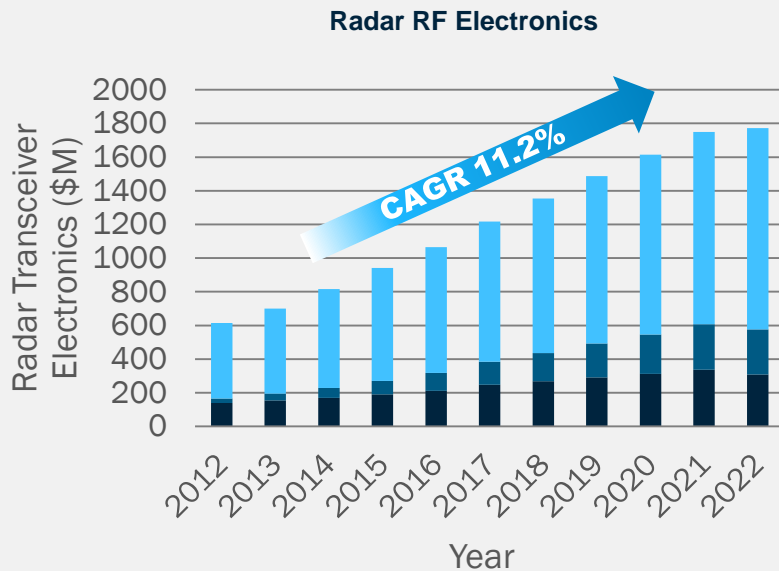


# Active Antennas

# Active Antennas for Radar and Communications to Drive MACOM Growth



## Radar



Source: Strategy Analytics

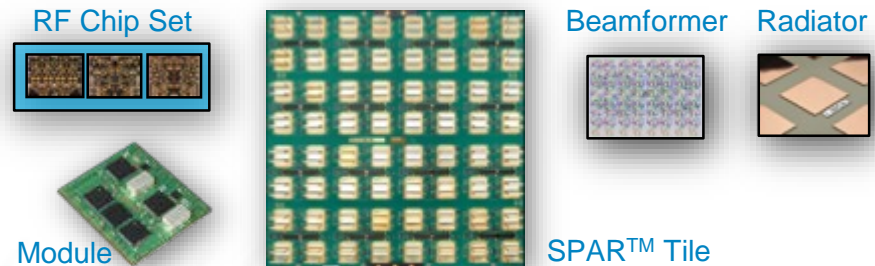
Well positioned to take advantage of the shift from Mechanically Scanned Arrays to Active Antenna Arrays.

## APPLICATIONS

### Modern Networked Battlefield



## PRODUCTS & TECHNOLOGY



## TARGET CUSTOMERS

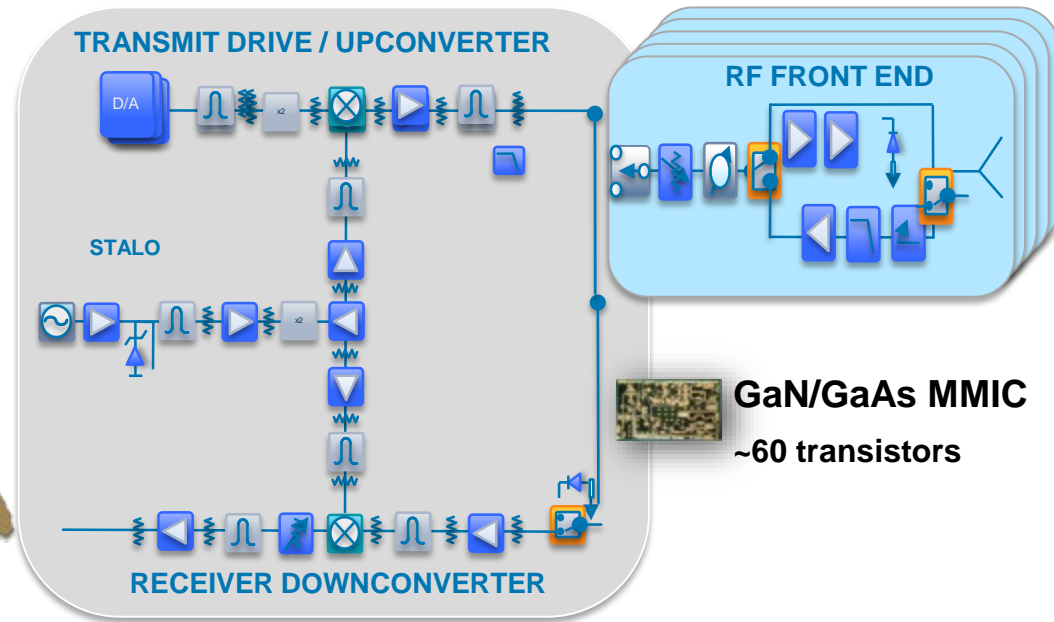
**NORTHROP GRUMMAN**

**LOCKHEED MARTIN**



**NOKIA**

# MACOM Innovation to Drive Active Antennas in Communications Applications



**SiGe RF IC**  
850 transistors (octal)



MACOM's broad array of process technologies and proven track record in **phased array radar** expected to enable next generation **microwave and millimeterwave wireless solutions.**

# MACOM Innovation to Drive Active Antennas in Civil and Military Radar Applications



## Terminal Area Aircraft



ASR-8



ASR-9

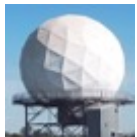


ASR-11

## Long Range Aircraft



ARSR-1/2



ARSR-3



ARSR-4

## Long Range Terminal Area

### Weather



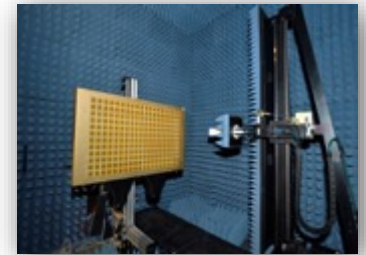
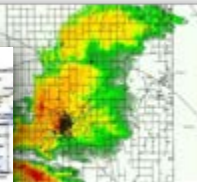
NEXRAD

### Weather



TDWR

## Successful Field Tests in Oklahoma



MACOM has demonstrated the commercial and functional viability that can support large scale civil and military deployments in the field

# MACOM Innovation to Drive Active Antennas in Civil and Military Radar Applications



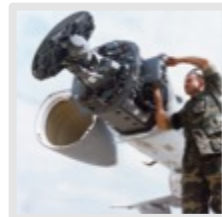
Air Traffic Control



Shipborne



Airborne



Ground Based



1,000 – 10,000X  
More RF Content



**Expected order of magnitude increase in RF content** due to the transition from Mechanically Scanned Arrays to Active Electronically Scanned Arrays