PROFILE: THE NICHE EMS
Cordon electronics Italia is a leader in design, development and production of Microwave and Optical modules and subsystems.

CORDON GROUP
AROUND THE WORLD
Cordon Group operates in 3 continents with production facilities in 9 nations.

REFERENCE MARKET
Historical activity:
Industrial repair of electronic products.
Strong orientation in value-added services since 2007.

12 industrial sites in France
8 international subsidiaries

2,550 employees

196 million revenue generated in 2017
(Bud 2018: 220M€)
Cordon electronics Italia in brief

Located in Milan area, with over 20 years of experience, Cordon electronics Italia is an EMS that design, manufacture, test, distribute and provide return/repair services for electronic modules and subsystems for Defense, Aerospace, Telecom and Industrial markets.

Technological market field

Microwave and Microwave - Photonics

Main applications

Modules and sub-systems provided by the company, are used for ground stations and “on-board” devices in defense programs, point to point radio or FTTx in telco networks and energy/gas metering.
Cordon electronics Italia is a service provider for design, engineering, manufacturing, supply chain and repair services, of microwave and photonic components, modules and sub-systems for defense, telco, aerospace and industrial markets.

The company operates in Italy with 2 production sites (Milan area) and a pool of about 130 employees.

First area of market is Italy. The company also serves clients in Europe (France, Germany, UK), and in Middle East.

The business level is currently about 13 to 14 M€ per year.
Microwave

PACKAGING AND INTEGRATION

Cordon Electronics offers microwave chip&wire packaging and integration services (from components to systems), providing turnkey solutions from samples up to production. Our flexible platform includes custom design, engineering, manufacturing, after sales and supply chain management.

DESIGN CAPABILITIES

Build-to-spec customized solutions can be provided starting from Customer specifications, including electrical, thermal, mechanical and layout design of single or multi-function microwave components or modules.
On request, ITAR-free solutions may be performed.
Microwave Photonics

PHOTONIC PACKAGING

Cordon Electronics offers photonic packaging services and turnkey solutions from samples up to preseries. Our flexible platform uses a standard package, to reduce prototype cost and accelerate time to market. A wide range of services are included, like integration of electronic components, chip-to-chip, micro-optics elements, demo board.

DESIGN CAPABILITIES

Cordon Electronics develops fully customized Microwave Photonics systems, thanks to the acquired know-how in Photonics design, RF and control electronics design and manufacturing, mechanical and thermal analysis, to fully cover design, prototyping and production phases.
Photonic European projects H2020

Cordon Electronics Italia participates in the following ongoing European Projects H2020 as a Optical/Electronic Transceiver integration and prototyping.

**PIXAPP (2016-2020)**
Realize the world’s first open-access Photonic Integrated Circuit (PIC) Assembly and Packaging Pilot line.

**OPTIMA (2016-2019)**
A technological breakthrough based on Photonics is needed to meet the capacity increase objectives within the mass, size and power envelope allowed by the evolution of launchers and satellite platforms.

**HAMLET (2015-2019)**
Joint development of a new kind of transceiver for future 5G-mobile phone networks in the frequency range of 28 GHz.
Design Capabilities

Build-to-Spec solutions

COMPONENTS
Packaging up to 90 GHz devices
Custom hermetic connector for gas meter

MODULES
Digital controller attenuators amplifiers, limiters, mixers, switches, transceivers, Voltage Controlled Oscillator (VCO)...
TX-RX transceivers

SUB-SYSTEMS
Integration and test of MW complex devices (i.e. Switching matrix, etc)
Radio over Fiber data link integration and Test

SYSTEMS
Distribution box for mobile radio link
Industrial Capabilities

CONTRACT MANUFACTURING
With thousands of units manufactured for worldwide customers, Cordon electronics Italia is the reliable partner to outsource low, mid or high volume production, from single devices to complex system integration of Microwave components. An engineering team assist customers from New Product Industrialization (NPI) to Build-to-print volume production.

SUPPLY CHAIN MANAGEMENT
Cordon Electronics provides extensive supply chain solutions, including materials free-issued by Customer or full material sourcing and supplying.

AFTER SALES SUPPORT
Long term support agreement for repairing can be provided, including obsolescence management for components.

<table>
<thead>
<tr>
<th>TOTAL AREA</th>
<th>8,000 sqm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean Room</td>
<td>1,300 sqm</td>
</tr>
<tr>
<td>10000 class – ISO 7</td>
<td></td>
</tr>
<tr>
<td>ESD Area</td>
<td>1,900 sqm</td>
</tr>
<tr>
<td>Warehouse &amp; Logistics</td>
<td>2,000 sqm</td>
</tr>
</tbody>
</table>
Main applications

**Telecom & Energy**

E Band SIP (80 GHz) TX-RX \(\rightarrow\) Point to point Radio
D Band SIP proto (150 GHz) TX - RX \(\rightarrow\) Point to point Radio
5G SIP proto \(\rightarrow\) New generation Radio
Optical distribution frame \(\rightarrow\) GPON broadband network
Equipped fiber glass box \(\rightarrow\) Middle voltage energy meter

**Defense and Naval**

EW Counter measure subsystem \(\rightarrow\) Airborne, Naval mounted Transmitter & switching \(\rightarrow\) Missile system ground station
RF Components \(\rightarrow\) Missile mounted
Tx - RX for Radar applications \(\rightarrow\) Airborne and Naval
Multi Channel Optical Transceiver \(\rightarrow\) Airborne EW System
RF Fiber Optic Link Antenna Remoting \(\rightarrow\) Airborne EW Systems
Reference Market

cellnex
driving telecom connectivity

FLEXTRONICS

RAFAEL
ADVANCED DEFENSE SYSTEMS LTD.

ROHDE & SCHWARZ

ZTE

ABB

TELEDYNE DEFENCE LIMITED
A Teledyne Technologies Company

MBDA
MISSLE SYSTEMS

NOKIA

MeteRsit

THALES

igus

HUAWEI

Sagemcom

ELETTRONICA GROUP
A FOCUSED GLOBAL LEADER

open fiber

enel

HENSOLDT
Detect and Protect

Sirti

eolo

LEONARDO
FINMECCANICA