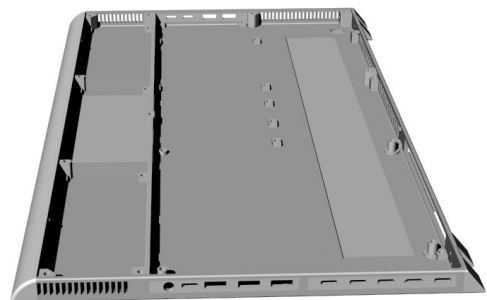
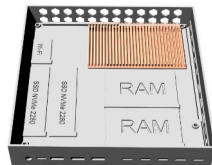


UNIFIED LAPTOP & MINI PC BOARDS AND CHASSIS CONSTRUCTION



By Ivan Buhaienko



Our groundbreaking project aims to develop and produce affordable:

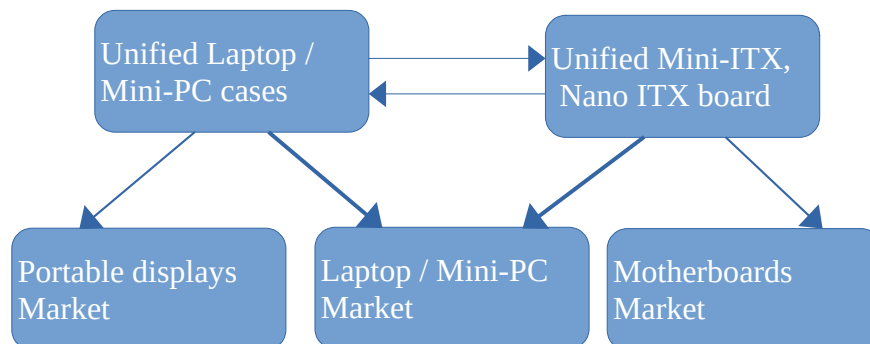
- **Universal Mini-ITX / Nano-ITX motherboards**
- **Standardized Mini-ITX / Nano-ITX chassis designs for laptops and mini PCs**
- **Detacheable independent display**
- **Modular components for maximum flexibility**

Creating a New Computing Paradigm

Let's transform how we think about portable computers with our innovative universal construction system that enables both laptops and compact desktop solutions. **We offer to create a new laptop universal upgradable and serviceable chassis and to create and use the mainboard of updated universal Mini-ITX and/or Nano-ITX form factor for these laptops and for mini-PCs. Also for laptops we offer to use display that have independent power and video input from outer sources.** It will allow to reuse laptop display or use it with other machines for work.

Modern laptops becomes less serviceable and upgradeable day to day. They don't have universal motherboards, that makes the upgrade and repair impossible or too expensive. We want to create Mini-ITX / Nano-ITX supported laptop and mini-PC chassis and advanced boards for them and other market users. Also new construction shall support display with several power and video in ports for more wide way of usage.

For boosting donations we can offer not only laptop but mini-PC case and cooling system with these board support and additional laptop case designs.



New Features:

1. Modular Excellence

- Effortless and affordable component upgrades
- User-serviceable design
- Standardized parts across form factors
- Standardized parts across cases designs
- Advanced display usage in many situations.

2. Dual Form Factor Compatibility

- Build a powerful of cheap laptop for mobility
- Create a compact mini PC for your desk
- Same core components, different applications
- Increased sales of standardised components for other devices (Mini-ITX boards, Displays etc.)

3. Future-Proof Design

- Universal Mini-ITX (17x17cm) or Nano-ITX (12x12cm) motherboards
- Standardized mounting and connection interfaces
- 3D-printable chassis options

Advantages for Users:

- Cost-Effective Upgrades: Replace only what you need
- Extended Lifespan: Repair and upgrade instead of replace
- Flexibility: Transition between laptop and mini PC as needs change
- Customization: Design your ideal setup within standardized parts

Technical Innovation:

- Universal port placement for multiple configurations
- Standardized cooling solutions adaptable to both form factors
- Type-C Power Delivery for simplified power management
- Optional features:
 - Pass-through display functionality
 - Detachable screens that double as standalone monitors
 - Dual GPU support in mini PC configuration

For Manufacturers:

- New market opportunities in standardized components
- Streamlined production through universal designs
- Reduced waste and increased sustainability
- Community engagement driving organic brand growth
- Evolving brand internet, social and media activity

Environmental Impact:

- Significant reduction in e-waste
- Longer product lifecycles
- Sustainable manufacturing options
- Resource-efficient upgrades

Community Benefits:

- Knowledge sharing and collaborative improvement
- DIY-friendly designs encouraging user creativity
- Accessible high-performance computing
- Platform for innovation and customization

Universal Chassis and Board Construction System Specifications:

1. Motherboard Standards

- Flat design optimized for multiple form factors
- Strategic port placement for versatility
- Universal mounting points
- Standard modules usage, including portable format GPU

2. Chassis Standards

- Create several chassis of different designs but with universal internal structure
- User-serviceable construction
- GPU installation or upgrade friendly construction

3. Cooling Solutions

- Modular design adapting to different chassis
- User-serviceable components
- Optimized for both laptop and mini PC airflow

4. Power Management

- Universal battery interface for laptops
- Standardized power delivery across form factors
- BIOS-level power configuration

What to do, project steps:

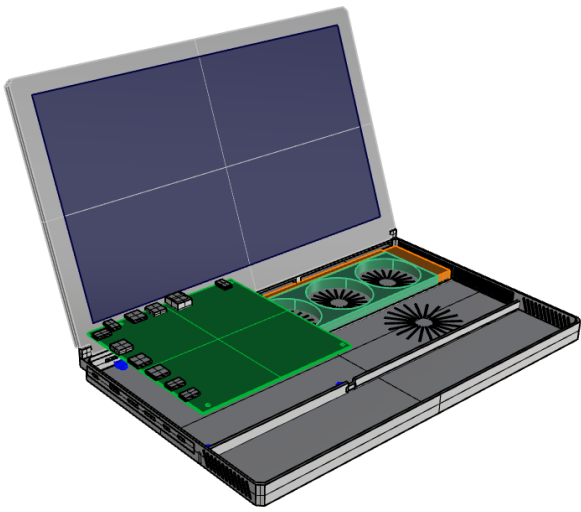
- 1) Making final designs of Laptop case, display and optionally Mini-PC case
- 2) Ordering new flat Mini-ITX / nano ITX boards compatible with new cases and good for standard mini computers
- 3) Ordering new cooling system for new boards and cases
- 4) Ordering new batteries for laptops.
- 5) As further project development, creating and ordering gaming design cases for laptop and Mini-PC.

Whether you're building a portable powerhouse or a compact desktop marvel, our Universal Computer Construction System provides the foundation for your ideal computing solution. Create, customize, and evolve your perfect device.

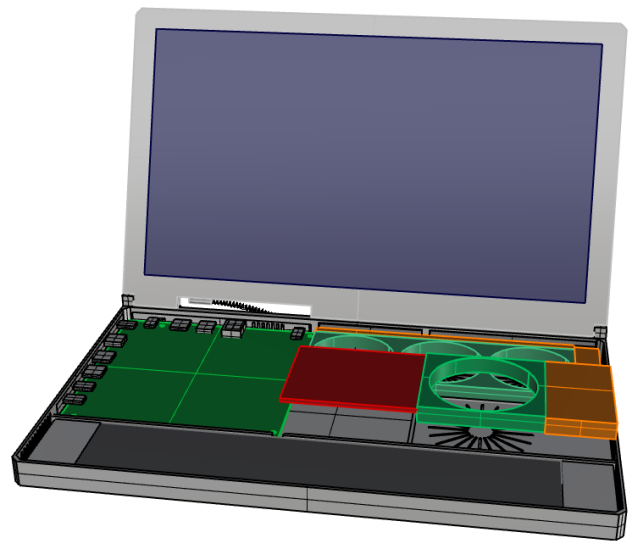
Be part of the future of sustainable, user-centric computing!

Illustrations

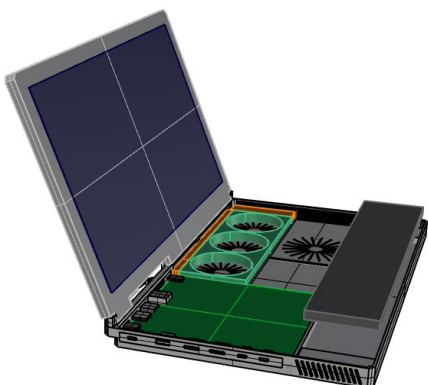
Unified Mini-ITX board Laptop construction example



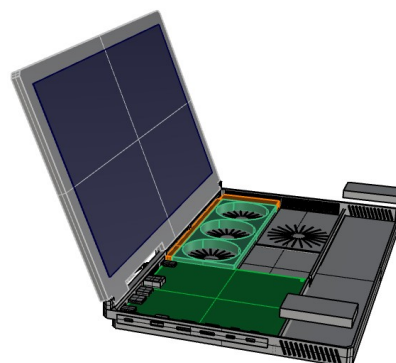
Portable GPU with its cooling system connection



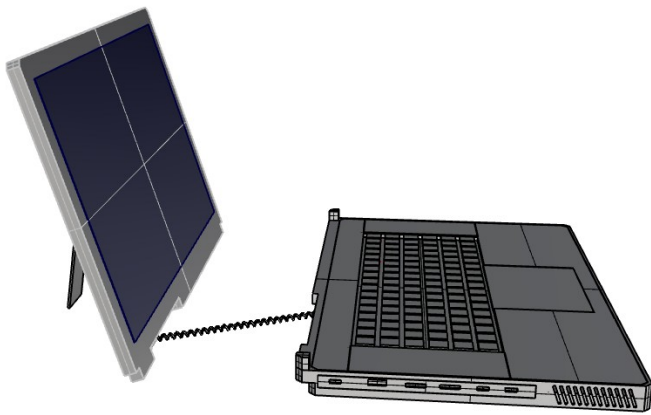
Battery replacement



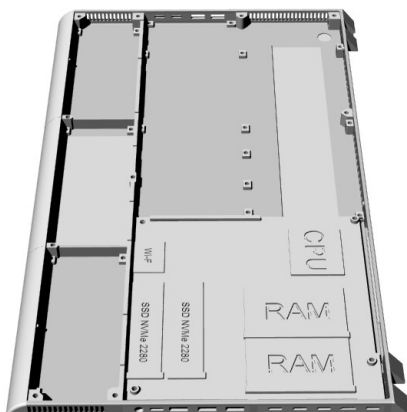
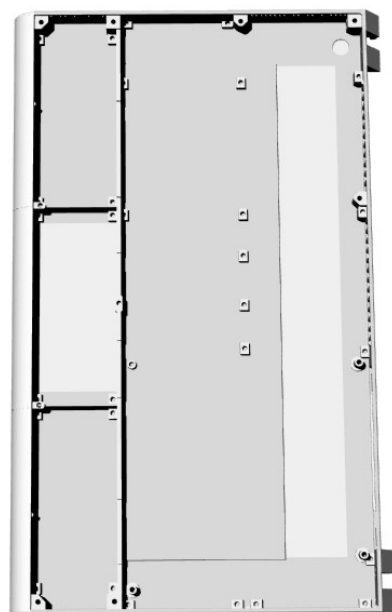
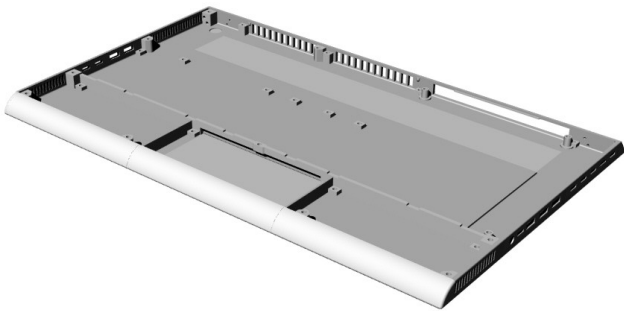
Loudspeakers replacement



Detachable screen construction example

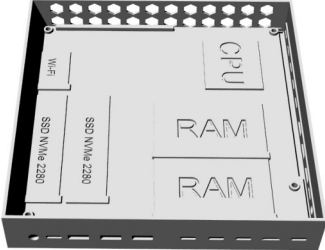


Classical design compact laptop example

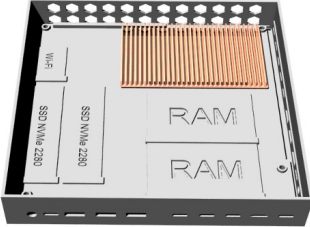


Mini-PC construction example for mini-ITX MB format

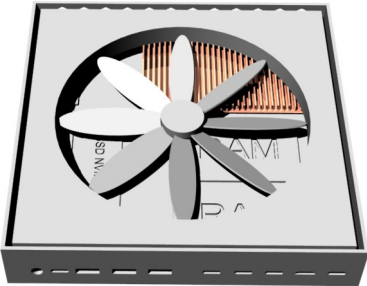
Case and Motherboard



Cooling system CPU radiator added



One 140 mm cooler added



Assembled device

