

**CAES** PIONEERING  
ADVANCED  
ELECTRONICS

# Solutions for Commercial Applications





# CAES Leverages Space and Military Expertise for Commercial Applications



CAES has served customers in various commercial electronics sectors since 2000 with a range of RF and microwave components, modules and subsystems, as well as analog, mixed-signal IC and ASIC design services.

Our team of mixed-signal engineering experts has more than 150 man-years of IC design experience in the commercial electronics market. Our proven design engineering experience reduces technical risk, while our extensive IP and design libraries allow for first-pass success, optimal wafer yields and improved time to market.

We are a fab-independent semiconductor supplier, and our four CAES Design Test Centers support a full suite of device manufacturing and test capability. CAES packaging includes custom designs as well as commercially available chip-scale, flip-chip-on-flex and chip-on-board packaging, in addition to high-reliability hermetic ceramic packaging.

## Healthcare



CAES provides the Healthcare electronics market with custom ASICs, memory, microprocessors, interconnects and power ICs for a range of advanced medical imaging applications. Our radiation-tolerant technology allows ASICs to be designed into the X-ray radiation therapy beam, which reduces noise and allows medical imaging equipment designers to lower patient radiation exposure.

CAES medical imaging solutions support high-voltage, high-channel-count readout ASICs that interface directly to ultrasound transducers and technology used by a leading global provider of computed tomography (CT) scanners to help diagnose respiratory conditions.

CAES ASICs also enable advanced devices used to deliver the genomic sequence of the SARS-CoV-2 virus that causes the COVID-19 disease, enabling insights into how the virus is transmitted and how it evolves.

## Industrial



CAES supports a broad range of Industrial applications, including secure point-of-sale terminals, wireless and telecom (including 5G testing), security screening, laboratory test equipment and precision electronic blasting for the mining industry.

CAES uses the latest industry-standard tools for chip design, development, modeling and layout. We provide high-reliability, turnkey design and manufacturing services but also support the needs of our Industrial customers for long product lifecycles and product end-of-life mitigation.

## Commercial Aviation



CAES is the market leader and supplier of choice for flat plate antennas to the commercial Aviation radar market.

Equipped with two in-house, near-field antenna test ranges and extensive environmental test capabilities, CAES can meet specific customer requirements on a variety of antenna products.



## CAES Commercial Products

- Antennas
- ASICs
- Cable Assemblies
- RF Assemblies and Subsystems
- RF, Microwave and Millimeter Wave Components
- Rotary Joints
- Waveguides/3D Printed Waveguides

## CAES Manufacturing Solutions for Commercial Applications

In addition to a complete product offering for commercial applications, CAES offers a variety of specialized services.

### Advanced Engineering Services:

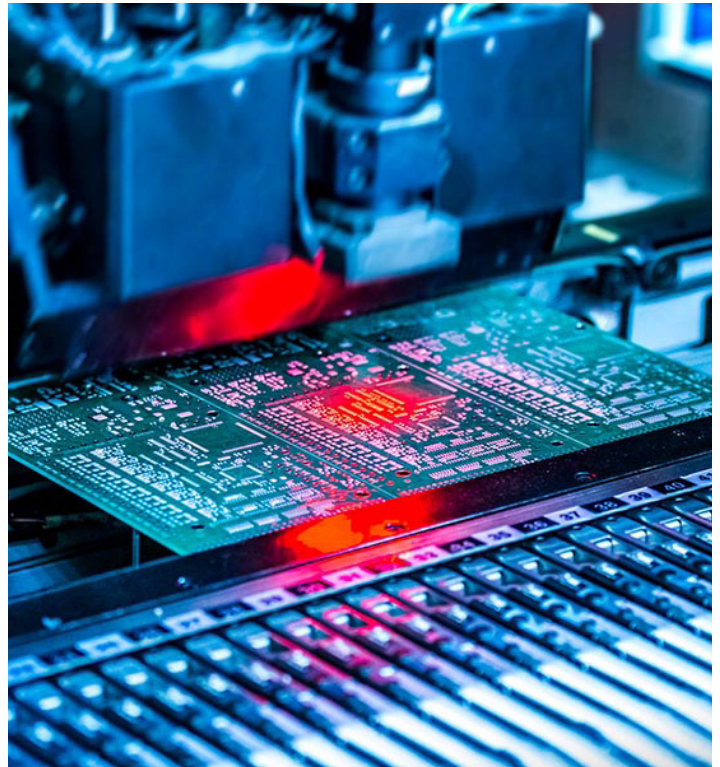
- Additive Manufacturing/3D Printing
- SWaP Optimization
- High Reliability
- High Power
- High Frequency
- SOSA™/MOSA

### Testing and Tuning Services:

- Automated Testing
- Environmental and Dynamics Testing
- High Power Test Solutions
- Antenna Test Ranges

### CAES Manufacturing Services:

- Advanced Automated Assembly
- Advanced Packaging
- Build-to-Print/Build-to-Spec
- Electronic Manufacturing Solutions
- Microwave through Millimeter Wave Solutions



Leveraging its pedigree in space and military markets, CAES technology supports various systems for commercial applications.





We engineer  
solutions for  
the world's  
most critical  
missions.