

Spotlight on: Unicircuit, Inc.

Location: Littleton, CO



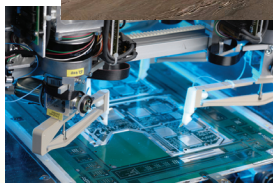
Founded in 1979, added to the Anaren Space & Defense Group in 2008, and operating out of a 50,100 sq. ft. state-of-the-art facility — Unicircuit, Inc. is a world-class printed circuit board manufacturer and trusted source of supply for technology driven, high reliability products in the military, aerospace, ATE, and instrumentation markets.

Unicircuit has a well-deserved reputation for outstanding execution in product development, LRIP (low rate initial production), and full rate production support for critical flight hardware programs – where our technology advantages, deep materials and precision-manufacturing expertise, and certifications to applicable standards have made us a longstanding and trusted supplier on mission critical applications of all kinds. Among the platforms we support are search and rescue, sensors, phased-array radars, AESA radars, space-based radars, beamforming networks, and transmit/receive IMAs, just to name a few.

Core competencies

Our Unicircuit, Inc. facility:

- > specializes in high-precision, high-reliability PWB manufacturing
- > supports a wide range of technologies, including:
 - RF/microwave
 - composite/hybrid
 - sequential blind & buried via structures



- step lamination/die cavity
- embedded passives
- embedded composites (resistors)
- high-density interconnect
- via-in-pad technology
- thermal management
- CTE constraintment
- fusion bonding

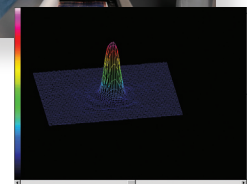
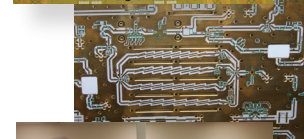
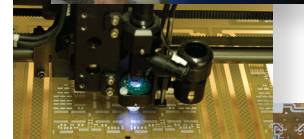
- > offers stringent quality control, supported by Class 10,000 clean rooms, Environmental Management Systems, and departmental manufacturing processes



Capabilities

Manufacturing techniques & tolerances:

- > .004 mil laser-defined vias
- > .006 mil drilled hole diameter
- > .002 mil line & space
- > .4 mm pitch - BGA packages
- > .006 mil pitch COB technology
- > conductive & non-conductive via plugging
- > edge / cavity plating
- > horizontal / vertical multi-level launch sites
- > precision back drilling
- > heatsink bonding
- > CIC & metal cores
- > heavy copper / thermal vias
- > controlled impedance tolerance to 5%

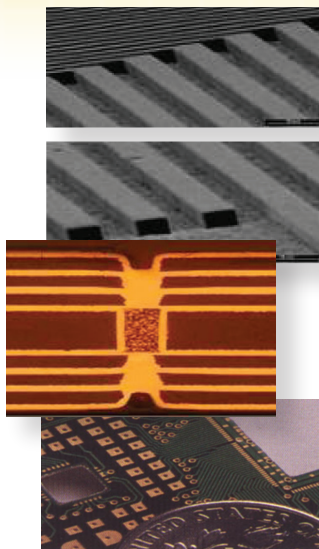


Materials technologies:

- > low Dk (2.17Dk)
- > low loss materials
- > high Dk (10.2Dk)
- > high Tg materials (260-270)
- > composite technology
- > liquid crystalline polymer
- > cyanate ester astro quartz
- > Thermount 85NT (XT)
- > Ohmega resistive materials
- > Ticer resistive foils
- > thick film polymers
- > 3M C-Ply

Surface finishes:

- > electroplated nickel
- > hard gold
- > selective gold
- > fused tin lead
- > selective solder strip
- > ENIG
- > wire-bondable gold
- > white immersion tin
- > immersion silver
- > hot-air solder level



Applications

Applications for Unicircuit solutions include:

- > search & rescue
- > sensors
- > phased-array radars
- > AESA radars
- > space-based radars
- > beamforming networks
- > transmit/receive integrated microwave assemblies (IMAs)
- > weaponry
- > tactical systems
- > reconnaissance satellites
- > secured communications



Certifications & qualifications

- > ISO 9001 – 2000
- > AS90100-Rev B
- > ITAR Certification
- > Mil-PRF-31032 Certification
- > Mil-P-55110
- > IPC-1710 Certification

Anaren®
What'll we think of next?™

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