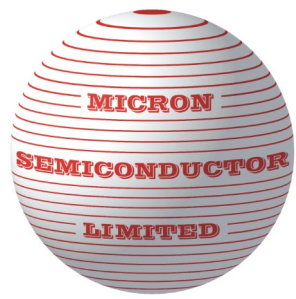


MICRON SEMICONDUCTOR LTD

Dr Gwenaëlle LEFEUVRE
New Technology Development Manager



Company Presentation



Micron Semiconductor Ltd, est. 1983
Based in **Lancing, UK**: close to London,
Gatwick and Heathrow airports

Micron Semiconductor Europe, est. 2019
Based in Paris, wholly-owned subsidiary

We operate world-wide: offices and agents
in Spain, the USA, China, Japan, Australia

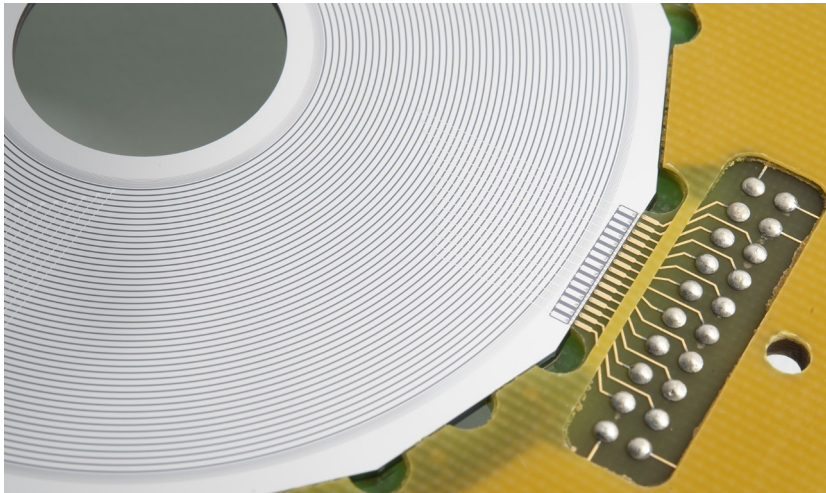
80% export



Specialists of small-series, custom-designed silicon- and CVD diamond- based radiation sensors

Silicon Sensors:

- p / n-type
- single / double sided
- various shapes / multiple elements (pads/pixels, microstrips...)
- AC or DC coupling
- 10 μm to 2.5 mm thickness



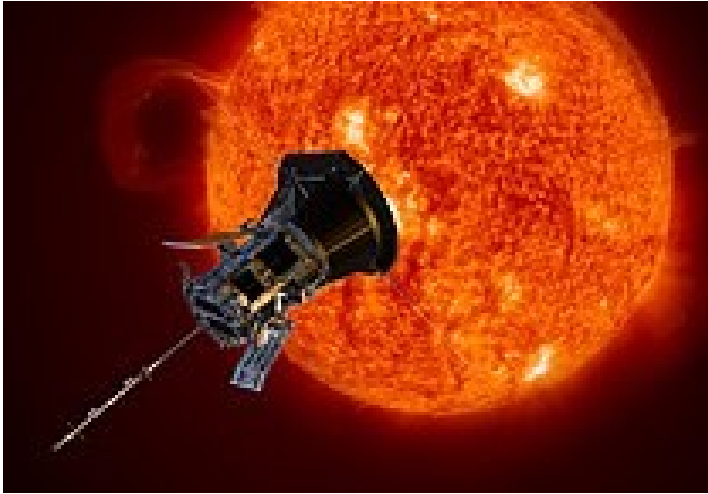
CVD Diamond Sensors:

- single / polycrystalline CVD
- single / double sided
- various shapes / multiple elements (quadrant, strips, PSD...)
- 50 to 500 μm thickness

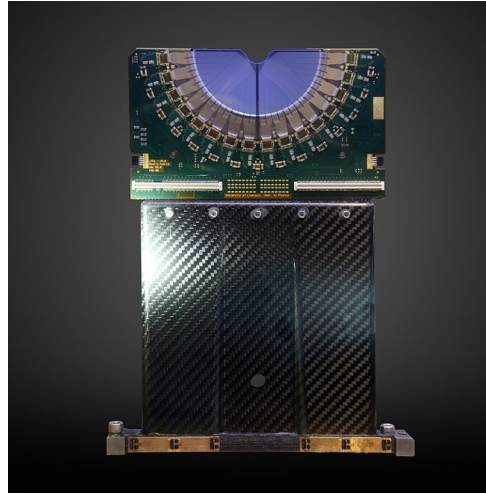




Markets



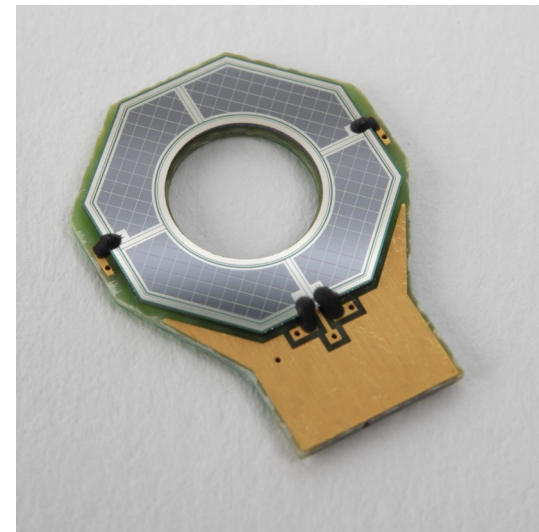
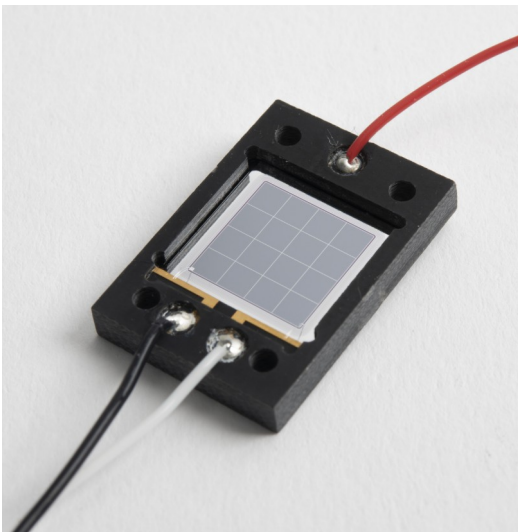
Space



HE Physics



Synchrotron



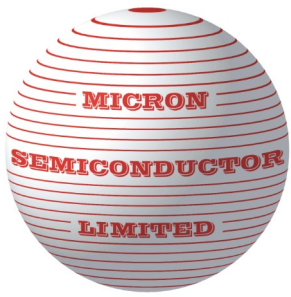
Civil Nuclear

Medical

OEM

Defence

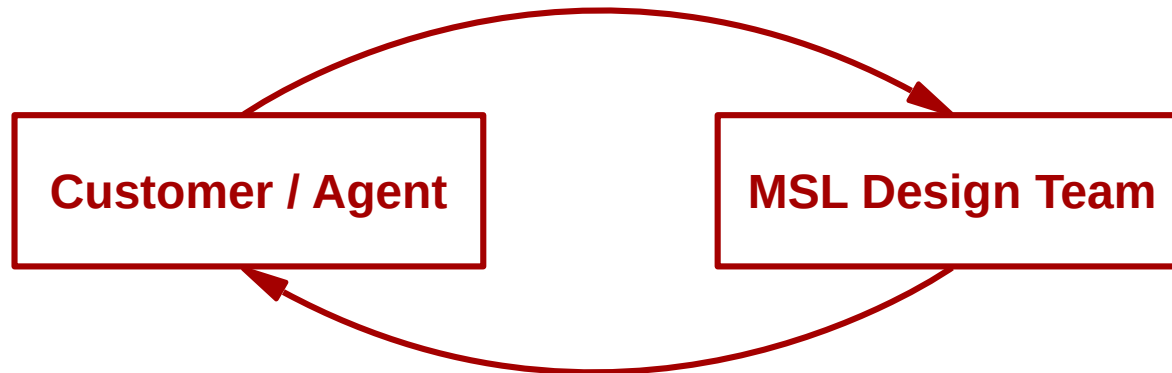
Research...



Design Service 1/2

Stock = "Yes but"

Many applications have **unique requirements**: available space or power, operating conditions.... These can greatly influence the detector design.





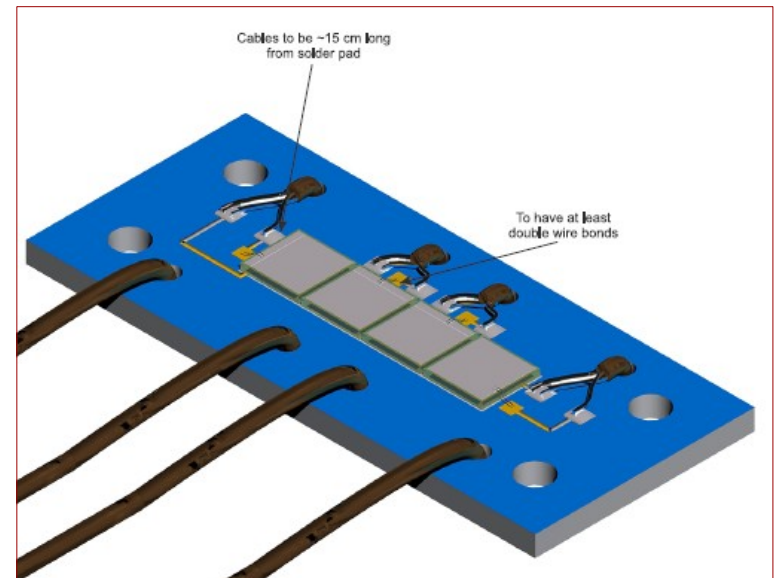
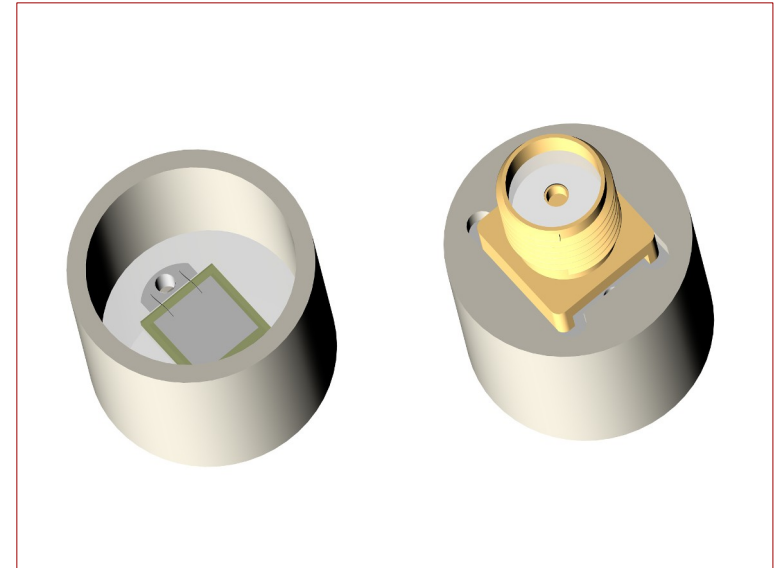
Design Service 2/2

Design – an integral part of MSL processes

- in-depth discussions to understand the application and its specific challenges
- iterated design proposals to converge towards a cost-effective solution, best suited to the customer's needs

Design Outputs

- Detector geometry (CVD size, tiling configuration etc)
- Electrode patterns (lithography masks)
- Ceramic, FR4 or Rogers PCBs
- Interconnect
- Assembly, test and shipping jigs





Fabrication Facilities

5-Unit facility with all in-house processing areas from class 100 to class 10:

- 4 & 6 inch single and double sided technology, ranging from 5 to 2000 μm in thickness
- 3 photolithography machines
- 2 implanters
- Poly-silicon deposition furnace
- Sputtering and evaporation equipment
- Plasma etching equipment
- Trench etching
- Silicon laser profiler
- Laser machining



Testing equipment:

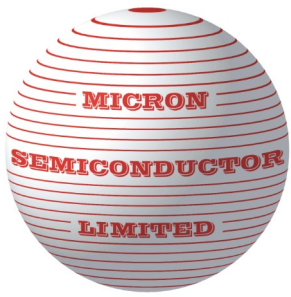
- Semi-automatic probing stations
- I-V and C-V equipment
- Energy resolution measurement with various sources
- Testing to space flight qualification standards
- Access to mechanical shocks and vibrations

Specific tests can be organized with our customers for particular projects / applications.



Product Development





Contact



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Thank you.