#### **Core Advantages**

- Technical staff are among the world's foremost experts in the growth and processing of GaAs- and InP-based electronic devices and solar cells
- Vertically integrated facility 30,000 ft<sup>2</sup> building with a custom device fabrication and design laboratory, cleanroom, and office space
- Laboratories for material growth, characterization, and solar cell fabrication, including photolithography, wet chemical etching, metal/dielectric deposition equipment and a suite of MOCVD reactors for high volume production
- Measurement laboratory contains characterization tools, including X-ray diffraction, photoluminescence, SEM, a three-zone solar simulator, and a quantum efficiency measurement system
- ISO-9001 certified
- Strong dedication to producing superior quality products to meet customer needs

# **Contact Us**

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# Lightweight, Flexible Solar Power on the Move







# **Company History**

- Established in 2000
- Located outside of Chicago
- 50 employees
- Initial product was epitaxially grown heterojunction bipolar transistor (HBT) material for mobile phone industry.
- Now leader in development and manufacture of epitaxial lift-off (ELO) solar cell arrays.
- Achieved record 37.75% efficiency with ELO solar cell in 2018. Solar cell design exceeds 3000 W/kg.

MicroLink has developed a lightweight, flexible solar cell that is significantly more efficient than current systems producing significant power in limited space with near zero weight penalty.





# **Core Competencies**

- Metal-organic chemical vapor deposition (MOCVD) growth of III-V semiconductor structures
- III-V and gallium nitride (GaN) based epitaxial lift-off (ELO) technology
- State-of-the-art solar cell and solar sheet manufacturing

MicroLink has an exclusive license agreement with the US National Renewable Laboratory (NREL) for the commercialization of the inverted metamorphic multi-junction (IMM) solar cell technology.

The IMM architecture with ELO is the enabling technology for very high efficiency and lightweight solar cells.



#### Markets

- Power devices for portable cellular communications
- Commercial and industrial solar power cells
- Aerospace solar power cells
- Power electronics components

# Customers

#### Commercial

- Epitaxial Materials
  - o Mitsubishi Electric
  - Keysight (formerly Agilent)
- Solar Arrays
  - o Airbus
  - o BAE

#### Government

- Air Force Research Laboratories
- Naval Research Laboratory
- Army Research Laboratory
- NASA
- ONR
- DOE
- DARPA
- OSD
- ARPA-E
- NSF

