



Unity™

Imaging Platform

A proven, modular platform that simplifies development from prototyping to production.

www.poci.com/unity



The Unity Imaging Platform

The journey to commercialize a medical device typically spans 3 to 7 years, a timeline that intensifies the pressure on companies aiming to bring iterative advancements to market every 2 to 3 years. In the rapidly evolving field of endoscopy, where demands for smaller devices, superior image quality, and single-use solutions increasingly dominate, the challenge to shorten time-to-market is more pressing than ever.

Precision Optics Corporation has developed a groundbreaking approach to streamline this process. The Unity Imaging Platform, helps integrate and simplify your journey to market. Leveraging over a decade of technological innovation and intellectual property, Unity offers a suite of imaging platforms with diverse architectures, crafted to accelerate development timelines without compromising quality or compliance.

These pre-engineered imaging trains, spanning from tip to display, enable rapid customization tailored to specific needs. Building on the Unity Platform pre-screened reference designs not only facilitates later regulatory compliance and mitigates development risks, it also positions customers for seamless transitions to future product iterations.

Unity transforms the journey to market by integrating precision, reliability, and efficiency, helping endoscopy innovators meet the demands of tomorrow, today.

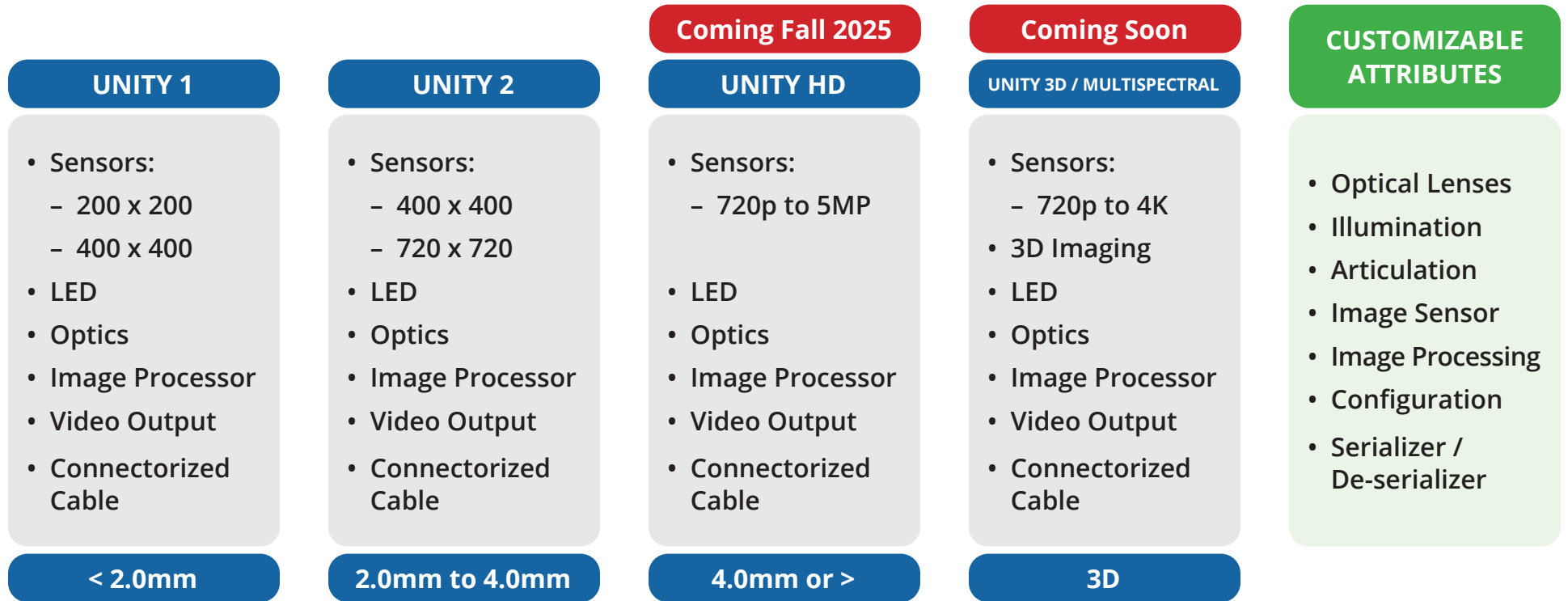




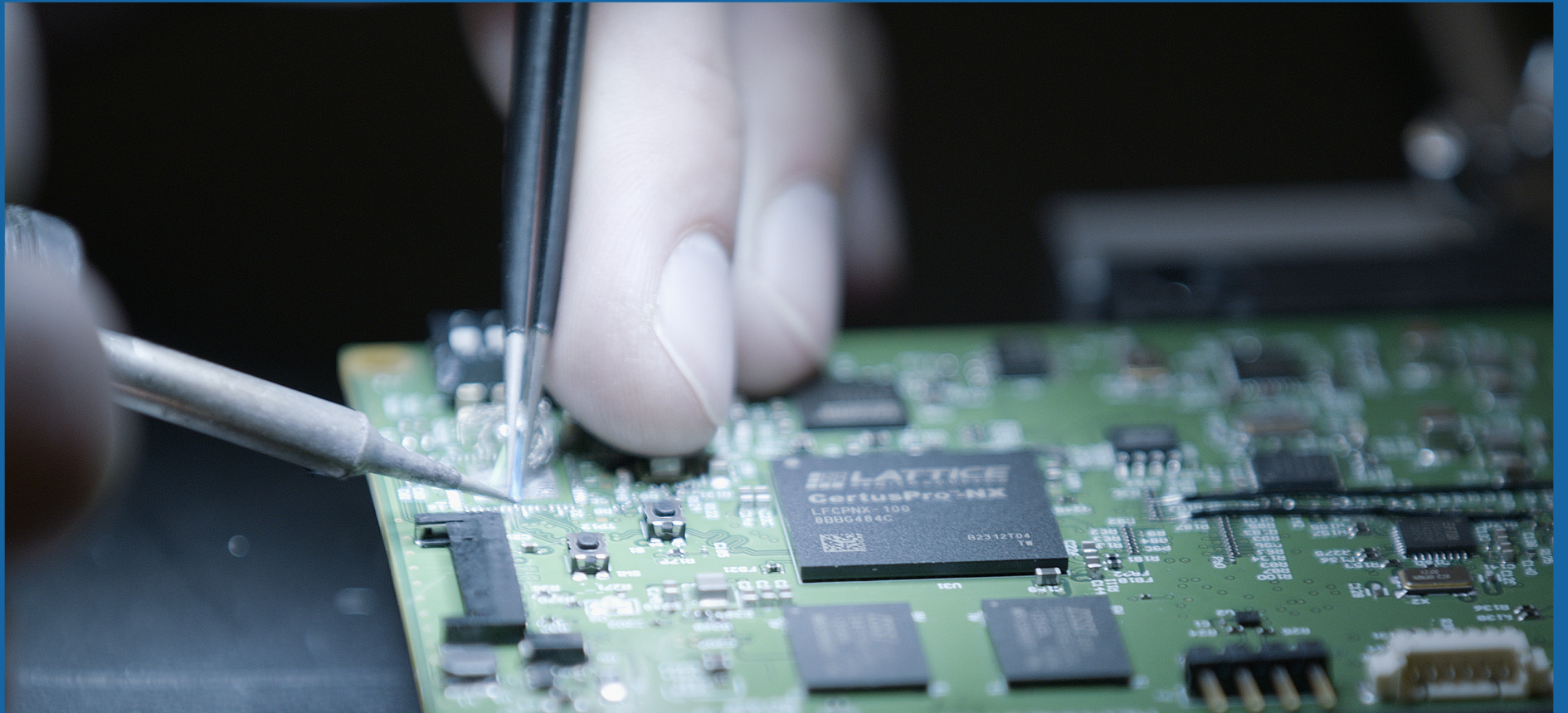
Design Innovation

Multiple Platforms With Configurable Imaging Technology

At Precision Optics Corporation, we've harnessed decades of expertise to create multiple platforms featuring configurable imaging technology. Our modular approach allows seamless customization to meet specific size and image requirements.

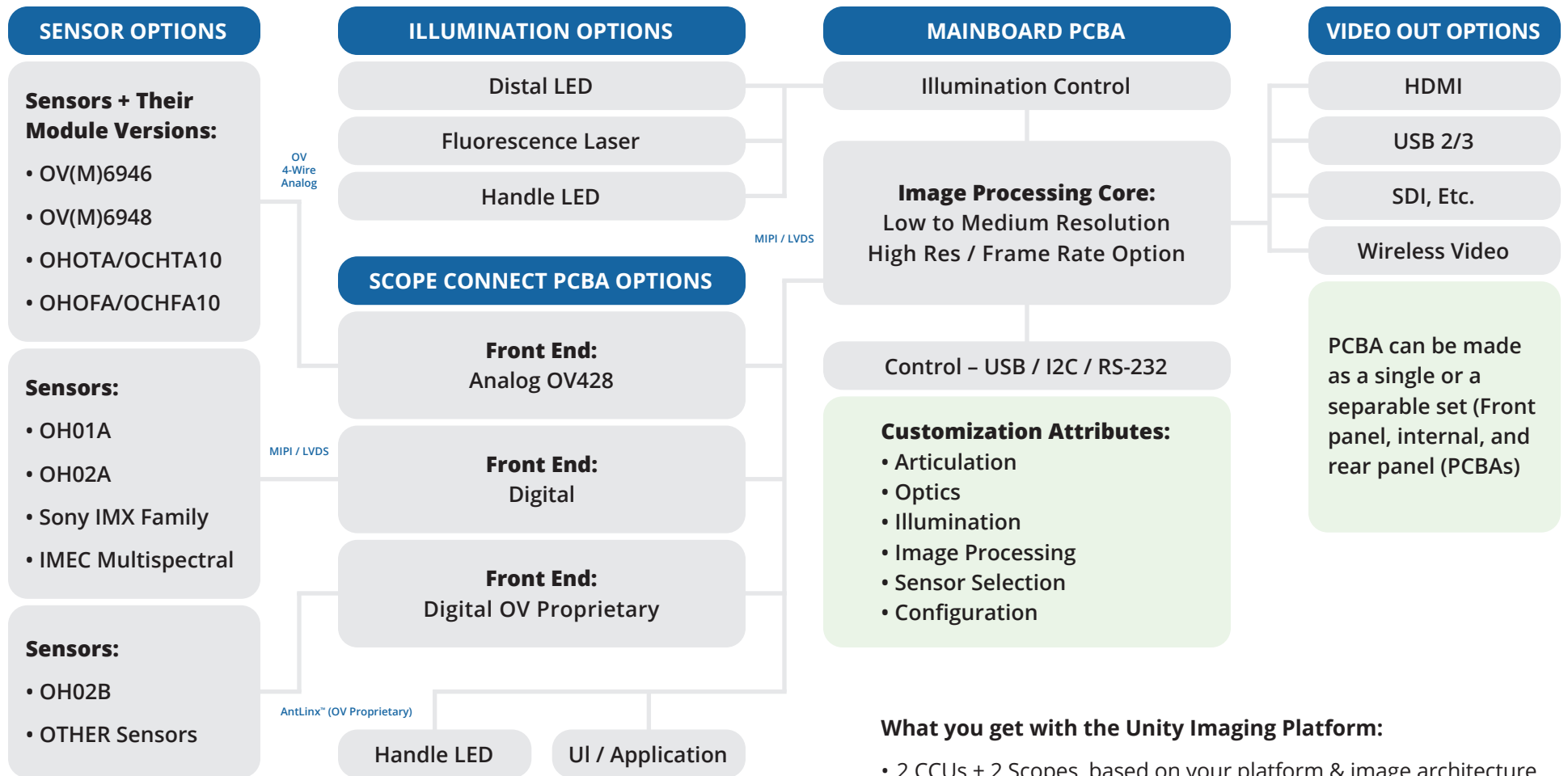


- Each platform requires a purchase of a Unity Platform Fee, which is included in the Product Development quote to refine imaging configuration and customizations
- Each Platform Document Package comes with limited use rights



Proven Architectures

Unity Imaging Platform Architecture



What you get with the Unity Imaging Platform:

- 2 CCUs + 2 Scopes, based on your platform & image architecture
- A project planning phase, trade study, or project customization
- A baseline prototype accelerating initial Product Design and System Integration activities in weeks instead of months



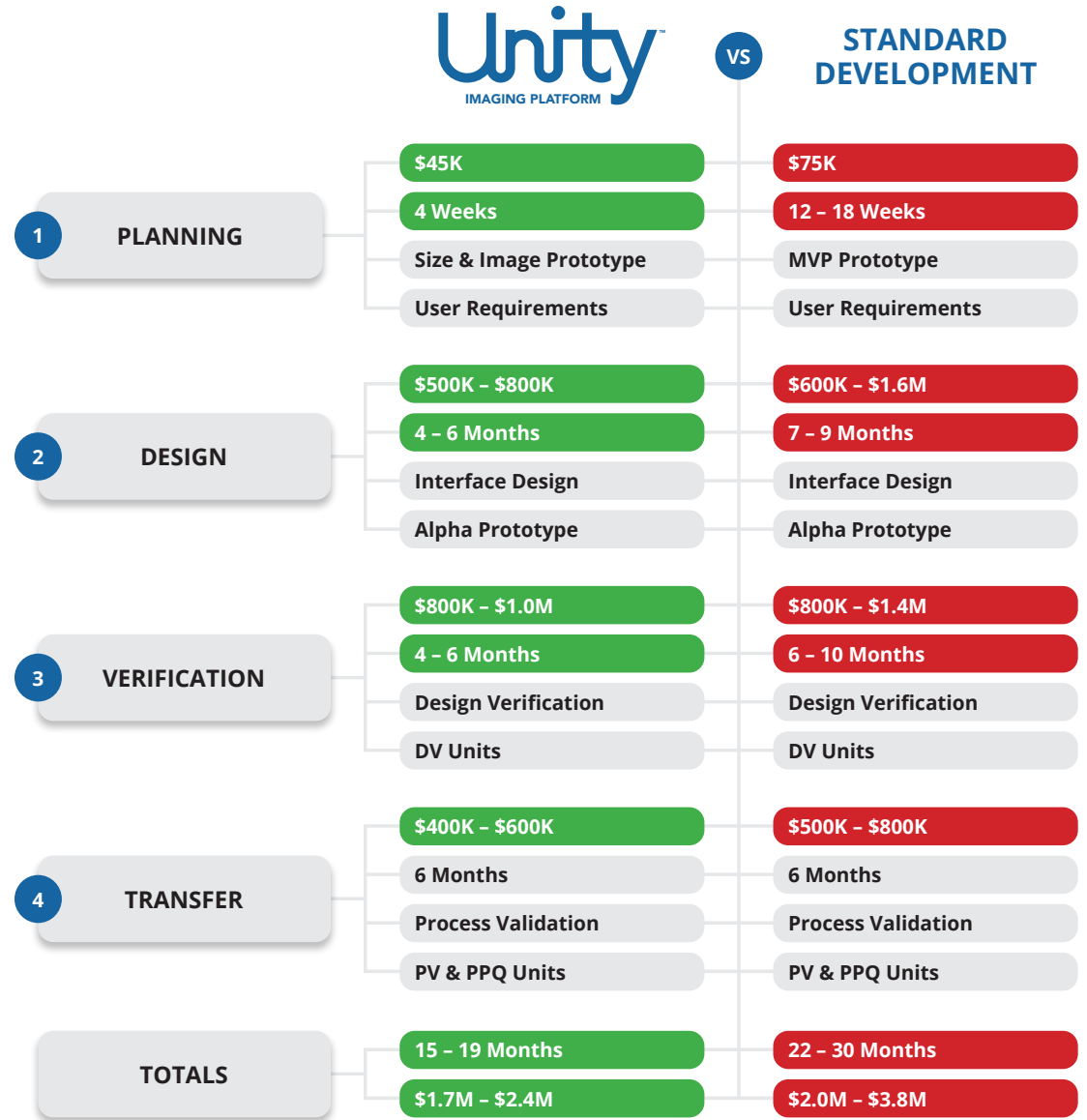
Reducing Risk, Cost
& Time To Market

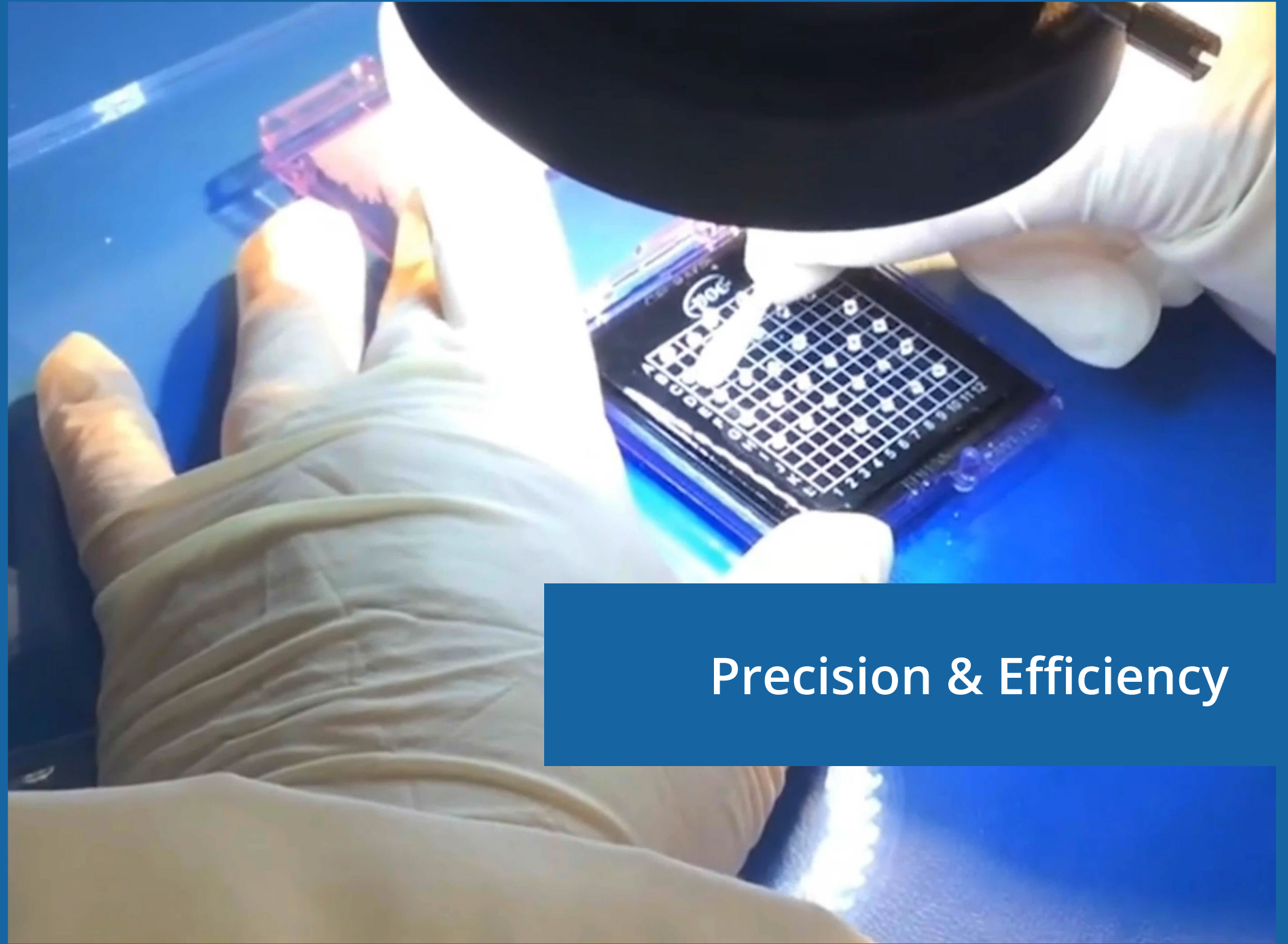
Product Development Comparison

The Unity Imaging Platform is a modular solution that redefines how products are developed. Designed for efficiency, Unity streamlines every stage, from prototyping to production, outpacing standard development processes.

With its customizable architecture and proven performance, the Unity Imaging Platform eliminates traditional bottlenecks, allowing you to bring products to market faster while maintaining the highest standards of quality. Transform your approach and experience a new era of innovation.

- Estimates Only: Individual project costs vary with customization and complexity
- Standard Development estimates based on multiple past standard development programs at Precision Optics Corporation
- Reduced lead time assumes firmware development for platform can launch early in prototype phase due to CCU availability





Precision & Efficiency

Precision Optics Corporation Overview

Precision Optics Corporation was Founded in 1982, and has been a pioneer in the design and development of advanced optical components and systems for medical, industrial, and military applications. With over four decades of expertise, we are dedicated to delivering innovative solutions rooted in comprehensive design for manufacturability.

Our specialization includes the design, development, and manufacturing of these products:

- Optical Components
- Illumination Systems
- Optical Assemblies
- Endocouplers
- Imaging Systems
- Specialty Endoscopes
- Image Processing
- Fiber Optic Assemblies

From cutting-edge CMOS endoscopes to intricate opto-mechanical sub-assemblies, our capabilities cater to the most demanding micro-optics and optical imaging technologies. Backed by a team of highly experienced optical engineers and scientists, we provide an unparalleled edge in advancing precision and miniaturization. With locations in central Massachusetts, Maine, and Texas, Precision Optics Corporation supports projects from prototype development through mass production, offering the scalability and industry expertise to meet your most complex requirements.

We Create Advanced Design for Advanced Applications:



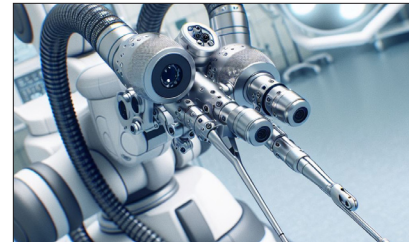
Micro-Optics

Micro instrumentation and improved visualization create better outcomes.



Aerospace & Defense

Reduce SWaP and increase performance with smaller optical assemblies.



Robotic Surgery

CMOS or fiber scopes from a pioneer in robotic surgery instrumentation.

Advantages & Achievements:

- More than 40 years of experience in design, development, and production of state-of-the-art optical components and systems
- 1983 – Cidex™ Soakable Endocoupler was developed
- Developed the first commercially available stereoendoscope
- Patented superior durability and easy-to-repair sinusscopes and arthroscopes
- Design and manufacture of micro lenses to 0.37 mm and prisms to 0.10 mm
- Design, prototyping, and manufacturing all under one roof
- Rapid design and prototyping
- Recipient of US Government Small Business of the Year award
- Visualization systems created for spine, neuro, cardiac, thoracic, orthopedic, ENT and ophthalmic specialties
- FDA registered and FDA QSR Compliant, ISO 9001 and ISO 13485 registered – Products are approved for CE marking

Precision Optics continues to innovate and invest in medical device optical systems

Precision Optics Corporation Overview

Design for Manufacturability

This part of our process is often thought of as a discrete step between prototype and high-volume production to optimize manufacturability and ensure a product's ability to scale. Particularly for medical devices, design for manufacturability is far more than the ability to scale – your product's viability in the market depends upon it. At Precision Optics Corporation, design for manufacturability has always meant a comprehensive approach to optical engineering: from ideation through optical design and prototyping to metrology and quality assurance, our manufacturing processes are designed to meet:

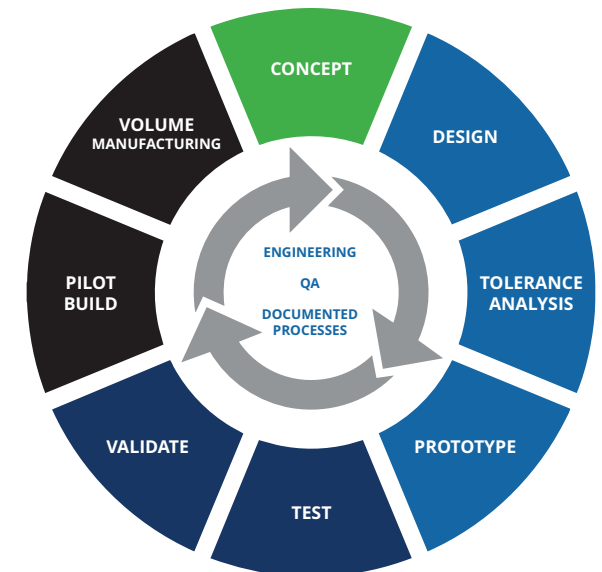
- Cost constraints, especially critical for single-use medical devices
- Imaging resolution targets, from prototype through high volume
- Quality standards, through consistent assembly processes & testing
- FDA regulations, including traceability and documentation

Starting with ideation, our engineering team works with yours to produce micro-optics and optical assemblies that enable smaller, higher performing systems.

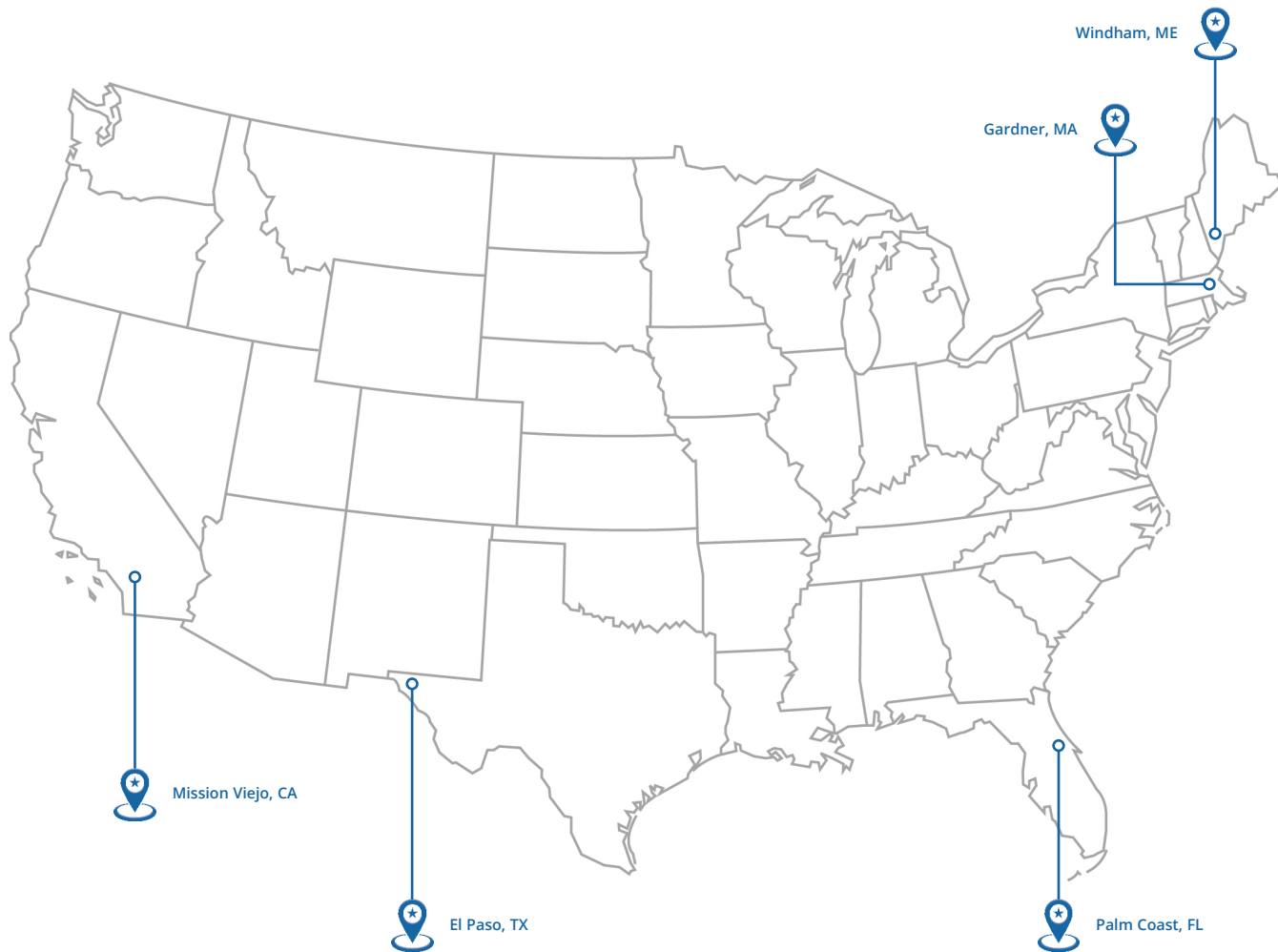
The Precision Optics' Advantage

Experience makes the difference. We work with your team to deliver designs and prototypes to your exacting standards and on your timeline. With our vast knowledge of manufacturing techniques and processes and design teams working side by side with fabricators, you can be sure that the design for your opto-mechanical system will be maximized for efficient and scalable manufacturing.

Planning | Design | Verification | Transfer



Precision Optics Corporation Overview



PEOPLE

- ~ 83 Full Time Employees
- ~ 6 Business Development
- ~ 27 Technical
- ~ 38 Production

FACILITIES

- 5 Locations
- 3 Production Facilities:
 - Gardner, MA
 - Windham, ME
 - El Paso, TX
- 46,000 sq ft
- In-House Machine Shop
- In-House Optics Shop
- Clean-Room Environments

MARKETS

- 65% – Medical Device
- 25% – Defense / Aerospace
- 10% – Other

SERVICES

- Optical Systems Design
- Digital Imaging
- Manufacturing
- Supply Chain Partner



**Big Advances Require
Innovative Development**



Let's Talk!

We're ready to connect with you to learn more about your unique projects and mirco optics challenges.

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