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Defence supplier Micreo supplying to US production contract

Micareo Limited, a designer and manufacturer of Radio Frequency subsystems for global defence and aerospace applications, announced that it is shipping production units to Raytheon's SAS Division for incorporation into the ALR- 69A(V), the world's first all-digital radar warning receiver (RWR).

Micareo was selected by Raytheon following a competition over two years ago for the design and development of the RF Microwave Integrated Circuit (MIC) for the ALR-69A(V) system.



One of Micreo's test technicians working with a typical test set-up.

"Our prior record of supply to Raytheon with over 2000 MICs delivered for the ALR-67(V)3 Program since 2008 coupled with the development of our patented Gain Shaper technology were the key factors contributing to our success on this new opportunity. This level of innovation is essential if we are to compete in the global defence and aerospace market," said Tim Shaw, Micreo's Managing Director. "This win demonstrates that an Australian company can establish and maintain a competitive advantage in the international marketplace."

The Gain Shaper provides a method whereby electronically variable radio frequency (RF) tuning circuits can automatically tune circuits within the MIC. "Normal practice in the manufacture of Microwave Integrated Circuits (MICs) is to manually tune the performance to meet the required specification through the application of tuning stubs to the circuit while viewing the result on the screen of a microwave network analyser. This current approach is both time consuming and costly requiring highly skilled technicians to interpret the performance variation from each stage of tuning", said Tim Shaw. The introduction of the Gain Shaper into Micreo products, both new and existing designs, together with improved manufacturing processes, provides a significant reduction in manufacturing time and therefore the cost of products.

The first of the production units delivered by Micreo will be deployed on the KC-46A aerial refueling aircraft which is to replace the existing USAF tankers. The ALR-69A(V) is an all-digital radar warning receiver designed to work both with large and fighter aircraft. Raytheon's advanced digital open architecture provides increased sensitivity and the ability to accurately identify threat signals much earlier in today's dense urban environments.

Micareo Limited is an Australian-based independent company founded in 2002 which currently employs 70 people. The core business of the company is the design and manufacture of RF and photonic products for Radar and Electronic Warfare avionic systems. Micreo's EW products utilize high performance microwave, millimetrewave and photonic technology. Micreo's specialty is working with customers to design leading-edge products for extreme environments. To learn more, visit www.micareo.com.