



# Understanding the Costs Behind Your Project with Kickr Design

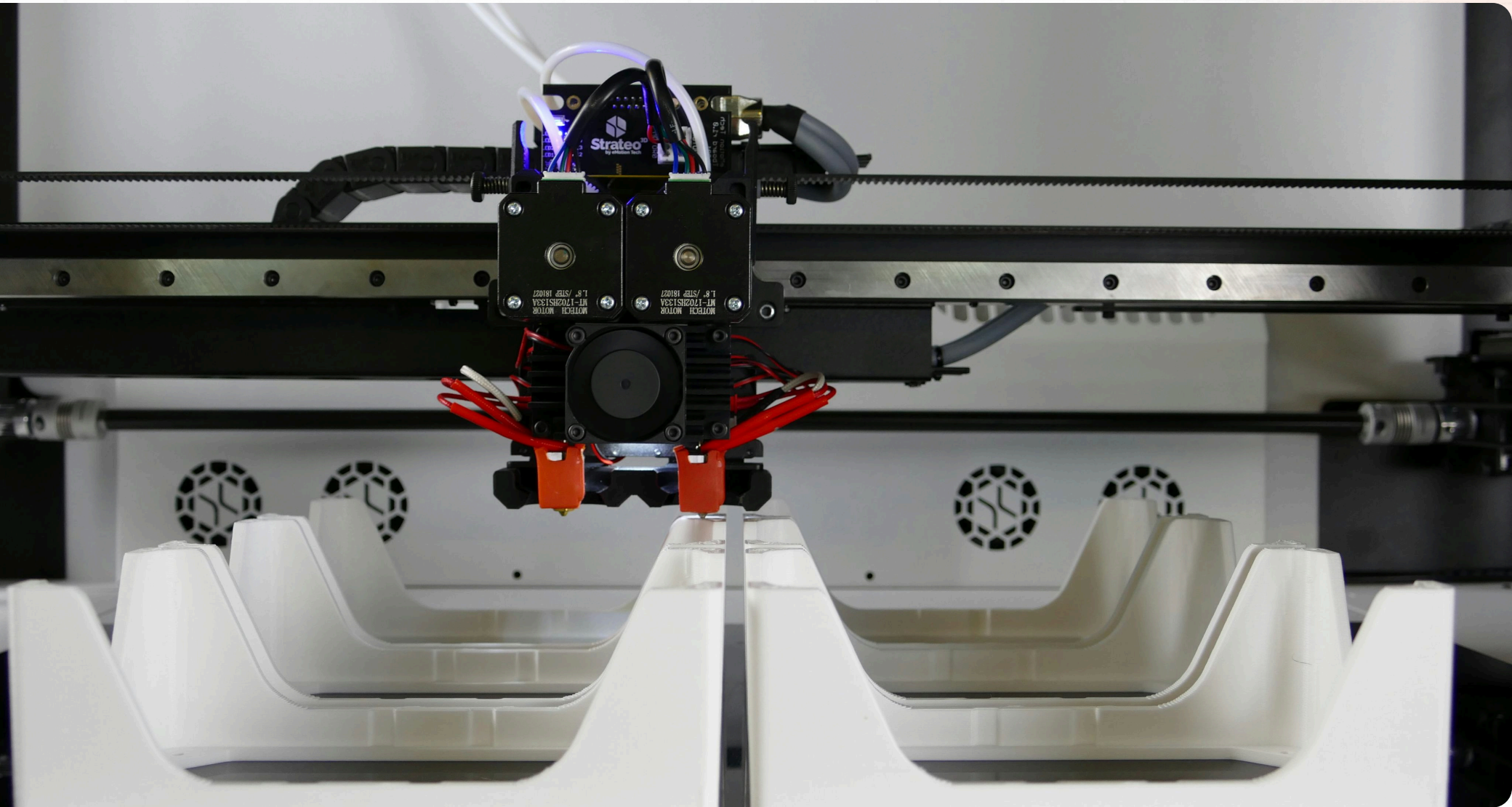


## A Customized Approach to Pricing and Product Design Needs

Every project we've ever done has been unique, which means pricing is as well. So much goes into creating your idea, product, design, etc. and it is important to us to take the time to understand your project goals, identify necessary activities, and scope appropriately to ensure success.

While we can't give definitive pricing, this resource provides transparency, giving you a clear picture of the scope and costs involved at each project stage. Before we get started, we'll provide detailed cost breakdowns upfront based on your project's specific activities. This ensures clarity and confidence at every stage.





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# How We Work

Our solutions don't come out of a box ready to plug and play.

With over 500 years of collective experience, we develop custom plans tailored to your unique needs, ensuring there are no surprises. We pride ourselves on identifying your challenges quickly and designing strategies to address them, always keeping your business's and product's needs as well as your personal goals and timelines in mind.

For more details about our approach, visit our [How We Work](#) page.

## Why You Can Trust Our Process

Our process follows a "Stage Gate" model, meaning there are defined points throughout the project where you can "sign off" to approve the direction and authorize us to proceed. These critical (and exciting!) moments allow us to make key decisions about the product and design direction together, ensuring your goals are met—and exceeded. At any point, we can evaluate progress and adjust the approach based on your feedback.

High-level steps of our process, which will be customized to fit your specific needs:



1. Research and Development (R&D)
2. Project Planning & Strategy
3. Brainstorming & Conceptualization
4. Industrial Design
5. Engineering & Development
6. Design Experiments
7. First Full Prototype
8. Prototype Testing
9. Revised Prototype(s)
10. Additional Testing & Customer Feedback



11. Optimization for Manufacturing
12. Contract Manufacturing Communication & Setup
13. Quality System Design & Implementation
14. Tooling Creation & First Articles
15. Manufacturing Scale-Up

**Note:**

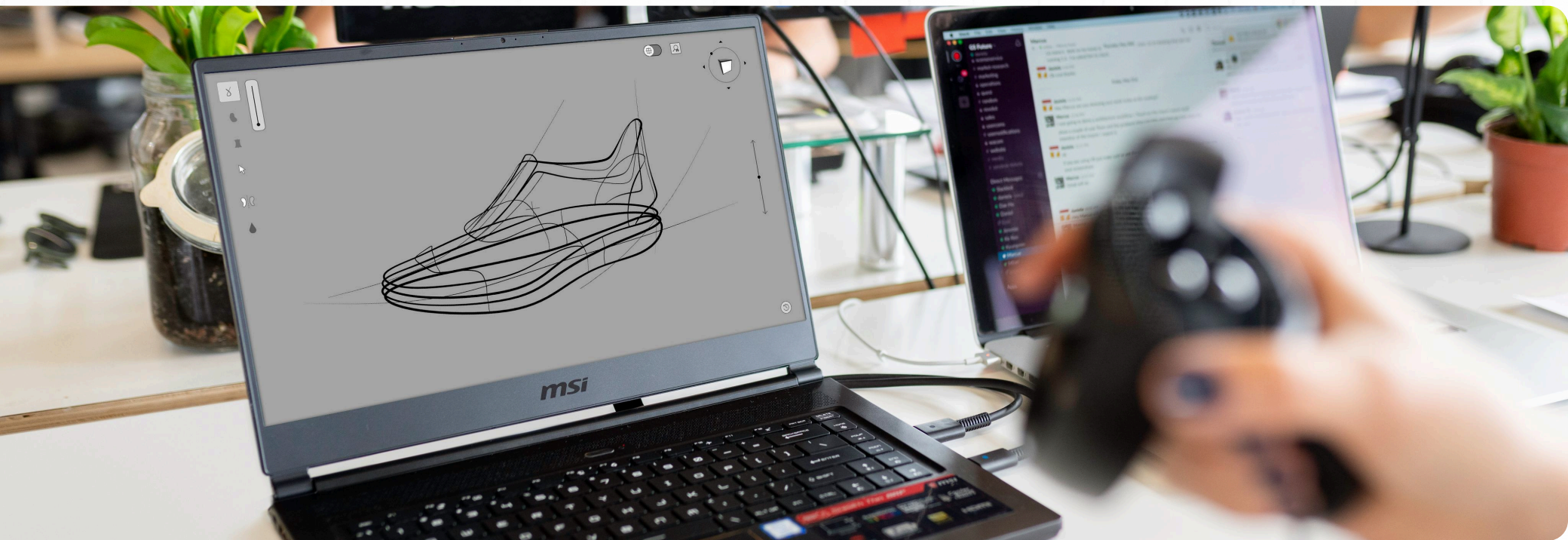
Not every step is required for every project.

We customize the process based on your unique needs, ensuring an efficient and effective approach that aligns with your goals.



# Estimated Costs & Key Activities by Category

Below are a few examples of the types of projects we handle, along with descriptions of the associated costs at various stages. These examples will help you understand the scope and pricing for different product development phases.



## 1. Brainstorming and Conceptualization

**Deliverable:**

A concept presentation with multiple design options, detailed descriptions, and recommendations for next steps.

**Key Activities:**

- Project kickoff and knowledge transfer sessions to align on goals.
- Team brainstorming sessions to generate possible concepts and solutions.
- Concept sketches exploring different directions, focusing on factors like materials, user experience, and functionality.
- Team evaluation and down-selection of concepts, identifying pros and cons for each option.
- Development of an **engineering strategy** for the next steps, including refinement, **prototyping**, and testing recommendations.

**Pricing Example:**

For an all-terrain adventure weapon, we delivered these services for **\$2,700**.

Description	Cost
Brainstorm, Idea Capture, Concept Presentation, and Engineering Strategy	\$2,700
Total	\$2,700



## 2. Consumer Product Development

Deliverable:

A prototype-ready design and production insights for a simple product with just a few plastic parts, ensuring a smooth transition to scalable production.

Key Activities:

1. Discovery Phase:

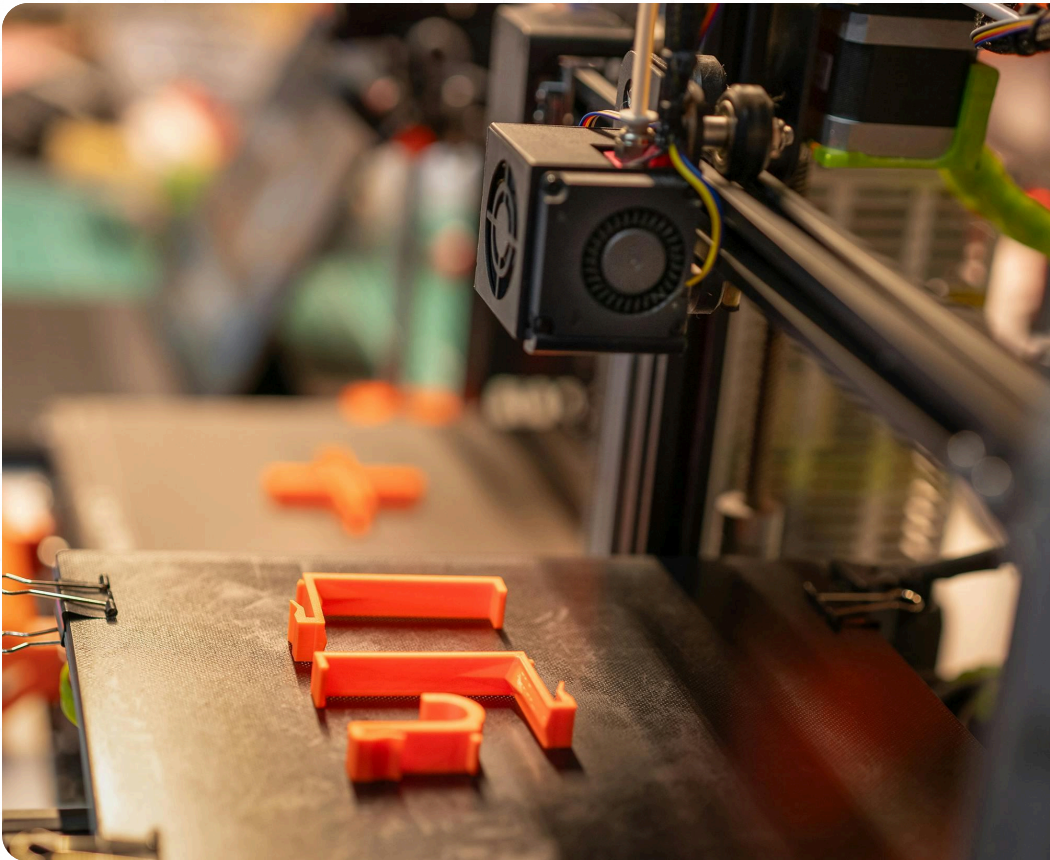
- Project kickoff and team alignment on goals.
- Define technical specifications for the product.
- Concept sketches for user experience and aesthetics.
- Brainstorming and evaluation of **engineering solutions**.
- Present and refine **design concepts** through discussions.

2. Implementation Phase:

- Iterate on **industrial design concepts** using sketches and CAD as needed.
- Research and source materials and components.
- Develop detailed **3D CAD models** for the chosen design path.
- Conduct design experiments to test subsystems like hinges or attachments.
- Create a Bill of Materials (BOM) and prepare files for prototyping.
- Provide prototype fabrication quotes based on detailed designs.

3. Prototype Phase:

- Source and fabricate components.
- Assemble and test **prototypes** for functionality.
- Review prototypes with the client and deliver them to the client.



Pricing Example:

For an eco-friendly utility carrier, we provided these services for **\$12,000**.

Description	Cost
Industrial Design, Concept Development, Mechanical Engineering (Fixed Price)	\$9,500
Prototype Development (Estimate)	\$2,500
Total	\$12,000



## 3. Consumer Product Development

### Deliverable:

Project strategy, concept and product design, prototype, testing, creating a scalable, next-generation tracking device ready for mass production.

### Key Activities:

#### 1. Discovery Phase:

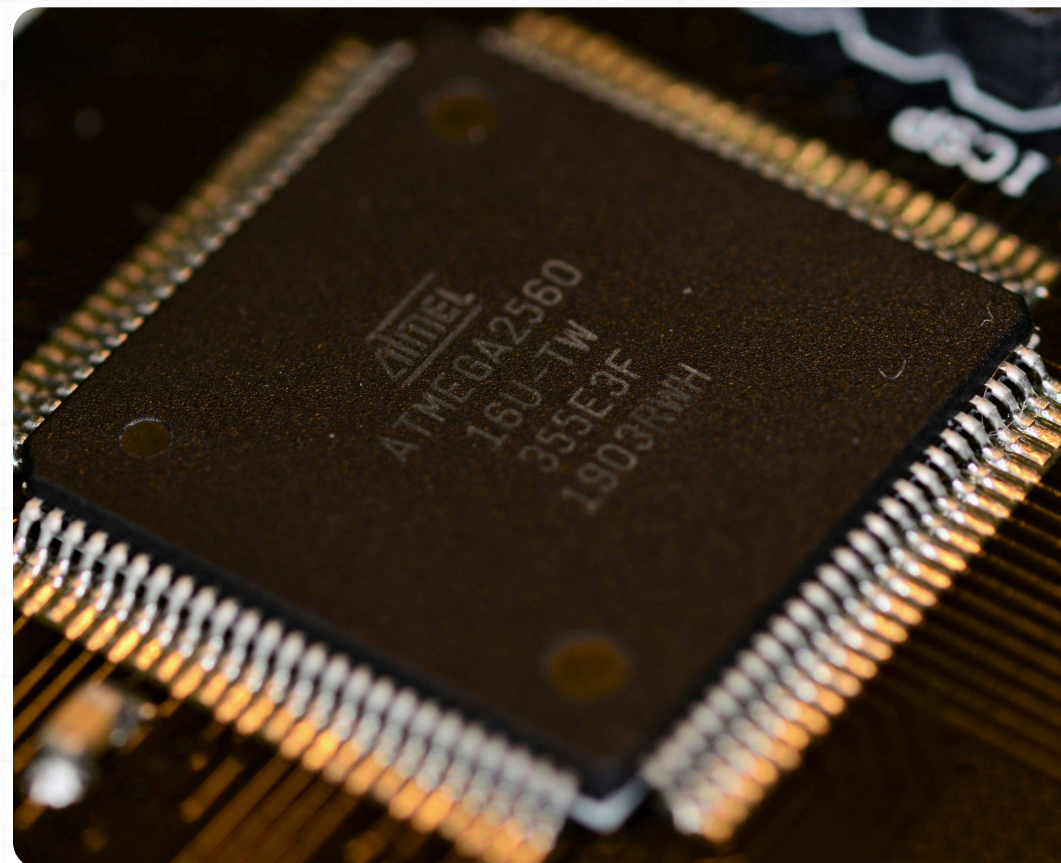
- Held kickoff sessions to align on goals and project requirements.
- Defined technical specifications and initial concept designs, focusing on tamper detection and aesthetics.
- Brainstormed **engineering concepts** for tamper resistance and device functionality.
- Developed **electrical/software** block diagrams and explored wireless communication options.
- Conducted battery life calculations based on user profile for expected usage.

#### 2. Implementation Phase:

- Developed additional industrial design concepts and **3D CAD models**.
- Researched and sourced components/materials to meet technical specifications.
- Designed custom PCB for screen, sensors, GPS, wireless communication, and power management.
- Selected materials for durability and IPXX water resistance.
- Developed **firmware** for GPS tracking, data transfer, and mobile phone tethering.
- Refined 3D CAD model and prototype design files.
- Conducted subsystem tests before full system integration.
- Created BOM and provided quotes for prototype fabrication.

#### 3. Prototype Phase:

- Sourced components and fabricated custom parts in-house.
- Assembled and tested **prototypes** for quality and functionality.
- Held reviews to gather feedback and revised prototype as needed.
- Delivered revised prototypes for further testing and validation.





4. Design for Manufacturing and Assembly:

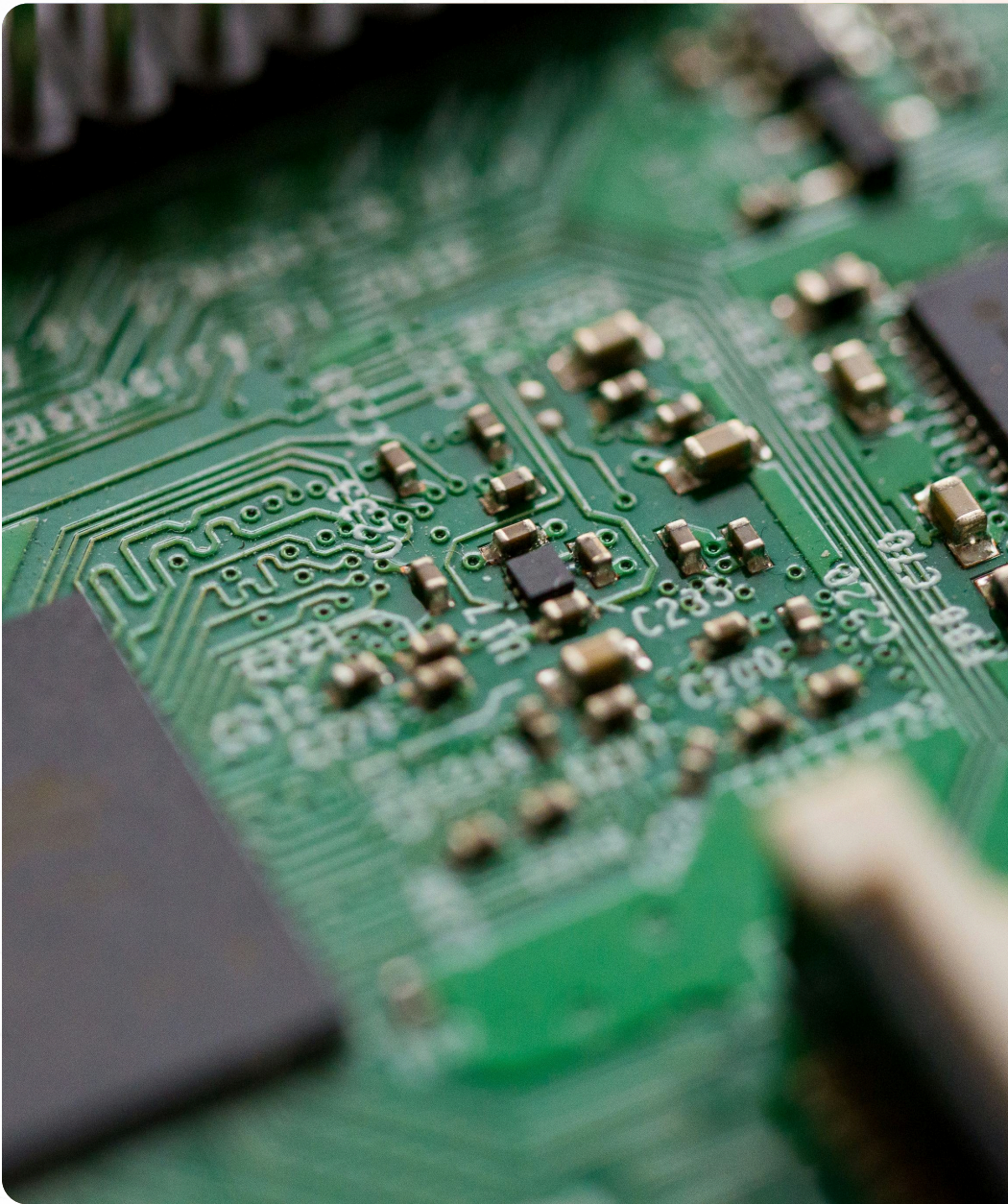
- Optimized design for manufacturability, reducing production costs.
- Created 2D manufacturing drawings and coordinated with manufacturers for tooling and pricing.
- Incorporated supplier feedback to refine tooling and production methods.
- Sourced off-the-shelf components for volume and cost efficiency.
- Developed quality control documentation for parts and assembly.
- Supported FCC approval process by preparing and submitting necessary documentation.

5. Manufacturing Setup and Support:

- Reviewed first articles from tooling trials for design and functional compliance.
- Managed ongoing support for contract manufacturers to ensure smooth production.

Pricing Example:

For a smart tracking wearable, our costs ranged from \$489,000 to \$590,000.



Description	Low Estimate	High Estimate
Project Strategy, Specification, First Concept Development (Fixed Cost)	\$35,000	\$35,000
Concept Iteration, Engineering and Implementation	\$382,500 (1700 hours)	\$450,000 (2000 hours)
Prototype Development and Iteration	\$40,000	\$65,000
Design for Manufacturing and Assembly (Phase 2)	\$31,500 (140 hours)	\$40,500 (180 hours)
Manufacturing Setup and Support (Phase 3)	TBD	TBD
Total	\$489,000	\$590,500



# 4. Medical Device Product Design

**Deliverable:**

A functional medical device prototype created during Phase 0 prototyping. This phase focuses on concept and functionality testing and does not include design controls or adherence to a Quality Management System (QMS).

**Key Activities:**

1. **FDA Regulatory Assessment, Predicate Device, Gap Analysis:**

- Research and analysis of the device’s classification, with recommendations for FDA approval paths.

2. **Discovery Phase:**

- Kickoff sessions, technical specifications, concept sketches, and brainstorming.
- Evaluation and refinement of engineering concepts and materials sourcing.
- **Engineering** and **design concept** presentation with pros and cons for each selected path.

3. **Implementation Phase:**

- Iterative industrial design, mechanical engineering, and **3D CAD modeling**.
- Bill of Materials (BOM) and necessary design files for prototype fabrication.

4. **Prototype Phase 0:**

- Component sourcing, fabrication, and assembly of the **prototype**.
- Quality checks and testing for basic functionality.
- Please note: This phase does not include design controls or QMS documentation, as it focuses solely on early-stage prototyping to refine the device concept.

**Navigating Medical Device Development**

Developing a medical device for the US market requires specialized knowledge of ISO 13485, FDA regulations, and biomedical engineering. Choosing a development partner with expertise in these areas ensures compliance and success. Learn more about our process [here](#).



**Pricing Example:**

For a medical procedure sealant, our services cost **\$36,675**.

Description	Cost
Optional FDA Regulatory Analysis and Strategy	\$3,000
Project Strategy, Specification, Concept Development, Engineering Architecture (Fixed Cost)	\$8,800
Concept Iteration, Engineering and Implementation (Estimate)	\$18,375
Prototype Development (Estimate)	\$6,500
Total	\$36,675



# 5. Custom Electrical and Software Systems

Deliverable:

Functional prototypes with production readiness.

Key Activities:

1. Discovery Phase:

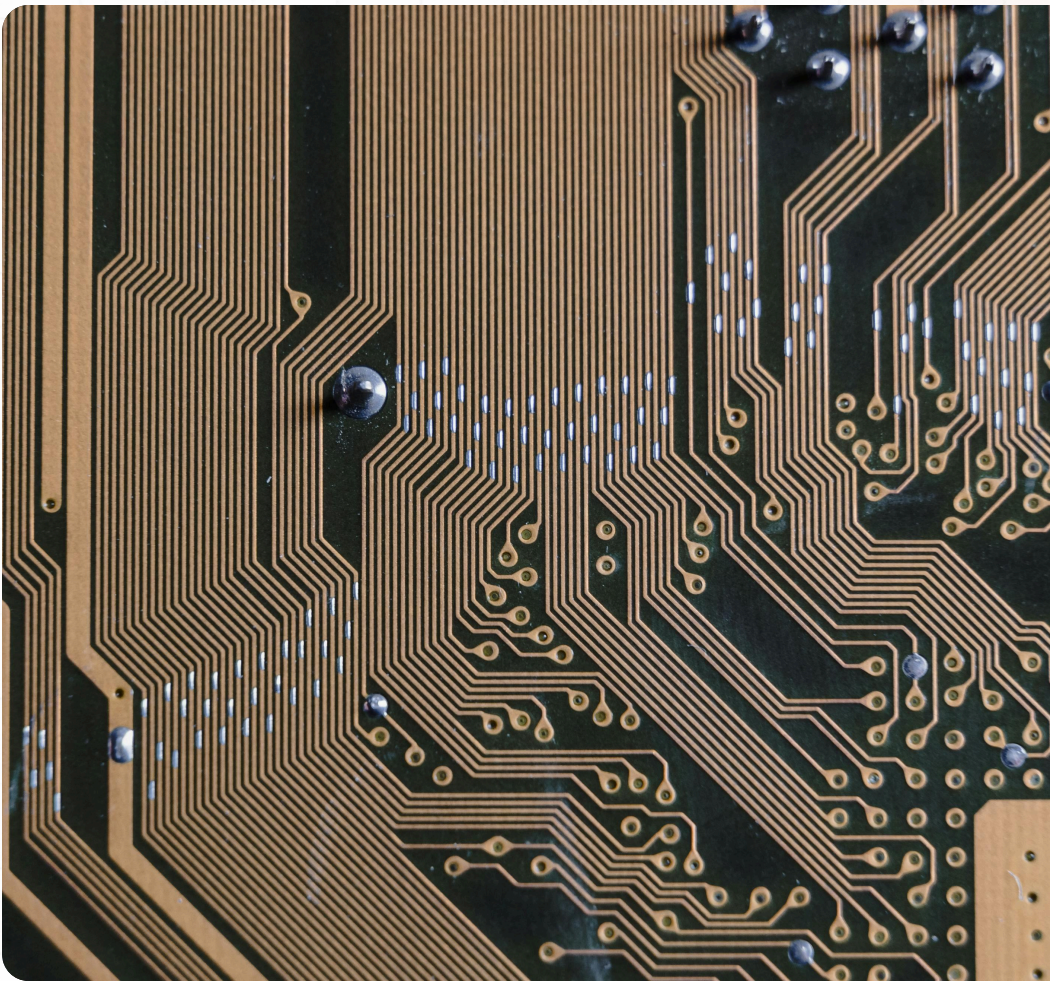
- Kickoff and knowledge transfer sessions.
- Define technical specifications and create initial design concepts focusing on user experience, interaction, and aesthetics.
- Develop electrical and software block diagrams for system components and power output.
- Brainstorm and evaluate **engineering concepts**, including power loss calculations for the boost circuit.
- Present refined **design concepts** with pros/cons and estimate for the next phase.

2. Implementation Phase:

- Source components and materials to meet system specifications.
- Design custom flex circuit, mechanical components, and **firmware** for power control.
- Create **3D CAD** models and test subsystems before integration.
- Generate Bill of Materials (BOM) and design files for **prototyping**.
- Provide a quote for prototype fabrication.

3. Prototype Phase:

- Source components, fabricate custom parts, and assemble prototype.
- Conduct quality checks and basic functionality tests.
- Review prototype (in-person or via video) and deliver prototype.



Pricing Example:

For a universal power dock, the estimated cost was **\$56,500 to \$73,000**.

Description	Low Estimate	High Estimate
Project Strategy, Specification, First Concept Development (40 hours)	\$9,000	\$9,000
Concept Iteration, Engineering and Implementation	\$40,500 (180 hours)	\$54,000 (240 hours)
Prototype Development	\$7,000	\$10,000
Total	\$56,500	\$73,00





# Ready to Bring Your Vision to Life?



Understanding the costs involved is just the first step in bringing your idea to life. At Kickr Design, we work closely with you to ensure your project is executed efficiently, within budget, and with the expertise it deserves.

[Contact us today](#) to schedule a consultation and receive a customized quote based on your project goals. We're excited to partner with you and help turn your vision into reality!