

### **SUMMARY**

- PART 1
- PART 2

- PART 3
- PART 4

• Our Timeline

**Key Figures** 

- <u>Global Presence</u>
- Local Presence
- Why ICAPE Group?
- <u>3 Business Models</u>

- Virtual Booth
- Virtual Tours
- Virtual Audits
- Virtual Quality

- PART 5
  - <u>Full Expert</u> <u>Services</u>
- PART 6
  - Circuit Boards
  - <u>Technical Parts</u>
- PART 7
  - Two Online Shops
  - PCB Lab Testing -Online
- PART 8
  - Asia services Office
  - China In-house Lab

- PART 9
  - <u>U.S. Services</u> <u>office</u>
  - <u>U.S. in-house</u> <u>lab</u>
- PART 10
  - Revenue per Continent
  - Revenue per Industry

- PART 11
  - <u>Customer References</u>
    - Europe & Russia
    - Americas
    - Asia & Others







# PART 1 Timeline & Key Figures

## **OUR TIMELINE**

#### CIPEM DEUTSCHLAND



\$84M



## **KEY FIGURES**

28

### WORLDWIDE ORGANIZATION

28 SALES UNITS 3 SERVICES OFFICES (France, USA, China) 600

#### **GLOBAL TEAM**

LOCATED IN 18 COUNTRIES

MULTILINGUAL CUSTOMER SERVICE



#### **SALES REVENUE**

+\$200M REVENUE
20% ANNUAL GROWTH
3,000 CLIENTS

80

#### **PARTNER FACTORIES**



80+FACTORIES IN SOUTH AMERICA & ASIA 26



**CIRCUIT BOARDS** 

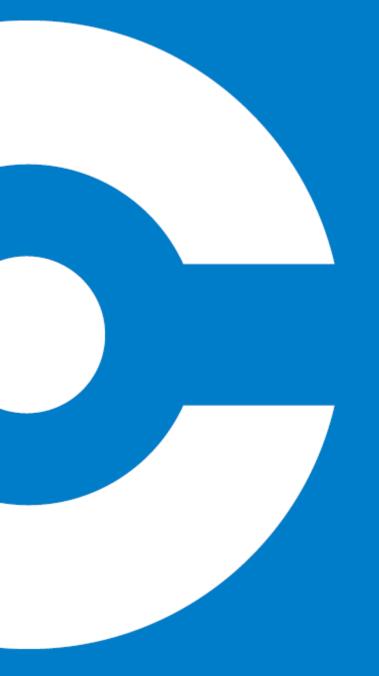
26 MILLION CIRCUIT BOARDS DELIVERED PER MONTH 6

#### **TECHNICAL PARTS**

6 MILLION CUSTOM MADE TECHNICAL PARTS DELIVERED PER MONTH

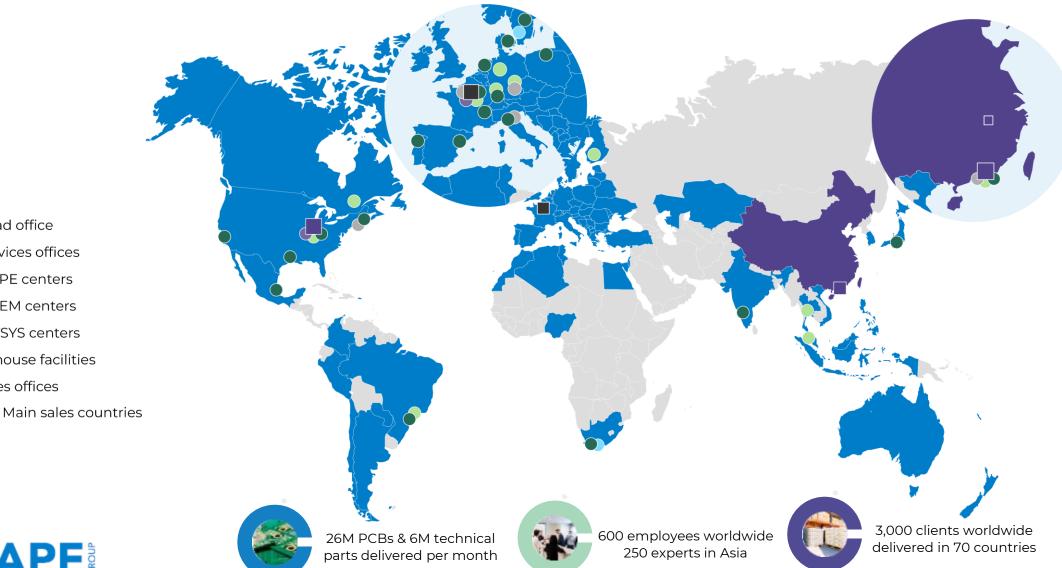






# PART 2 Global & Local Presence

## **GLOBAL PRESENCE**





Head office

Services offices

**ICAPE** centers

CIPEM centers

**DIVSYS** centers

Sales offices

In-house facilities

### LOCAL PRESENCE

#### 28 Business Units

ICAPE Group counts 28
Business Units around
the world.

Each facility looks after different areas or different functions within the overall group.

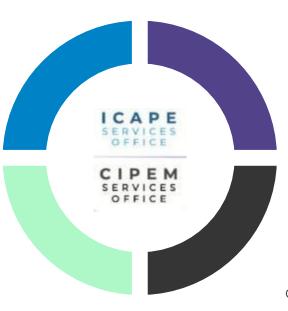
ICAPE and CIPEM have complementary activities and separate teams. This organization brings a lot of potential business opportunities to our customers all around the world.

#### **EUROPE - ICAPE**

- ICAPE FRANCE
- ICAPE DEUTSCHLAND
- ICAPE ITALIA
- ICAPE IBERICA
- ICAPE POLSKA
- ICAPE SWEDEN
- ICAPE NETHERLANDS
- ICAPE IDELEC
- ICAPE DENMARK
- ICAPEMMAB

#### **ASIA & AFRICA - ICAPE**

- ICAPE HONG KONG
- ICAPE DONGGUAN
- ICAPE CHANGAN EXPRESS
- ICAPE INDIA
- ICAPEJAPAN
- ICAPETRAX
- ICAPESOUTH AFRICA



#### AMERICAS - ICAPE

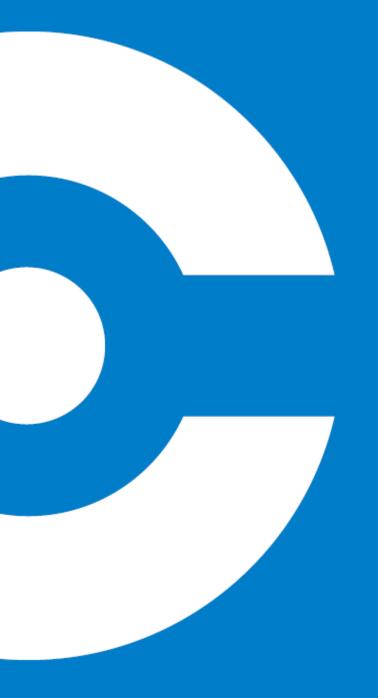
- ICAPEUSA •
- DIVSYS ICAPE •
- ICAPECALIFORNIA
  - ICAPECANADA •
  - ICAPEMEXICO •
  - ICAPEBRAZIL •

#### **WORLD - CIPEM**

- CIPEM HONG KONG
  - CIPEM FRANCE •
- CIPEM DEUTSCHLAND
  - CIPEM USA •
  - **DIVSYS FRANCE** •







# PART 6 Circuit Boards & Technical Parts

# icape circuit boards



#### HIGH-DENSITY CONNECTION - HDI

• HDI with 1,2or 3 levels or ELIC construction (with laser microvia)



#### **RIGID-FLEX**

- Rigid part (4-16L), FR4
  - · Flexible parts (1, 2, 4L)
  - · EMI Shield Film on Flexible area



#### **ALUMINUM (IMS)**

- · Power & Lighting applications
- · Raw material on metallic base: aluminum, copper, steel



#### **SEMI-FLEX**

- · Economic 3D PCB in FR4 (1-4L)
  - · Lamination/routing process, cost advantage vs Rigid-Flex



#### FLEX

- · Standard products (1, 2, 4L) with coverlays or PHI.
  - · FR4 Stiffeners
- · FMI Shield Film

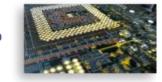


• Power Electronics • High layer count (up to 64 layers)



#### **MULTILAYER**

Standard products (4-6L), FR4, photo-sensitive Solder Mask
 Special types (thick copper, thin core, hard gold, etc)
 High layer count (8 to 64 layers)



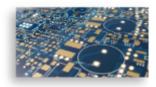
### MICROWAVE/RF

· Radio frequency and antenna applications



#### **DOUBLE-SIDED PTH**

High-density products
 Special types



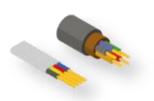
#### SINGLE-SIDED & DOUBLE-SIDED STH

 With conductive jumpers: carbon, silver, or copper pastes
 Silver Through Holes (STH) or Copper Paste Through Holes (CPTH)





# cipem CUSTOM PARTS



#### **CABLES & CONNECTORS**

- · Customized Cable Assemblies & Common Cables Assemblies
- Wire Harnesses & Customized Connectors



#### **ADAPTERS**

- · Wall Mount Adapters & Interchangeable Adapters
- · Desktop Adapters & Open Frame Power & LED Drivers



#### **TRANSFORMERS & COILS**

- High & Low Frequency Transformers
- · Air Coils & Filters & Toroids, Coils & Inductors



#### **KEYPADS**

- Membrane Switch Keypads
- · Overlays & Silicone Keypads



#### **BATTERIES**

- · Li-ion & Li-Po & Ni-Mh & Lead Acid
- · Primary Batteries



#### **DISPLAYS**

- TFT & VA Type
- TN & HTN & STN & FSTN & DFSTN Types



#### **PLASTIC & SILICONE**

- · Plastic Injection Parts & Plastic Injection Molding
- · Silicone Mechanical Parts



#### METAL

- Stampings Parts
- Shields & Heatsinks

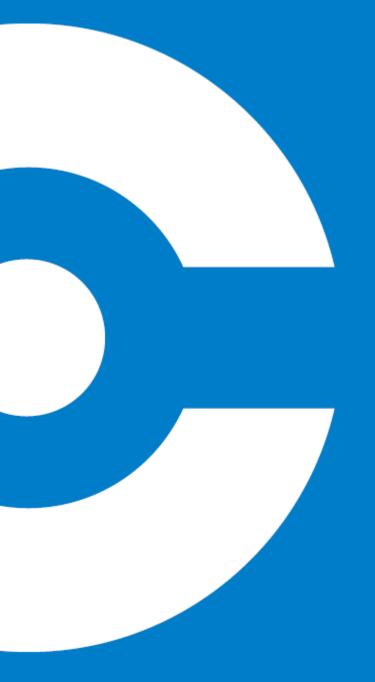


#### **REMOTE CONTROL UNITS**

- · IR InfraRed
- BT Bluetooth & RF Radio Frequency







# PART 7 Our Online Shops

### TWO ONLINE SHOPS



#### **ICAPE SHOP CAPABILITIES**

flex & rigid-flex, HDI, single-sided, double-sided plated thru holes, multilayer & aluminum

#### CIPEM SHOP CAPABILITIES

3d printing, metal & plastic cnc/vc, Connectors, displays, fan & heatsinks, power supplies, cables & wires, STD-001certifications

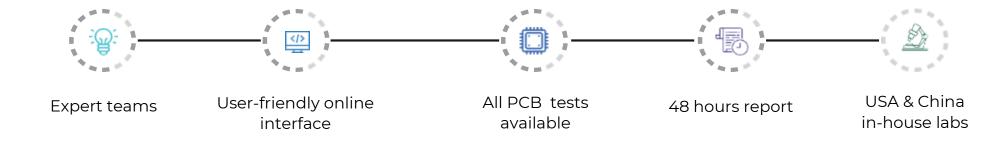


## PCB LAB TESTING - ONLINE

Do you want the confidence that comes from buying a quality board?

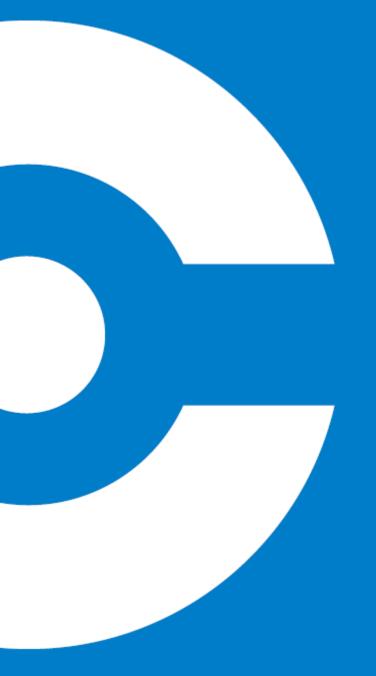
#### LAB SHOP IS HERE FOR YOU!

Our in-house laboratories, available online on our LAB Shop, allow us to inspect the boards coming from ICAPE Shop but also to offer stand-alone services for all non-ICAPE Shop customers. **Available on icapeshop.com** 









# PART 5 Our Areas of Expertise



### **Sales Support**

- **28 business units** in 16 countries & multilingual teams
- Team of experienced sales assistants & available 24/7
- Price within 24h (max 48h for special cases)
- Prototype quotations within 1h

Customer-centric focus is what gets the job over the goal line!

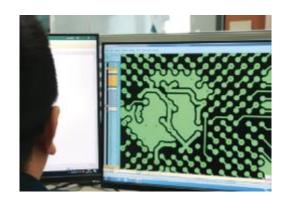


### **Purchasing**

- 80 partner suppliers based on trust & improvement
- AVL (approved vendors list) updated every 3 months
- Constant price negotiation & competitive price offer

We have a solution for all request: all techno, volume, and price





### **Engineering**

- Technical data and specification analysis & customer specification analysis
- Technical files opening and check versus design rules
- TQ (technical question), if needed, will be sent to the customer after files analysis
- Ucamco integr8tor (design-rule, DFM, capability checks & QED report)

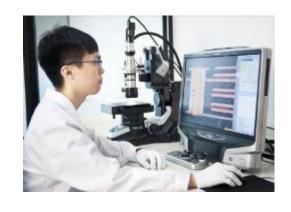




### Quality

- Reducing the number of iterations to achieve fast production-ready status
- Monthly monitoring to ensure quality performance of our partner suppliers
- Inspectors on our partner factories' sites every day





#### **In-house Labs**

- **\$3M investment** into our in-house labs
- Two leading-edge test labs in China & the USA
- We test the PCB batch we procure to guarantee an exact match with the design file

High quality & neutrality from our AVL suppliers go hand in hand



#### Finance & Insurance

- Solid financial organization with several insurance policies
- Third party liability insurance up to \$16M
- Responsible for our clients' damages or losses





### **Supply Chain**

- Global team & forwarders to ensure best lead times!
- Numerous platforms in Europe, Asia, north & south America
- Different incoterms (FOB, FCA, DAP, DDP)
- Inventory management (VMI & CMI)
- Strategic network diverse responses with air freight, railway, sea & ground
- Consolidation solution offering low prices for sea & land transport

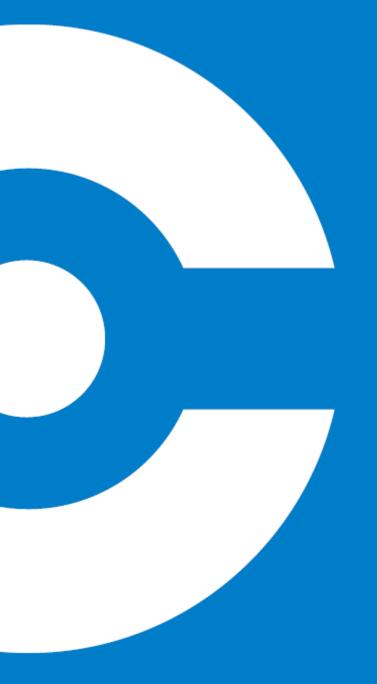


#### **Ethics**

- Strong core values for a sustainable development
- Ethics code available on our website (<u>www.icape-group.com</u>)
- Ethical requirements from our employees & partners







# PART 4 Our Virtual Offer

# **VIRTUAL AUDITS**







•	REMOTE AUDITING				
•	NO NEED TO TRAVEL				
٠.	REDUCE CARBON FOOTPRINT				
•	SAVE TIME FOR CLIENTS				
•	IPC & ISO EXPERT STAFF LOCALLY				

Contact your <u>local sales representative</u> to schedule a virtual audit



# VIRTUAL QUALITY

### VIRTUAL QUALITY CLAIM HANDLING



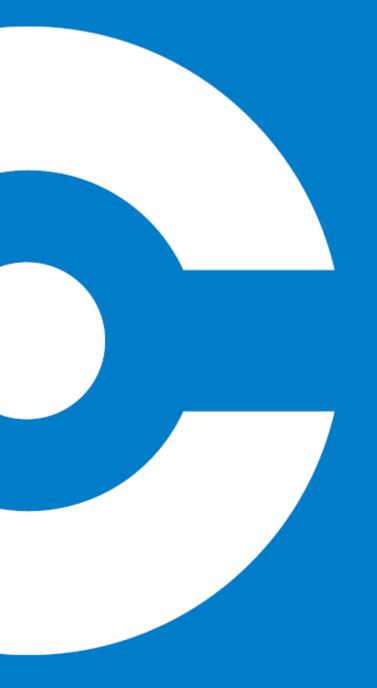


- 230 EXPERTS NEAR OR DIRECTLY AT OUR PARTNER FACTORIES
- QUALITY INSPECTORS & QUALITY ENGINEERS
- ICAPE & CIPEM FACTORIES
- THROUGH VIDEO CHATTING SERVICES

Contact your <u>local sales representative</u> to organize a virtual quality claim handling







PART 9
Our labs.

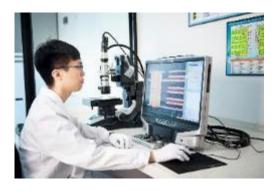
## **CHINA IN-HOUSE LAB**

30+

3+

MODERN MACHINES
TO PERFORM ANALYSIS

MILLION EURO INVESTMENT











MICRO SECTION
Digital Microscope
(Keyence VHX5000)
Sample &
Grinder Machine

IONIC CONTAMINATION
TESTER

(Metronelec CT100-L)
verify ionic contamination
level

X-Ray System
(Fisher XDML PCB 200)
Layer thickness
measurement

AUTOMATIC
GRINDER
(Stuers)
Grind & polish
microsection

TEMPERATURE
HUMIDITY
Chamber
(GWS EK-04)
Aging test

THERMAL SHOCK Chamber (ESPEC TSE 12) Thermal Stress



## **CHINA IN-HOUSE LAB**









TG TESTER (TA Instruments DISCOVERY DSC25)

Control TG of base raw material FR4

WETTING BALANCE (METRONELEC ST88) Solderability test

SOLDER POTS (Asida )
Thermal stress and solder
float tests

2D MEASUREMENT (KEYENCE 6225)

Bow & Twist, Roughness, Mechanical, V-Cut, holes diameters



### **U.S. IN-HOUSE LAB**

DIVSYS-ICAPE's fully equipped laboratory offers a complete range of testing services for both bare and assembled printed circuit boards, engineering and reworks. Our inhouse lab inspects the boards we procure to guarantee an exact match with the design file while offering standalone services to detect a wide range of manufacturing defects. Our laboratory reports are not just an exercise in metrics but provide an "approval for use" report with the results.

The laboratory tests include:





### X-RAY FLUORESCENCE (SURFACE FINISH THICKNESS)

The thickness of plating down to 0.1 micro inch



#### **ION CHROMATOGRAPHY**

(CLEANLINESS BY IDENTIFYING SPECIFIC IONS)
Measures the specific ions in the contamination & concentration of those ions



### MICRO-SECTION ANALYSIS

(COPPER THICKNESS & HOLE QUALITY) thermal stress micro-section (after solder float)



#### **BARE BOARD TEST**

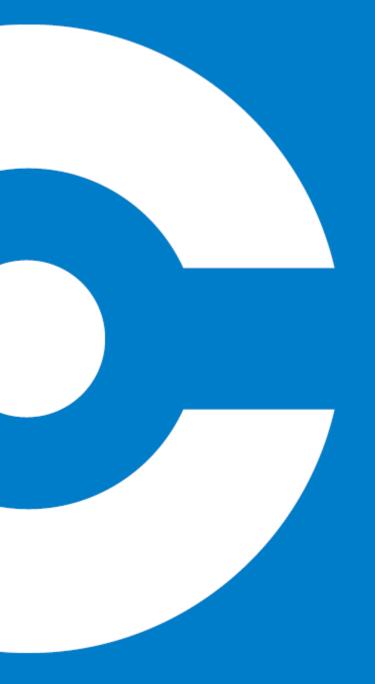
(OPENS, SHORTS & IMPEDANCE) flying probe bare board tester - measures opens & shorts against the design netlist



#### X-RAY INSPECTION

(FOR PRODUCTION APPLICATIONS) detects a wide range of manufacturing defects: BGA, QFN and IGBT attachment, PTH filling, interfacial voiding, component cracking & counterfeit device screening.



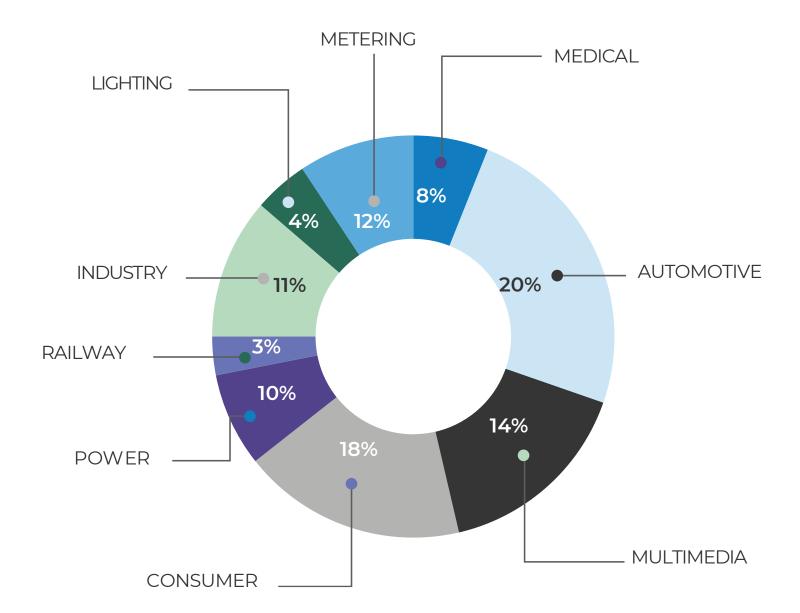


# PART 10 Sales Revenue

### REVENUE PER CONTINENT

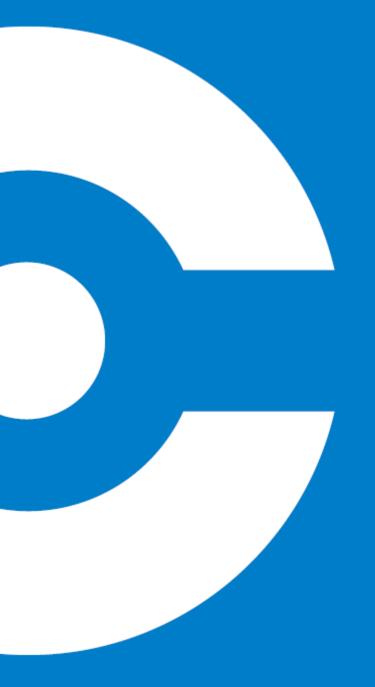


## REVENUE PER INDUSTRY









# PART II Customer references

## **CUSTOMER REFERENCE**

















































































































## THANK YOU

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