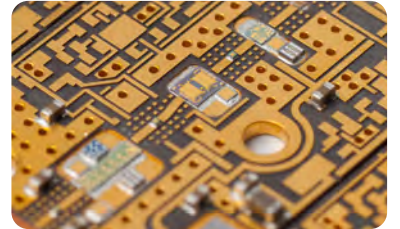
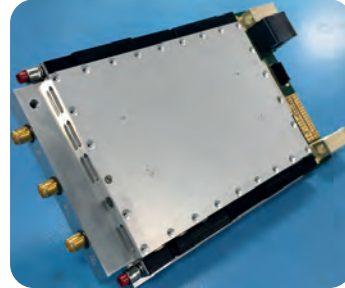
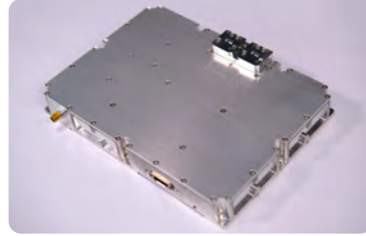


# RF Modules and Custom Solutions for Security and Defence

## DC-100 GHz RF Capability

- Wideband Receiver
- Active Radar Sub-Systems
- Custom Integrated Solutions
- Amplifiers
- Converters
- Ultra Low Phase Noise Oscillators
- Phased Arrays
- QFN System in Package



## Applications

- Secure Communications
- Electronic Warfare
- Counter UAS
- Radar
- SIGINT
- C4ISR
- ECM
- Missile Guidance
- TSCM
- Border and Perimeter Protection
- Critical National Infrastructure



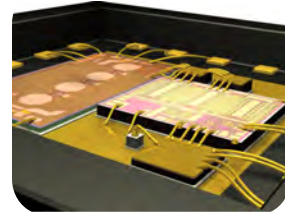
Tel  
Email  
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sales@linwave.alaris.tech  
www.linwave.alaris.tech  
Marlin Building, 4 Sadler Rd  
Lincoln LN6 3RS, United Kingdom

# Design Manufacture and Test

## Design

Experienced and Extensive Design Team  
DC to 100 GHz Capability  
Analogue, Digital, RF, Microwave  
PCB Design and Layout  
Mechanical Design  
Design Tools - Solidworks, Altium  
Simulation Tools - AWR Microwave Office



## Manufacturing

Custom Built Facility  
Class 10,000 Clean Room  
Chip and Wire Assembly  
Wire Bonding  
Approved to AS9100, ISO14001,  
Cyber Essentials



## Test

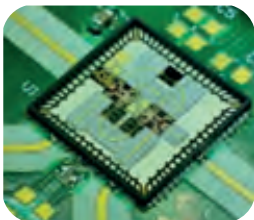
Analyser Capability up to 100 GHz  
Spectrum, Vector, Power, Noise, Scalar  
Phase Noise Capability  
Temperature Testing and Cycling  
Vibration Testing  
Burn-in  
Automated Testing  
Wafer probe capability



## Typical Products

### X band Switched Filter bank

7-13 GHz  
Noise Figure 2 dB  
Switching Speed < 100ns



### High Gain Broadband Amp

Output frequency 18.0 -40.0 GHz  
Max operating power +13 dBm  
Operating temp -40° C to + 85° C



### Low Phase Noise Oscillator

Frequency range 200 MHz - 12 GHz  
Phase noise @ 200 MHz output  
-181 dBc/Hz (1 MHz)  
Phase noise @ 11 GHz output  
-143 dBc/Hz (1 MHz)



### Ultra-Wideband Receiver

DC-18 GHz  
Track and Hold  
Operating temp 0° C to +55° C

### Transceiver UWB

UHF to X-band  
Software Defined 12-bit Resolution  
Operating temp -40° C to +60° C

### SP8T Switch

0.0-18 GHz  
Switching Speed < 100ns  
Operating temp -40° C to +85° C