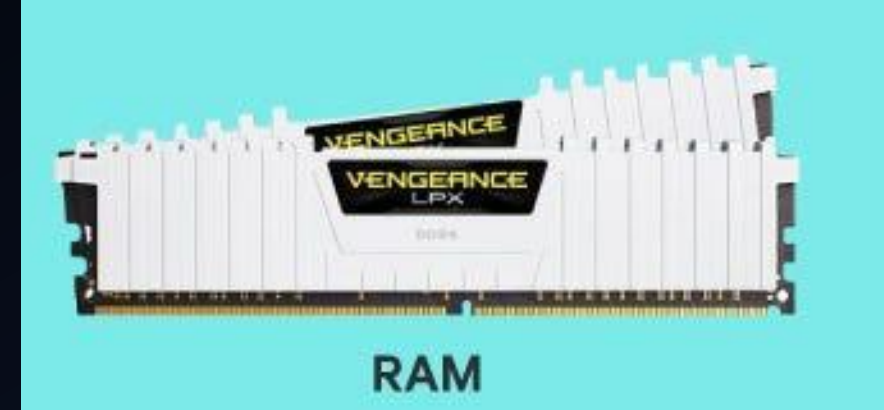
Motherboard

Motherboard

PROPERTIES

- Socket Support:
  - AMD: AM4 & AM5
  - Intel: LGA1700

- Form Factors:
  - ATX, Micro ATX, Mini ITX

- Price Limit: $180

- ~ 200 total variations

COMPATIBILITY CHECKS

- Case
  - Form factor support

- RAM Support
  - DDR4 or DDR5

- CPU
  - Chipset/Socket

RAM

RAM

PROPERTIES

- Module Type
  - DDR4 or DDR5
  - 16GB or 32GB

- CAS Latency
  - DDR4: CL16, CL18
  - DDR5: CL30, CL36, CL40

- Price Limit: $150

- ~ 200 total variations

COMPATIBILITY CHECKS

- Motherboard
  - DDR4 or DDR5 support

- CPU Socket
  - AM4 = DDR4
  - AM5 = DDR5
  - LGA1700 = DDR4 or DDR5
    - Depending on Motherboard

Power Supply

PROPERTIES

- Wattage Range: 500 – 1200

- 80+ Efficiency Rating:
  - Bronze or Gold only

- Semi-Modular or Full Modular

- Form Factors:
  - ATX, SFX

- Price Limit: $150

- ~ 100 total variations

COMPATIBILITY CHECKS

- Case
  - Form factor support

- CPU + GPU
  - Total Watt support

Power supply unit

Case

PROPERTIES

- Tower Type
  - ATX, Micro ATX, ITX
- Price Limit: $120
- Additional Limits
  - No included PSU
  - Side panel window
  - Case brands
- ~ 190 total variations

COMPATIBILITY CHECKS
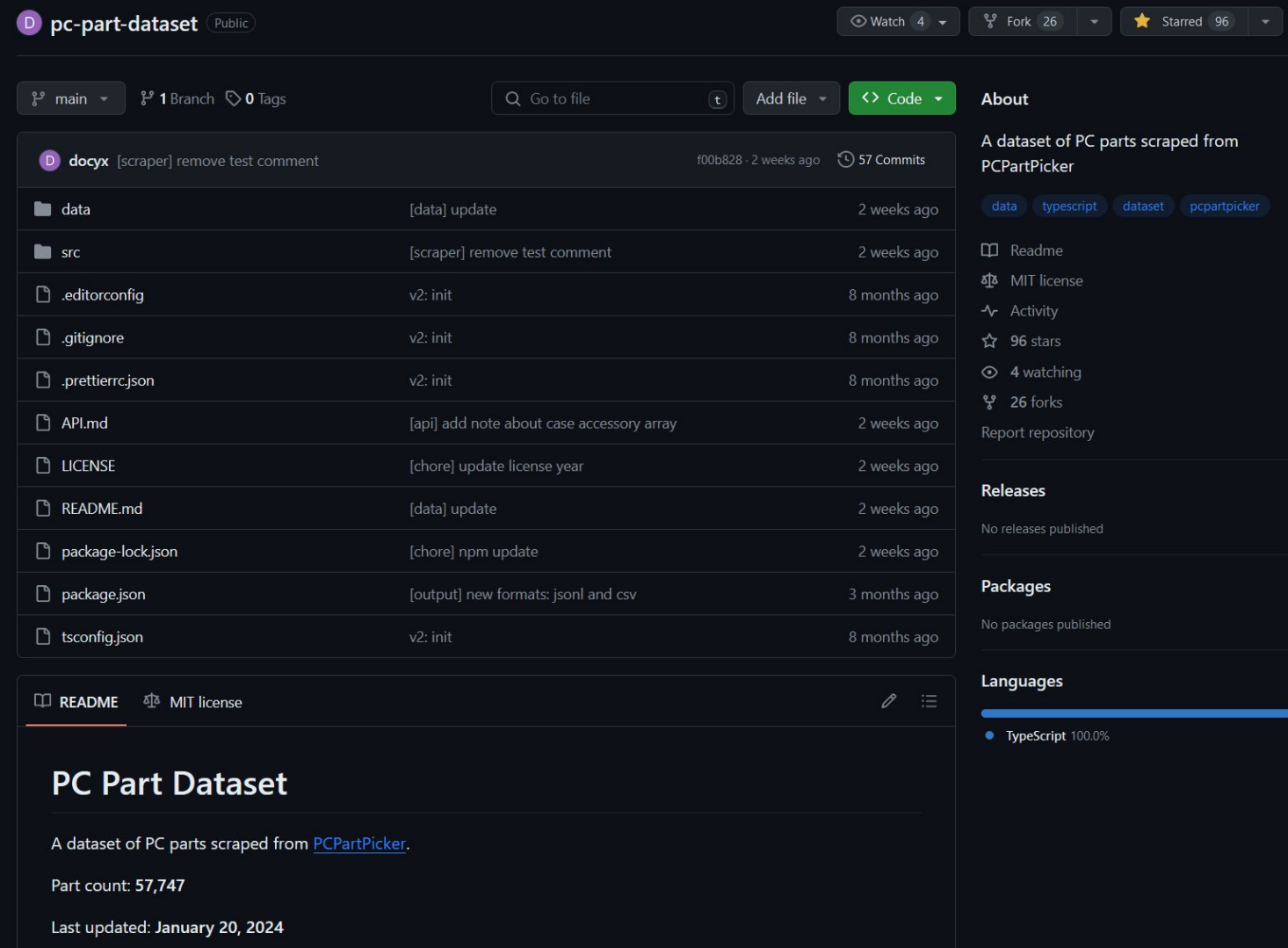
- Motherboard
  - Form factor support
- GPU length support
- Power Supply
  - i.e. SFX PSUs for ITX cases

Case

SOURCE: GITHUB

- Unofficial API for PC Part Picker

- Used to data scrape site for part info