

# Jabil Optics

Condensed Overview

**JABIL**



# The Power of Jabil

1966

FOUNDED IN  
MICHIGAN, USA

54M

SQUARE FEET  
OF MANUFACTURING  
SPACE

100+

SITES  
WORLDWIDE

260K

DEDICATED  
EMPLOYEES



TENURED  
MANAGEMENT TEAM

\$33.5B

REVENUE  
IN FY22

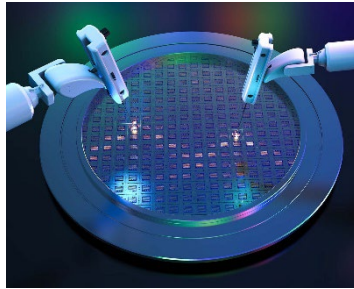
# Markets Served



Networking & Telecommunications



Cloud, Compute & Storage



Capital Equipment



Industrial & Energy



Building Technologies



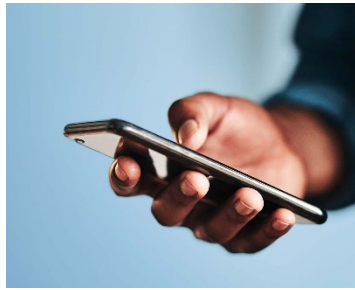
Safety & Security



Digital Print & Retail



Smart Home & Appliances



Consumer Devices



Optics



Automotive & Transportation



Defense & Aerospace



Healthcare



Packaging

# Jena, Germany Site Overview

Strategically located in the heart of Germany's Optics valley, Jabil's Optical Technology group in Jena provides in-depth optics knowledge to customers worldwide.

OPERATIONS  
MANAGER

Pascal  
Grahnert

110  
EMPLOYEES

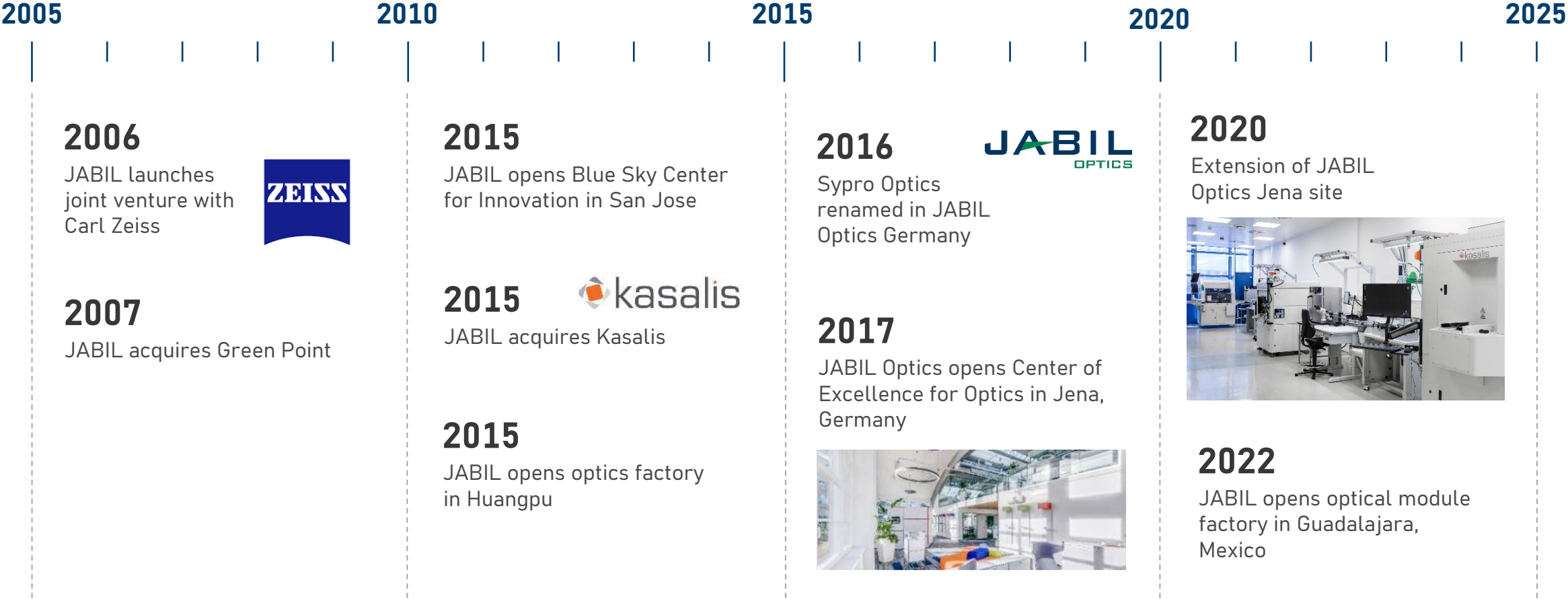
YEAR  
ESTABLISHED

2006

62,000  
SQUARE FEET

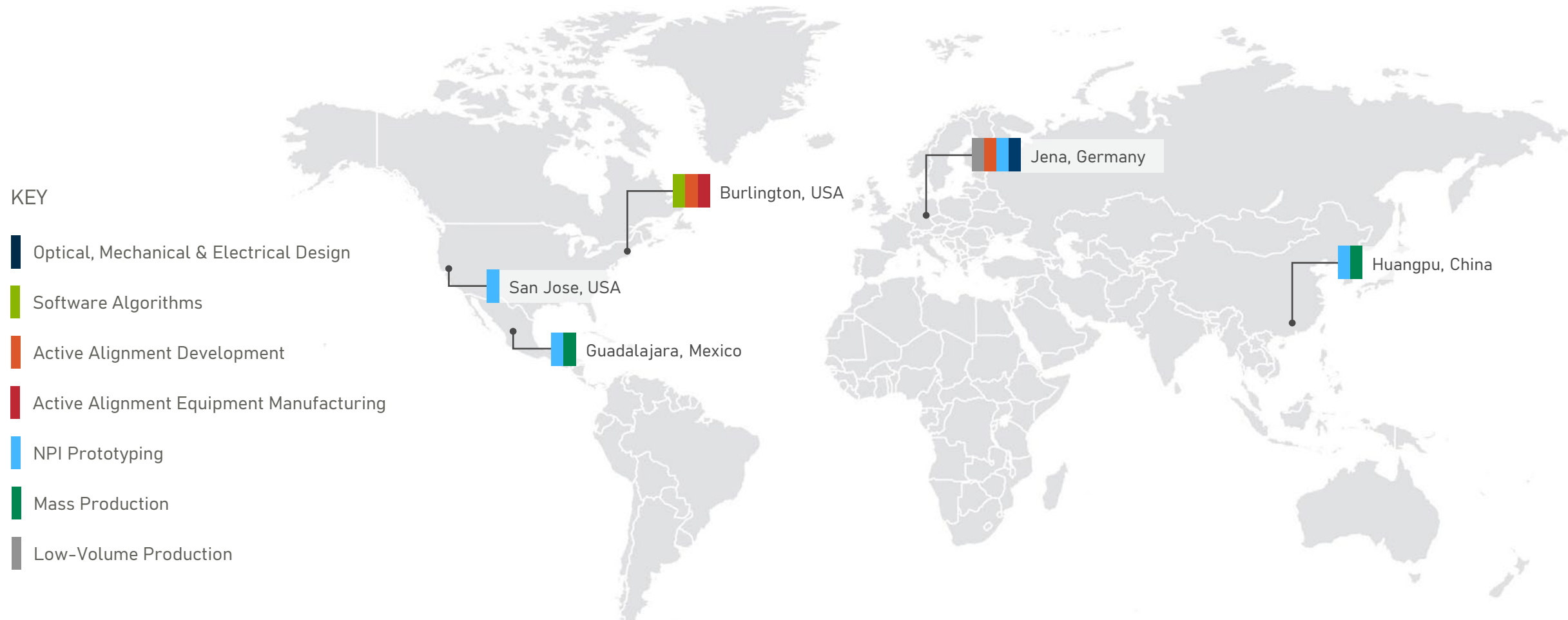


# How We Became What We Are Today



# What Makes Us Engineering Experts

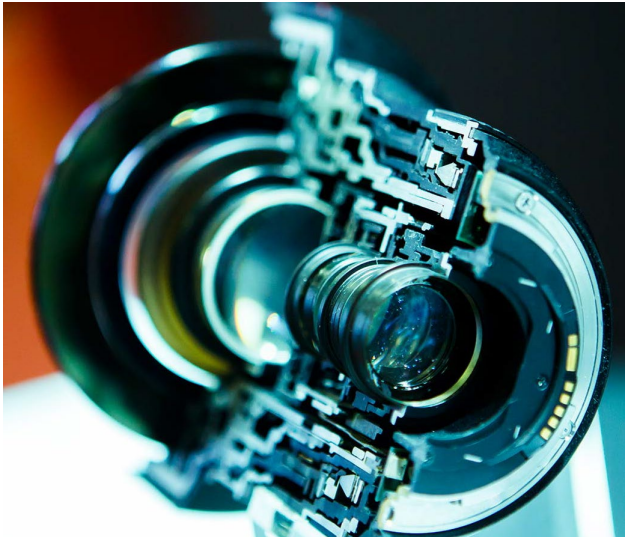
Strategic acquisitions & investments in best-in-class capabilities have built one of the world's strongest optical engineering team with formidable design and mass production capabilities.



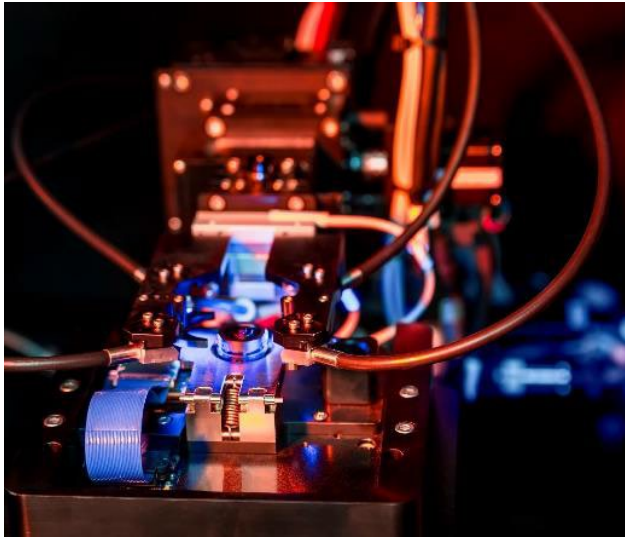
# From Sketch to Mature Product



INNOVATE



DESIGN



PROTOTYPE



MANUFACTURE  
LOW/HIGH VOLUME

# What Makes Us Special



**20+ YEARS** of experience in best-of-class design of opto-electronical modules



**FAST, FLEXIBLE** and **WELL-EQUIPPED PROTOTYPING** within design implementation (EDT & EV1)



Deep **UNDERSTANDING** of customer requirements



Full range of design capability and manufacturing processes **WITHIN ONE COMPANY**



Turnkey **ACTIVE ALIGNMENT** solutions provider



**GLOBAL** supply chain network





# Broad Optics Experience

WE PROVIDE

Opto-Mechanical Design

Development & Integration

Full Product Design

Productionization/  
Industrialization  
Deployment

Serial Production,  
High Precision Assembly  
Deployment

FOR



PROJECTION SYSTEMS



IMAGING SYSTEMS



USED IN



AR & VR



LiDAR



3D SENSORS



ADVANCED CAMERA SYSTEMS

# Your Trusted Partner For Superior Products



World Class **OPTICAL DESIGN**  
in Leading Innovation Centers



Full Portfolio of **ACTIVE & PASSIVE ASSEMBLY TECHNOLOGIES**



Uniquely Qualified Team  
of **EXPERTS** & PhDs



Active Alignment Process Transfer into  
Jabil High UPH Machines



**MINIATURIZATION** Expertise



Custom Test Equipment



**IP PROTECTION**



Custom Algorithms for Production & Test



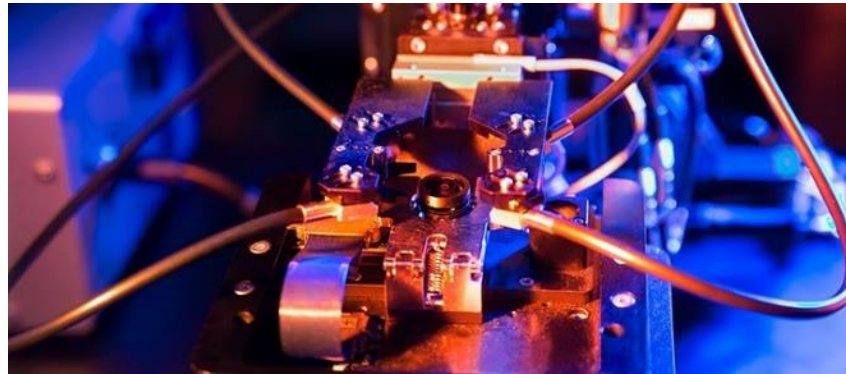
Global **SUPPLY CHAIN**



**FAST PROTOTYPING & SCALABLE MANUFACTURING**

# Our Value For You

We design **products**, **processes** and **equipment**







for **low volume / high mix** and **high volume** production.








# Markets We Serve






## CONSUMER

-  AR / VR / MR Glasses
-  Action Cameras
-  Facial Recognition
-  Embedded Cameras






## AUTOMOTIVE

-  LiDAR
-  ADAS Cameras
-  Smart Headlamps
-  Head Up Display & In-Car Projection
-  Precision Farming

## MEDICAL

-  Endoscope Cameras
-  Medical Diagnostics
-  Patient Monitoring

## INDUSTRIAL

-  Robotic Sensing
-  ToF Sensors
-  Bar Code Scanners
-  Authentication
-  Smart Home Cameras

# Flexible Design Capabilities to Complement Your In-House Capabilities

Increasing speed-to-market by designing first-time manufactured products.

## ENGINEERING OPTIMIZATION



- Manufacturing & Quality Cost Avoidance (DFx)
- Component Engineering, RoHS, WEEE, Obsolescence
- NPI Engineering Support
- Product Teardown

## ENGINEERING SERVICES



- Working for Customer Engineering Teams
- Internal Capacity Supplements
- Outsourced Engineering Layout, Verification
- A La Carte Services (OD, MD, EE, TE, ME, SW, V&V)

## JOINT PRODUCT DESIGN



- Working with Customer Engineering Teams
- Technical Specification
- Full Product or Subassembly Design
- Assembly Process
- Product Builds
- Product or Subassembly Test & Verification
- Industrialization & Mass Production Transfer

## FULL PRODUCT & SUBSYSTEM DESIGN



- Full Product & Subsystem Design Ownership
- Strategists & Researchers
- Partner Development
- Industrial Design
- Quality & Regulatory Experts
- Product Specification
- Product Design & Qualification
- Product Test, Verification & Certification Support
- Industrialization & Mass Production Transfer

JABIL ENGAGEMENT & INCREASED VALUE ADD

# Core Capabilities

Capabilities to help our clients define What to Make + Why and How to Make + Scale It



Design for Excellence



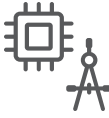
Opto-Mechanical Design



Advanced Optical Design



Product Verification & Test



Electrical Design



Process Development



Industrialization & Transfer



Quality Management



Agile Product Design



Supply Chain Management



Fast Prototyping & Low Volume Manufacturing



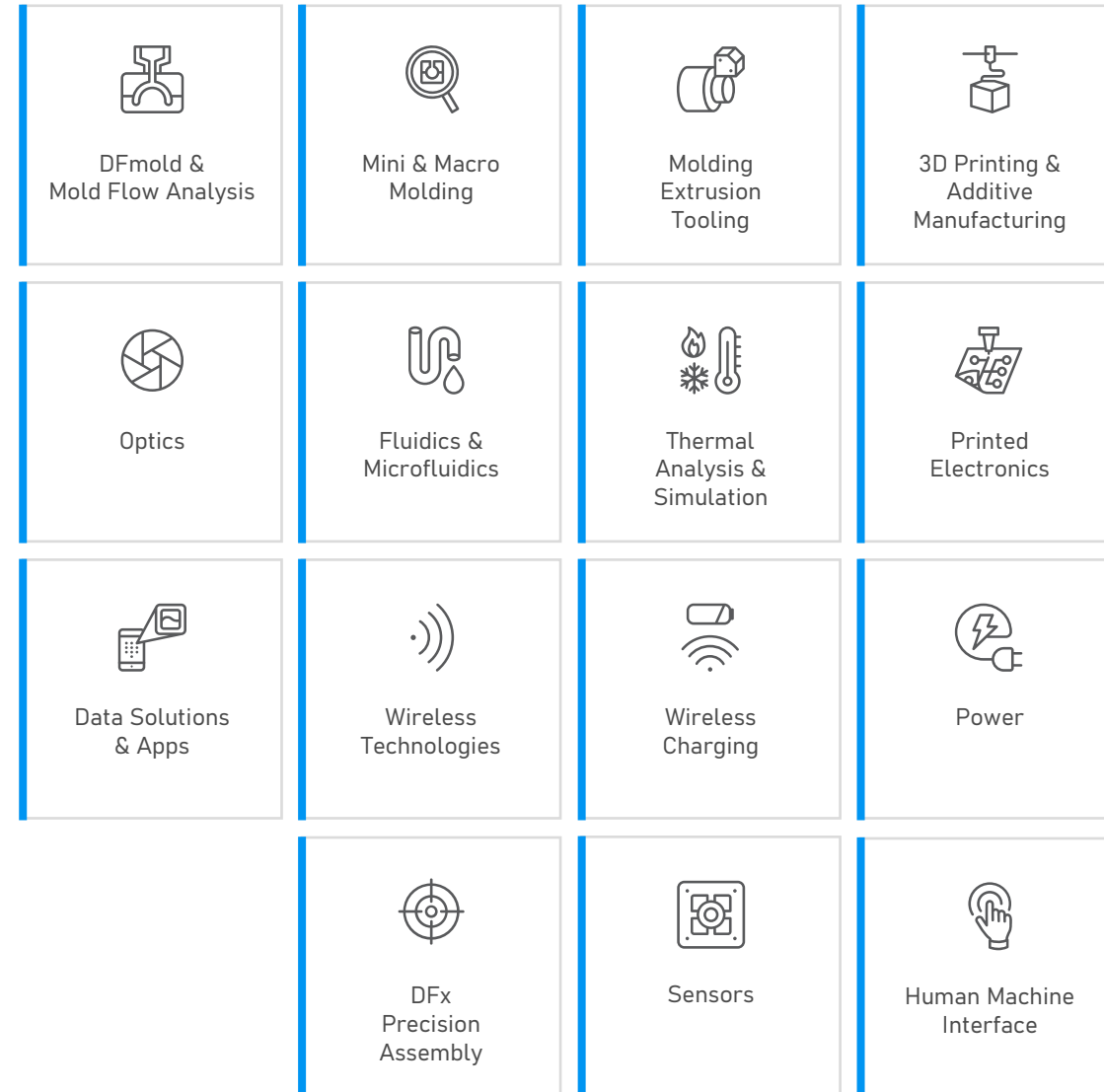
Joint Product Design



Active Alignment

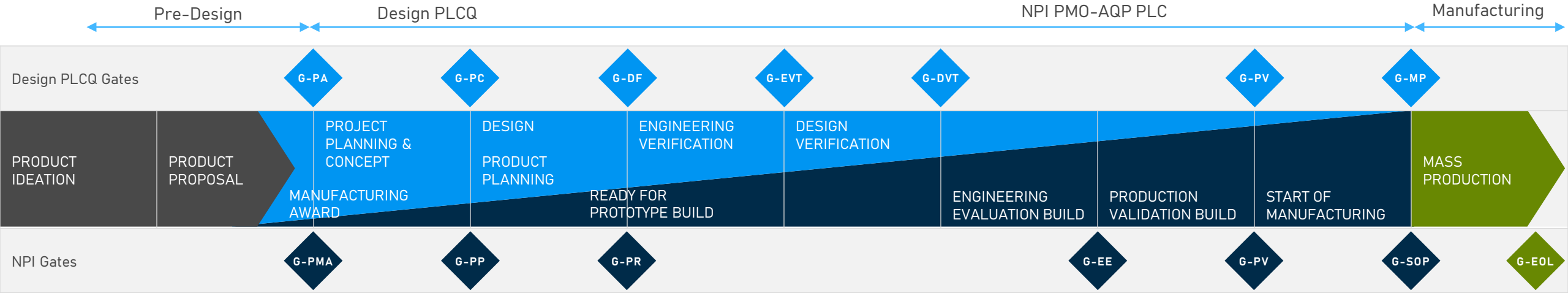
# Leveraging Jabil Experts

- Core technology focus areas around the world
- Technologies leveraged for opto-electromechanical Module Design & Development
- SME owner for each technology responsible for:
  - Monitoring industry capabilities and technology roadmaps
  - Collaborating and leveraging pan-Jabil expertise
  - Providing expertise and guidance to Jabil Optics Project teams
  - Supporting Jabil Optics customers with technology exploration



# Quality Management + Standards

We understand the industry standards and guidelines and how to best integrate them into the design and development process.



ISO 9001 Certified

IATF 16949 Compliant







# Why Jabil Optics?

We provide the full solution to bring your product to market.

1

We serve you with **outstanding optical know-how** that's unique in the world & enable **highest maturity of your product** with our inhouse state-of-the-art verification, test & manufacturing equipment.

2

We live **agility**, designing the development processes according to your needs, & are backed by **one of the world's largest** manufacturing service providers with one of the strongest supply chain, logistics and quality organizations,

3

We have worked with the **leading brands** in the consumer, automotive, industrial and healthcare markets, & have provided solutions for **AR/VR, LiDAR, 3D sensing, projection** and **imaging** applications.

# We are your partner!

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Learn more at [jabil.com/optics](https://jabil.com/optics) or contact us via [jabil\\_optics@jabil.com](mailto:jabil_optics@jabil.com) to start your project with us.

The JABIL logo is located in the bottom right corner of the slide. It consists of the word "JABIL" in a bold, blue, sans-serif font. A light blue diagonal line passes through the letter "A", extending from the top left to the bottom right.

**JABIL**

**JABIL**

**MADE POSSIBLE.  
MADE BETTER.**